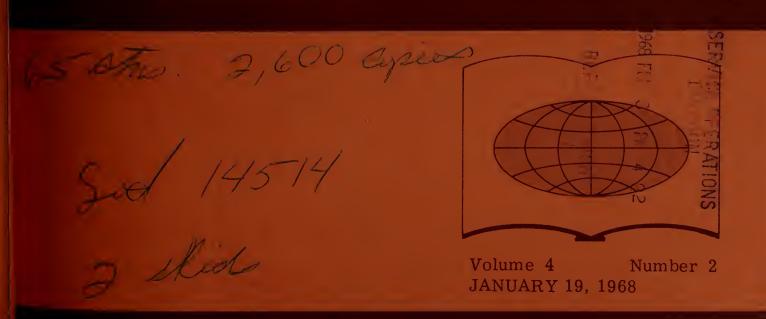


Pesticides Documentation Bulletin





U.S. DEPARTMENT OF AGRICULTURE

PESTICIDES DOCUMENTATION BULLETIN

A BI-WEEKLY PUBLICATION OF

U. S. DEPARTMENT OF AGRICULTURE

Volume 4

January 19, 1968

Number 2

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, physiological 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, a monthly publication of the National Agricultural Library.

FORMAT

The <u>Bulletin</u> is a categorized bibliography, with citations arranged alphabetically by author under the following major subjects:

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

Citations: Each citation consists of an accession number assigned serially with the last two digits representing the Bulletin's issue year, i.e. 3286-67. The citation number (minus the year) is used

in all indices. Following the accession number is the full title of the article; all personal authors; an abbreviated journal title; volume, issue and inclusive page numbers; date of publication; language abbreviation, if other than English; and the National Agricultural Library's call number. Subject descriptors, patent or grant numbers, bibliographer's notes, and abstracts or extracts may follow each citation when appropriate.

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

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

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

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

AVAILABILITY OF REFERENCES CITED

Search Requests

Each item appearing in 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 services can be developed through a coordinated and cooperative interdepartmental effort.

10 ENTOMOLOGY

792-68 ENVIRONMENTAL CAUSES OF VARIATION IN THE SEX RATIO OF AN ARRHENOTOKOUS INSECT, DAHLBOMINUS FULIGINOSUS (NEES) (HYMENOPTERA: EULOPHIDAE). Can Entomol 95(2):183-202, BIBL. 201-202, TABS. Feb 1963 421 C16 Insect ecology.

Systematics

ECTOPARASITES FROM RATTUS NORVEGICUS (EXERLEBEN) ON TWO JIMA, VOICANO ISLANDS.
J Med Entomol 2(4):384
Jan 1966 421 J828 Rats. 794-68 THE BARLEY JOINTWORM, HARMOLITA HORDEI (HARR-) (HYMENOP-TERA: CHALCIDOIDEA), IN PRINCE EDWARDS ISLAND. F M Cannon Can Entomol 95(1):28-35
Jan 1963 421 C16
Barley, Insect morphology, Insect pests,
Prince Edward Island. NOTES ON THE VOLTERRA EQUATIONS. W R Thompson Can Entomol 92(8):582-594 Aug 1960 421 C16 Insects, Population, Statistics.

796-68 CAUSES OF VARIATIONS IN EFFECTIVENESS OF BRACON CEPHI (GAHAN) (HYMENOPTERA: BRACONIDAE) AS A PARASITE OF THE WHEAT STEM SAWFLY.

N D Holmes W A Nelson L K Peterson C W Farstad Can Entomol 95(2):113-126
Feb 1963 421 C16 Parasitic insects, Plant hosts.

EQUILIBRIUM HUMIDITIES AND SURVIVAL OF SOME TICK LARVAE. W Knuelle J Med Entomol 2(4):335-338 Jan 1966 421 J828 Humidity, Ixodides.

798-68 A FIELD SURVEY OF ARTHROPOD PARASITES OF BIRDS IN TAIWAN. J Med Entomol 1 (4):395-401
15 Jan 1965 421 J828 Insect pests, Mallophaga, Parasitism, Taiwan.

PRINCIPLES AND METHODS OF ZOOGEOGRAPHY: THE FIELD APPROACH. L Gressitt
Can Entomol 92(8):636-639
Aug 1960 421 C16
Zoogeography.

A NEW SPECIES OF ANTHOCORIS FROM CANADA, AND DISTRIBUTION BECORDS FOR THREE OTHER SPECIES (HETEROPTERA: ANTHOCORII-DAE). N H Anderson L A Kelton Can Entomol 95(4):439-442 Apr 1963 421 C16

10 812-68 Canada, Insect dissemination, Insect identification, Canada. HOST SPECIFICITY OF CALOPHASTA LUNULA (HUFN.) (LEPTDOP-P Harris Can Entomol 95 (1): 101-105 Jan 1963 421 C16
Biological control (insects), Weed control. TAXONOMY OF COCOONS AND PUPARIA, AND THEIR CONTENTS, OF CANADIAN PARASITES OF SOME NATIVE DIPRIONIDAE (HYMENOPTERA). T Finlayson Can Entomol 95 (5):475-507, BIBL. 503-507 Insect taxonomy, Parasitism, Pupal cases. 803-68 A NEW BIRCH APHID FROM CENTRAL NEW BRUNSWICK (HOMOPTERA: APHIDIDAE).
M E MacGillivray Can Entomol 95(2):178-182 Feb 1963 421 C16 Insect taxonomy, New brunswick. 804-68 A NEW PEST OF APPLE IN NEW BRUNSWICK. C W Maxwell D B Finnamore Can Entomol 95(3):291 Mar 1963 421 C16
Apples, Insect pests, New brunswick, Plant injuries,
New brunswick. COMPETITION BETWEEN TWO SPECIES OF MITES. II. FACTORS IN-PLUENCING INTENSITY. W H Foott Can Entomol 95 (1):45-51 Jan 1963 421 C16
Insect behavior, Insect competition, Mites, Insect behavior. 806-68 THE EFFECT OF LOW TEMPERATURES ON SOME PREDACIOUS PHYTOSEIID MITES, AND ON THE BROWN MITE BRYOBIA ARBOREA M. AND A.. A W MacPhee Can Entomol 95(1):41-44 Jan 1963 421 C16 Predaceous insects. 807-68 THE REARING OF EUROPEAN RED MITE UNDER CONTROLLED ENVIRON-MENTAL CONDITIONS. H B Specht Can Entomol 95 (1):35-41, BIBL. 40-41, TABS. Jan 1963 421 C16 Insect ecology, Insect rearing. THE APHIDIDAE OF THE CANADIAN ARCTIC (HOMOPTERA). W R Richards Can Entomol 95 (5):449-464 May 1963 421 C16 Insect biology, Insect evolution, Insect taxonomy. 809-68 A NOTE ON THE PTEROSTIGMA IN INSECTS. J W Arnold Can Entomol 95(1): 13-16 Jan 1963 421 C16 Insects, Wings (insects). 810-68
A NEW SPECIES OF ASPIDAPHIS GILLETTE (HOMOPTERA: APHIDI-DAE).
Can Entomol 95 (3):296-299
Mar 1963 421 C16
Insect taxonomy. 811-68 TWO NEW DACTYNOTINE APHIDS (HOMOPTERA). W R Richards Can Entomol 95 (3):254-257 Mar 1963 421 C16 Insect morphology, Insect taxonomy.

SYNOPSIS OF THE GENUS ORIUS WOLFF IN AMERICA NORTH OF

MEXICO (HETEROPTERA: ANTHOCORIDAE) .

I. A Kelton

10 813-68

Can Entomol 95(6):631-636 Jun 1963 421 C16 America, Insect taxonomy, America.

A NEW SPECIES OF NEPYTIA (LEPIDOPTERA: GEOMETRIDAE), OF ECONOMIC IMPORTANCE TO DOUGLAS FIR IN BRITISH COLUMBIA. E Munroe Can Entomol 95(4):407-413

Apr 1963 421 C16
British Columbia, Economic entomology, Insect taxonomy, Pseudotsuga menziesii, British Columbia, Pseudotsuga menziesii.

RELATIONSHIPS OF CREMIFANIA CZERNY (DIPTERA: CHAMAEMYII-DAE AND DESCRIPTION OF A NEW SPECIES. J F McAlpine
Can Entomol 95(3):239-255

Mar 1963 421 C16 Insect taxonomy. 815-68

THE GILVARIUS GROUP OF ASPILATES TREITSCHKE (LEPIDOPTERA: GEOMETRIDAE). Can Entomol 95(3):260-287 Mar 1963 421 C16 Insect taxonomy.

816-68

DEVELOPMENT AND SURVIVAL OF THE ONION MAGGOT UNDER FIELD AND ARTIFICIAL CONDITIONS ON ATTRACTIVE AND NON-ATTRACTIVE ONION J P Perron J J Jasmin J P Perron J J Jasmin Can Entomol 95(3):334-336 Mar 1963 421 C16 Attractants, Insect morphology, Insect pests, Onions, Plant injuries, Insect morphology.

SOME ECOLOGICAL ATTRIBUTES OF A PTEROMALID PARASITE AND ITS HOUSEFLY HOST.
W P Nagel David Pimentel Can Entomol 95(2):208-213, TABS. Feb 1963 421 C16 Insect behavior, Insect dissemination, Parasitic insects, Parasitism.

818-68

OBSERVATIONS ON THE MIGRATION OF LARVAE OF NEODIPRION SWAINEI MIDD. (HYMENOPTERA: TENTHREDINIDAE). W A Smirnoff Can Entomol Dec 1960 421 C16
Insect migration, Larvae, Neodiprion swainei.

GENERIC CHARACTERS IN THE TRIBE IPINI (COLEOPTERA: SCOLY-TIDAE), WITH A NEW SPECIES, A NEW COMBINATION, AND A NEW SYNONOMY. G R Hopping
Can Entomol 95(1):61-68
Jan 1963 421 C16
Insect genetics.

THE NATURAL GROUPS OF SPECIES IN THE GENUS IPS DE GEER (COLEOPTERA: SCOLYTIDAE) IN NORTH AMERICA. G R Hopping
Can Entomol 95(5):508-516
May 1963 421 C16 Insect taxonomy, North America.

821-68

TWO NEW SPECIES OF IPS DE GEER (COLEOPTERA: SCOLYTIDAE) FROM WESTERN CANADA AND ALASKA. G R Hopping
Can Entomol 95(2):213-217 Feb 1963 421 C16
Alaska, Canada, Insect taxonomy, Alaska, Canada.

822-68

AMBROSIA FUNGUS STORAGE IN TWO SPECIES OF GNATHOTRICHUS EICHHOFF (COLEOPTERA: SCOLYTIDAE). S H Farris
Can Entomol 95(3):257-259
Mar 1963 421 C16

Insect anatomy.

823-68 A FURTHER NOTE ON THE RELATION OF WEATHER TO POPULATION TRENDS OF THE PLACK-HEADED BUDWORM, ACLERIS VARIANA (FERN,) (LEPIDOPTERA: TORTRICIDAE). Can Entomol 95(1):58-61

Jan 1963 421 C16

Insect ecology, Insect outbreaks, Insect population.

824-68 TWO NEW SPECIES OF CINARA CURTIS (HOMOPTERA: APHIDIDAE) FROM JUNIPERUS HORIZONTALIS MOENCH.

G A Bradley
Can Entomol 95(3):287-291
Mar 1963 421 C16

Insect morphology.

825-68

LARVAE OF PINE NEEDLE MINERS IN ONTARIO. O H Lindquist Can Entomol 95 (5):517-521 May 1963 421 C16 Insect taxonomy, Ontario, Pinus, Ontario, Pinus.

826-68

COLEOPTERA:
SURVEY OF BIOTA ASSOCIATED WITH MONOCHAMUS (COLEOPTERA:
CERAMBYCIDAE) IN MAINE.
R S Soper Jr R E Olson
Can Entomol 95 (1):83-95, BIBL. 94-95
Jan 1963 421 C16 Insect diseases, Maine, Maine.

827-68

THE OCCURRENCE OF NEMOBIUS FASCIATUS (DEGEER) IN NEW-FOUNDLAND (ORTHOPTERA: GRYLLIDAE: NEMOBIINAE). V R Vickery V N 120017 Can Entomol 95(1):17 Jan 1963 421 C16 Insect identification, Newfoundland.

828-68

A NOTE ON SYNCHRONIZED EMERGENCE IN GOMPHUS VASTUS WALSH (ODONATA: GOMPHIDAE). C Johnson Can Entomol 95 (1):69 Jan 1963 421 C16 Insect taxonomy.

829-68
LEUCANIA COMMA IN NORTH AMERICA (LEPIDOPTERA, NOCTUI-DAE). D C Ferguson Can Entomol 95(1):105-107 Jan 1963 421 C16 Insect identification, North America.

THE ROLE OF DISEASE AND DESICCATION IN THE POPULATION DYNAM-ICS OF THE GYPSY MOTH PORTHETRIA DISPAR (L.) (LEPIDOP-TERA: LYMANTRIDAE). Can Entomol 95 (4): 426-434 Apr 1963 421 C16 Demography, Insect diseases.

A FLEXIBLE CUTICLE IN THE WING BASES OF LEPIDOPTERA. J Sharplin Can Entomol 95(1):96-100 Jan 1963 421 C16 Cuticle, Wings (insects).

THE FINE STRUCTURE OF SYNAPSES TIGHT JUNCTION IN THE CENTRAL NERVOUS SYSTEM OF THE BLOWFLY LARVA. ME P Osborne J Insect Physiol 12(12):1503-1512 Dec 1966 421 J825 Calliphoridae, Larvae.

833-68

STUDIES ON THE CANADIAN AND ALASKAN FULGOROMORPHA (HEM-IPTERA). I. THE GENERA ACHROTILE PIEBER AND LACCOCERA VAN DUZEE (DELPHACIDAE). G G E Scudder Can Entomol 95(2):167-177 Feb 1963 421 C16 Insect taxonomy.

844-68

```
834-68
   TERRITORIAL BEHAVIOR AMONG MALES OF PROTOXABA GLORIOSA (FOX) (HYMENOPTERA: ANDRENIDAE).

M A Cazier E G Linsley
Can Entomol 95(5):547-556
   May 1963 421 C16
   POUR MALES OF ANDRENA (HYMENOPTERA: ANDRENIDAE).
G Knerer C E Atwood
Can Entomol 95(6):583-587
Jun 1963 421 C16
   Insect taxonomy.
   KENDALL S ITAU COEFFICIENT AS AN INDEX OF SIMILARITY IN
   COMPARISONS OF PLANT OR ANIMAL COMMUNITIES.
   A W Ghent
   Can Entomol 95(6):568-575
Jun 1963 421 C16
    Animal communities, Plant ecology, Animal communities,
   Plant ecology.
   PLEAS FEED ON LIZARDS IN THE LABORATORY IN PUERTO RICO.
   J Fox R I Fox I G Bayona
J Med Entomol 2(4):395-396
Jan 1966 421 J828
Lizards, Siphonaptera.
   A REVISION OF THE GENUS EPHEMERELLA (EPHEMEROPTERA: EPHEMERELLIDAE). VII. THE SUBGENUS EURYLOPHELLA. R K Allen G F Edmunds Jr Can Entomol 95(6):597-623, BIBL. 622-623 Jun 1963 421 C16 Insect dissemination, Insect taxonomy.
   MOLLUSCS AND ARTHROPODS FROM CARDINAL NESTS AT LONDON, ON-
   TARIO.
W W Judd
   Can Entomol 95(3):327-333
Mar 1963 421 C16
Insect identification, Mollusks, Ontario.
840-68
    A NEW HYLOBIUS WEEVIL ASSOCIATED WITH JACK PINE STAND DE-
   TERIORATION (COLEOFTERA: CURCULIONIDAE).
I Millers D M Benjamin R E Warner
Can Entomol 95(1):18-22
Jan 1963 421 c16
   Insect taxonomy.
               Physiology and Biochemistry
841-68
   JOINT ACTION IN INSECTICIDES. P S Hewlett
    Advances Pest Contr Res 3:27-74, BIBL. 66-74 1962 421 AD9
    Insecticides.
    FURTHER CONSIDERATIONS REGARDING THE REPELLENCY OF SPRAY
    COMPONENTS.
    B Hocking
Bull Entomol Res 52(1):1-5
Apr 1961 421 B87
    Insect repellents, Spraying.
   43-68
THE UPTAKE OF C14 AND P32 FROM LEAVES BY TWO SPECIES OF LEAPHOPPER VECTORS.
S W Orenski R C Staples K Maramorosch Phytopathology 52 (11): 1220
Nov 1962 464.8 P56
C14, Dalbulus maidis, Insect vectors, Leaves, Macrosteles fascifrops, P32, Radioactive tracers, C14, Dalbulus maidis, Macrosteles fascifrons, P32.
```

```
N J Turnock J C E Melvin
Can Entomol 95(6):646-654, BIBL. 653-654
        1963 421 C16
   Insect dissemination, Insect taxonomy.
845-68
   THE FEEDING OF NORMAL AND ASTER YELLOWS-INOCULATED CORN
   LEAFHOPPERS.
S W Orenski K Maramorosch
   Phytopathology 52(11):1219-1220
Nov 1962 464.8 P56
   Nov 1962 464.8 P56
Dalbulus maidis, Peeding, Plant hosts, Dalbulus maidis,
846-68
   A FRUIT-PIERCING MOTH OF SAMOA AND THE SOUTH PACIFIC ISLANDS.
   J A Comstock
Can Entomol 95 (2):218-222
Feb 1963 421 C16
   Insect behavior, Insect biology, Insect pests, Moths.
   CARABIDS COLLECTED IN A DDT-SPRAYED PEACH ORCHARD IN ON-
TARIO (COLEOPTERA: CARABIDAE).
D H C Herne
   Can Entomol 95 (4):357-362
Apr 1963 421 C16
   Insecticide application, DDT, Ontario.
848-68
LIPE HISTORY AND ECOLOGY OF PULVINARIA VITIS (L.) (HEMIPTERA: COCCOIDEA), THE COTTONY SCALE ATTACKING PEACH IN ON
   TARIO.
   THE Phillips
Can Entomol 95(4):372-406, BIBL. 406-407, TABS.
   Apr 1963 421 C16
   Insect ecology, Insect outbreaks, Ontario, Peaches.
   LEAFHOPPER VECTOR CELLS IN VITRO.
  H Hirumi K Maramorosch
Phytopathology 54(7):747
Jul 1964 464.8 P56
Insect morphology, Insect vectors, Macrosteles fascifrons.
   STUDIES ON THE HORMONAL CONTROL OF METABOLISM IN RHODNIUS PROLIXUS STAL. II. THE FIFTH-STAGE INSECTS.
   J Insect Physiol 12(9):1029-1037
Sep 1966 421 J825
Insect metabolism, Insect physiology.
   NOTE ON OVIPOSITION IN PLANT STEMS BY GRASSHOPPERS (OR-
  THOPTERA: ACRIDIDAE).
R Pickford M E Taylor
Can Entomol 95 (5):556-557
May 1963 421 C16
   Grasshoppers, Insect eggs, Oviposition, Plants, Oviposition.
852-68
THE ALPALFA PLANT BUG, ADELPHOCORIS LINEOLATUS (GOEZE) IN
   NORTHERN SASKATCHEWAN.
   C H Craig
   Can Entomol 95 (1):6-13
Jan 1963 421 C16
   Insect biology, Insect migration, Insect morphology, Insect pests, Saskatchewan.
853-68
   THE GROWTH CHARACTERISTICS, IN TERMS OF LIVE WEIGHT, OF SOME GRASSHOPPERS (ORTHOPTERA: ACRIDIDAE) OF WESTERN CANADA.

L G Putnam E G Peters
   Can Entomol 92(12):908-910
Dec 1960 421 C16
   Canada, Grasshoppers, Insect morphology, Canada.
   EFFECTS AND INTERACTIONS OF VARIED LEVELS OF TEMPERATURE, AMINO ACIDS, AND A VITAMIN ON THE RATE OF LARVAL DEVELOPMENT IN THE FLY PSEUDOSARCOPHAGA AFFINIS.
   I L House
J Insect Physiol 12(12):1493-1501
Dec 1966 421 J825
   Amino acids, Diptera, Larvae, Pantothenic acid, Temperature.
```

THE STATUS OF BESSA HARVEYI (TNSD.) (DIPTERA: ACHINI-

10 855-68

855-68

HABITUATION AND ASSOCIATIVE LEARNING IN DRING BOBEMICA MESN. (DIPTERA: TACHINIDAE).

L G Monteith
Can Entomol 95(4):418-426, BIBL. 425-426
Apr 1963 421 C16
Insect behavior, Parasitic insects.

856-68

EFFECTS OF POLLENS ON FECUNDITY AND LONGEVITY OF ADULT SCAMBUS BUOLIANAE (HTG.) (HYMENOPTERA: ICHNEUMONIDAE). K Leius Can Entomol 95(2):202-207, BIBL. 207 Feb 1963 421 C16 Fertility, Longevity, Pollen.

857-68
STESS AND NUCLEAR POLYHEDROSIS IN CROWDED POPULATIONS OF TRICBOPLUSIA NI (HUBNER).
R P Jaques
J Invertebrate Pathol 4(1):1-22, BIBL. 21-22, TABS.
Mar 1962 421 J826
Polyhedroses, Trichoplusia ni.

858-68
COVER SELECTION BY ADULTS OF HYPOLITHUS BICOLOR ESCBSCBOLTZ (COLEOPTERA: ELATERIDAE).
J F Doane
Can Entomol 95(6):667-670
Jun 1963 421 C16
Insect behavior, Oviposition, Oviposition.

859-68
INFECTION OF THE JACK PINE BUDWORM, CHORISTONEURA PINUS FREEMAN, WITH A NUCLEAR POLYHEDROSIS VIRUS OF THE SPRUCE BUDWORM, CHORISTONEURA PUMIFERANA (CLEMENS), (LEPIDOPTERA: TORTRICIDAE).

G R Stairs
Can Entomol 92(12):906-908
Dec 1960 421 C16
Choristoneura fumiferana, Choristoneura pinus, Insect diseases, Polyhedroses, Choristoneura fumiferana, Choristoneura pinus, Polyhedroses.

GO-68
GROWTH, REPRODUCTION AND LONGEVITY IN ONE BIOTYPE OF THE PEA APHID, ACYRTHOSIPBON PISUM (BARR.) (HOMOPTERA: APHIDI-DAE).
J J Cartier
Can Entomol 92(10):762-764
Oct 1960 421 C16
Acyrthosiphon pisum, Insect morphology, Longevity,
Reproduction, Acyrthosiphon pisum.

861-68
LABORATORY AND FIELD OBSERVATIONS ON TWO PREDATORS OF THE PEAR PSYLLA IN BRITISH COLUMBIA.
T K Watson W H A Wilde
Can Entomol 95(4):435-438
Apr 1963 421 C16
British Columbia, Insect pests,
Insecticide resistant insects, Predaceous insects,
British Columbia.

862-68
TETRANYCHUS SINHAI BAKER (ACARINA: TETRANYCHIDAE) A NEW PEST OF CEREALS -- VARIETAL REACTION OF BARLEY.
R N Sinha H A H Wallace
Can Entomol 95(6):588-596, TABS.
Jun 1963 421 C16
Barley, Grain, Insect dissemination, Insect pests, Mites.

863-68
DYNAMIC PROGRAMMING, LOOK AHEAD PROGRAMMING, AND THE STRATEGY OF INSECT PEST CONTROL.
K E F Watt
Can Entomol 95(5):525-536
Hay 1963 421 C16
Insect pests, Pest control.

864-68
PROGRESSIVE HISTOCHEMICAL CHANGE IN VIRUS-INFECTED PAT BODY OF THE WESTERN OAK LOOPER.
Q N Morris
J Invertebrate Pathol 4(4):454-464, BIBL. 463-464, PL. Dec 1962 421 J826
Fat body, Histochemistry, Polyhedroses.

865-68
STUDIES ON THE HARMOLYMPH PROTEINS OF THE BLOWFLY PHORMIA REGINA. I. CHANGES IN ONTOGENETIC PATTERNS.
P S Chen L Levenbook
J Insect Physiol 12(12):1595-1609
Dec 1966 421 J825
Calliphoridae, Insect biochemistry, Insect morphology, Insect physiology, Insect biochemistry.

866-68

THE NEED FOR DIRECT OBSERVATION OF BEBAVIOUR IN STUDIES OF TEMPERATURE EFFECTS ON LIGHT REACTIONS.

W G Wellington
Can Entomol 92 (6):438-448
Jun 1960 421 C16
Insect behavior, Light, Temperature.

67-68
DEVELOPMENTAL RATES OF LARCH SAWFLY (PRISTIPHORA ERICHSONII (HTG.)) LARVAE IN AN INSECTARY AND IN FIELD SHELTERS.
W G H Ives
Can Entomol 92 (9):668-674
Sep 1960 421 C16
Insect morphology, Insect rearing, Larvae,
Pristiphora erichsonii.

868-68
BIOLOGY OF THE MOUNTAIN PINE BEETLE, DENDROCTONUS MONTICOLAE HOPKINS, IN THE EAST KOOTENAY REGION OF BRITISB
COLUMBIA. III. INTERACTION BETWEEN THE BEETLE AND ITS
HOST, WITH EMPHASIS ON BROOD MORTALITY AND SURVIVAL.
R W Reid
Can Entomol 95(3):225
Mar 1963 421 C16
British columbia, Insect biology, Insect dissemination,
Insect eggs, Parasitic insects, British columbia.

869-68
ATTACK AND BROOD PRODUCTION OF AMBROSIA BEETLES IN LOGGING DEBRIS.
E D A Dyer
Can Entomol 95(6):624-631, TABS.
Jun 1963 421 C16
Insect pests, Pest control.

870-68
OCCURRENCE OF PISSODES TERMINALIS HOPP. (COLEOPTERA:
CURCULIONIDAE) IN CANADA: LIFE HISTORY, BEHAVIOUR, AND
CYTOGENETIC IDENTIFICATION.
J A Drouin C R Sullivan S G Smith
Can Entomol 95(1):70-76
Jan 1963 421 c16
Canada, Insect behavior, Insect identification, Canada.

871-68

THE STORAGE OF AMBROSIA FUNGUS SPORES BY THE PITTED AMBROSIA BEETLE, CORTHYLUS PUNCTATISSIMUS ZIMM. (COLEOPTERA: SCOLYTIDAE).

R J Pinnegan
Can Entomol 95(2):137-139
Feb 1963 421 C16
Fungi, Insect vectors.

B72-68
DESCRIPTIONS OF IMMATURE FORMS AND BIOLOGY OF XYLOTRECBUS COLONUS (FAB.) (COLEOPTERA: CERAMBYCIDAE).
L M Gardner
Can Entomol 92 (11):820-825
Nov 1960 421 C16
Cerambycidae, Insect biology, Insect morphology,
Xylotrechus colonus, Cerambycidae, Xylotrechus colonus.

873-68
NOTES ON MATSUCOCCUS MACROCICATRICES RICHARDS (BOMOPTERA: MARGARODIDAE) AND ITS ASSOCIATION WITH SEPTOBASIDIUM PINICOLA SNELL IN EASTERN CANADA.
W Y Watson G R Underwood J Reid
Can Entomol 92 (9):662-667
Sep 1960 421 C16
Canada, Insect biology, Canada.

874-68
TESTS OF BACILLUS THURINGIENSIS VAR. TBURINGIENSIS BERLIN-ER AND B. CEREUS FRANKLAND AND FRANKLAND ON LARVAE OF CHORISTONEURA FUMIFERANA (CLEMENS).
W A Smirnoff
Can Entomol 95(2):127-133, TABS.
Feb 1963 421 C16

4

875-68
NOTES ON THE LIPE HISTORY AND HABITS OF THE SPRUCE CONE WORM, DIORYCTRIA RENICULELLA (GRT.) (LEPIDOPTERA: TPYRALIDAE).
J M McLeod L Daviault
Can Entomol 95(3):309-316
Mar 1963 421 C16
Insect behavior, Insect biology.

LIPE HISTORY AND HABITS OF A SPRUCE NEEDLE-MINER, EUCORDY-LEA DUCHARMEI PREE. (LEPIDOPTERA: GELECHIDAE). J M McLeod Can Entomol 95(4):443-447 Apr 1963 421 C16 Insect behavior, Parasitism, Picea.

877-68
ULTRASONIC PRODUCTION AND ITS RECEPTION IN SOME NEOTROPICAL TETTIGONIIDAE.
N Suga

J Insect Physiol 12(9):1039-1050 Sep 1966 421 J825 Insect physiology, Stridulation.

878-68
BACTERIAL PLORA OF HEALTHY AND DEAD LARVAE OF PSEUDALETIA UNIPUNCTA (HAWORTH).
R E McLaughlin
J Invertebrate Pathol 4(3):306-312, BIBL. 311-312, TABS.
Sep 1962 421 J826
Bacteria, Plora.

THE ROLE OF CERTAIN GRAM-NEGATIVE BACTERIA AND TEMPERATURE IN LARVAL MORTALITY OF THE ARMYWORM, PSEUDALETIA UNIPUNCTA (HAWORTH).

J. Invertebrate Pathol 4(3):344-352
Sep 1962 421 J826
Insect temperature, Mortality.

879-68

ON THE EMBRYOLOGY OF THE SPRUCE BUDWORM, CHORISTONEURA FUM-IPERANA (CLEM.) (LEPIDOPTERA, TORTRICIDAE). G R Stairs Can Entomol 92(2):147-154 Feb 1960 421 C16 Embryology, Tortricidae.

881-68
PURIPICATION OF INSECT HYPERGLYCAEMIC AND HEART ACCELERATING HORMONES.
G M Natalizi N Frontali
J Insect Physiol 12(10):1279-1287
Oct 1966 421 J825
Dorsal vessel, Insect biochemistry, Insect hormones,
Insect physiology, Insect biochemistry, Insect hormones.

382-68
TRYPTOPHAN AND TYROSINE METABOLISM IN THE PUPA OF PAPILIONID BUTTERPLIES. II THE GENERAL PATTERN OF TRYPTOPHAN METABOLISM DURING THE PUPAL STAGE OF PAPILIO XUTHUS. Y Umebachi M Katayama J Insect Physiol 12(12):1539-1547 Dec 1966 421 J825
Butterflies, Insect metabolism, Pupae.

3-68
ON THE LIPIDS OF THE EGG OF THE GRASSHOPPER AULOCARA ELLIOTTI.
JA Svobođa J H Pepper G L Baker
J Insect Physiol 12(12):1549-1565
Dec 1966 421 J825
Grasshoppers, Insect eggs.

98-68
PIRST NORTH AMERICAN RECORD OF BUPOLUCILIA SILVARUM (MEIGEN) (DIFTERA: CALLIPHORIDAE) PARASITIZING BUPO TERRESTRIS AMERICANUS HOLBROOK.
J S Bleakney
Can Entowol 95(1):107
Jan 1963 421 C16
Insect identification, Parasitic insects.

885-68
THE EPPECT OF TEMPERATURE, ANOXIA, OR INJECTION OF VARIOUS SUBSTANCES ON HAEMOLYMPH COMPOSITION AND SUPER COOLING IN LARVAE OF ANAGASTA KUEHNIELLA (ZELL.).
L SOmme

J Insect Physiol 12(9):1069-1083 Sep 1966 421 J825 Anoxia, Glucose, Insect physiology, Larvae, Temperature, Trehalose.

886-68
ABDOMINAL STRETCH AND INHIBITION OF MOULTING IN RHODNIUS PROLIXUS (HEMIPTERA).
H C B Clark
J Insect Physiol 12(9):1019-1028
Sep 1966 421 J825
Insect physiology.

17-68
PREE AMINO ACID CHANGES ASSOCIATED WITH DIAPAUSE IN THE EGG
OF THE FIELD CRICKET TELEOGRYLLUS.
J R MacParlane T W Hogan
J Insect Physiol 12(10): 1265-1278
Oct 1966 421 J825
Gryllidae, Insect physiology, Mitosis.

188-68
CRYSTAL PREPARATIONS PROM COMMERCIAL BACILLUS THURINGIENSIS
VAR. SOTTO CONCENTRATES.
Jr., S W Robertson A M Heimpel
J Invertebrate Pathol 4(2):273-274
Jun 1962 421 J826

89-68
SOME ICHNEUMONID-SARCOPHAGID INTERACTIONS IN THE GYPSY MOTH
PORTHETRIA DISPAR (L.) (LEPIDOPTERA: LYMANTRIIDAE).
R W Camphell
Can Entomol 95(4):337-345, TABS.
Apr 1963 421 C16
Insect mortality, Insect mortality.

9Q-68
SOME PACTORS THAT DISTORT THE SEX RATIO OF THE GYPSY MOTH PORTHERINA DISPAR (L.) (LEPIDOPTERA: LYMANTRIDAE).
R W Camphell
Can Entomol 95 (5): 465-474, TABS.
Hay 1963 421 C16
Demography.

891-68
SPIRACULAR STRUCTURE AND WATER LOSS FROM TRIBOLIUM CONFUSUM JACQ. AND SITOPHILUS GRANARIUS (L.) UNDER REDUCED PRESS-URES.
J Sharplin H J Bhambhani
Can Entomol 95 (4):352-357
Apr 1963 421 C16
Insect morphology, Insect physiology, Pressure, Spiracles, Pressure.

992-68
THE FUNCTIONAL MORPHOLOGY AND INTERPRETATION OF THE INSECT OVIPOSITOR.
G G E Scudder
Can Entomol 93(4):267-272, BIBL. 271-272
Apr 1961 421 C16
Insect morphology, Insect physiology, Ovipositors.

93-68
BEESWAX IN THE NUTRITION OF THE WAX MOTH GALLERIA
MELLONELLA (L.).
R H Dadd
J Insect Physiol 12(12):1479-1492
Dec 1966 421 J825
Insect nutrition.

14-68
SOME PHYSIOLOGICAL STUDIES IN RELATION TO AGE IN THE BLOWPLY CALLIPHORA ERYTHROCEPHALA MEIG.
M A Tribe
J Insect Physiol 12(12):1577-1593
Dec 1966 421 J825
Calliphoridae, Insect morphology.

895-68
A NEW APPROACH TO NEUROMUSCULAR ANALYSIS IN THE INTACT FREE WALKING INSECT PREPARATION.
H I Runion P N R Usherwood
J Insect Physiol 12 (10):1255-1263
Oct 1966 421 J825
Electrophysiology, Insect physiology.

96-68
HOST-CONTAMINANT BIOLOGY OF MUSCOID FLIES. III. EPPECT OF
HIBERNATION, DIAPAUSE, AND LARVAL BACTERICIDES ON NORMAL
PLORA OF BLOW-FLY PREPUPAE.

10 897-68

B Greenberg J Invertebrate Pathol 4(4):415-428, BIBL. 427-428 Dec 1962 421 J826 Bactericides, Hibernation.

RECOVERY OF CHOLINESTERASE ACTIVITY IN ORGANOPHOSPHATE TREATED INSECTS. U E Brady J Sternburg J Insect Physiol 12(9):1171-1185 Sep 1966 421 J825 Cholinesterases, Insect physiology.

HOST PLANT RECORDS AND BIOLOGY OF APHIDS ON CEREAL GRAINS AND GRASSES IN MANITOBA (HOMOPTERA > APHIDIDAE).
A G ROBINSON S HSU
Can Entomol 95(2):134-137
Feb 1963 421 C16
Grain, Host plants, Insect biology, Manitoba, Host plants, Manitoba.

899-68

GROWTH OF RED PINE TREES AFTER CHEMICAL SUPPRESSION OF THE EUROPEAN PINE SHOOT MOTH.
R L Talerico J Heikkenen W E Miller
Can Entomol 95(5):522-524
May 1963 421 C16
Chemical control Chemical control (insects), Insecticide application, Pinus resinosa, Plant regulators, Pinus resinosa.

900-68

STUDIES ON THE PTERIDINES IN THE MILKWEED BUG, ONCOPELTUS FASCIATUS (DALLAS).

H S Forrest M Menaker J Alexander
J Insect Physiol 12(11):1411-1421
Nov 1966 421 J825 Insect biochemistry, Insect physiology, Insect biochemistry.

HAEMQLYMPH PROTEINS OF OSTRINIA NUBILALIS DURING DIAPAUSE AND PREPUPAL DIFFERENTIATION.
6 M Chippendale S D Beck
J Insect Physiol 12(12):1629-1638
Dec 1966 421 J825 Insect morphology, Insect physiology.

ESSENTIAL AMINO ACIDS DETERMINED IN THE TWO SPOTTED SPIDER MITE, TETRANYCHUS URTICAE KOCH (ACARINA, TETRANYCHIDAE) WITH GLUCOSE U C14. J G Rodriguez R E Hampton J Insect Physiol 12(10):1209-1216 Oct 1966 421 J825 Insect biochemistry, Insect physiology, Mites, Insect biochemistry.

BOUND ACETYL CHOLINESTERASE IN THE CENTRAL NERVOUS SYSTEM OF ACHETA DOMESTICUS (L.) (ORTHOPTERA). J S Edwards D Gomez J Insect Physiol 12(9):1061-1068 Sep 1966 421 J825 Acetylcholinesterases, Insect physiology.

PITCH DISCRIMINATION IN THE LOCUST EAR: OBERVATIONS ON SINGLE SENSE CELLS. J Insect Physiol 12(9):1119-1131 Sep 1966 421 J825 Insect physiology.

Genetics

905-68 GENETICS AND BIOLOGICAL CONTROL. F J Simmonds Can Entomol 95(6):561-567 Jun 1963 421 C16 Biological control (insects), Insect genetics.

Medical Entomology

906-68 THE ATTRACTION OF MOSQUITOS BY HUMAN OR ANIMAL BAITS IN RELATIONS TO THE TRANSMISSION OF DISEASE. J A Reid Bull Entomol Res 52(1)43-62, BIBL. 60-62, TABS. Apr 1961 421 B87 Attractants, Insect vectors.

907-68 THE STUDIES ON THE LIFE-HISTORY OF AEDES (SKUSEA) PEMBAENSIS (THEOBALD) (DIPTERA, CULICIDAE).

C B Worth J de Sousa M P Weinbren
Bull Entomol Res 52(2):257-261
Jun 1961 421 B87 Insect biology.

NOTES ON FLIES OF MEDICAL IMPORTANCE IN JAPAN, PART XXIII. SEASONAL PLUCTUATION OF FLIES IN THE IMPERIAL PALACE SEASONAL FLUCTUATION OF FLIES IN THE IMPERIAL PALACE GROUNDS, TOKYO.

R Kano K Kaneko K Miyamoto S Shinonaga H Kiuna T Okazaki
J Med Entomol 1(4):387-394
15 Jan 1965 421 J828
Diptera, Insect ecology, Japan, Medical entomology.

STUDIES ON MALAYAN VECTORS OF MALARIA METHODS OF TRAPPING, AND OBSERVATIONS ON BITING CYCLES. DE Moorhouse R 8 Wharton
J Med Entomol 1(4):359-370
15 Jan 1965 421 J828
Insect ecology, Insect traps, Insect vectors, Malaria,

20 CROP PROTECTION

ABSTRACTS OF PAPERS ACCEPTED FOR PRESENTATION AT THE PIFTY-SIXTH ANNUAL MEETING OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY, LAFAYETTE, IND., AUGUST 23, 24, 25, 26, 1964. Phytopathology 54(8):886
Aug 1964 464.8 PS6
Abstracts, Phytopathology, Plant diseases, Abstracts.

911-68
COMPARISON OF THE PUNGICIDAL AND NEMATOCIDAL PROPERTIES OF A NUMBER OF COMPOUNDS IN FIELD SOIL.
R C Baines L J Klotz T A DeWolfe M J Garber Phytopathology 52 (8):723
Aug 1964 464-8 P56
Fungicides, Nematocides, Soils.

912-68
REPORT AND ABSTRACTS OF THE 1964 ANNUAL MEETING OF THE POTOMAC DIVISION OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY.
Phytopathology 54(7):746
Jul 1964 464.8 P56
Abstracts, Phytopathology, Plant diseases, Abstracts.

A STUDY OF THE ROLE OF SOME NEMATODES IN THE INCIDENCE AND SEVERITY OF SOUTHERN BACTERIAL WILT OF TOMATO.
G Libman J G Leach
Phytopathology 52(11):1219
Nov 1962 464.8 P56
Bacterial wilt (tomatoes), Nematodes,
Plant disease transmission, Pseudomonas solanacearum.

14-68
SOME EFFECTS OF OZONE ON TOBACCO LEAF METABOLISM.
F D H Macdowall R A Ludwig
Phytopathology 52(8):740
Aug 1962 464.8 P56
Ozone, Plant metabolism, Tobacco.

915-68
RADIAL INCREMENT REDUCTION IN AMERICAN BEECH CAUSED BY A FREEZE.
E H Tryon R P True
Phytopathology 52(11):1221
Nov 1962 464.8 P56
Pagus grandifolia, Freezing, Plant growth inhibitors,
Plant physiology, Fagus grandifolia.

CONTROL OF SOIL-BORNE FUNGI AND INCIDENCE OF PRATYLENCHUS PENETRANS.

P M miller P E Waggoner
Phytopathology 52(9):926
Sep 1962 464.8 F56
Fungicides, Nematocides, Pratylenchus penetrans, Soil fungi,
Soil-borne plant diseases, Pratylenchus penetrans.

INTERRELATIONSHIP OF TOBACCO RINGSPOT VIRUS AND MELOIDO-GYNE INCOGNITA ACRITA IN NEMATODE RESISTANT AND SUSCEPTIBLE SOYDEANS.

H W Ryder H W Crittendon Phytopathology 52(11):1220 Nov 1962 464.8 P56 Meloidogyne incognita acrita, Plant nematode resistance, Ring spot (tobacco), Meloidogyne incognita acrita.

P18-68
EFFECTS OF SOIL AMENDMENTS ON NEMATODES AND SUBSEQUENT VERTICILLIUM WILT.
P M Miller L V Edgington
Phytopathology 52(8):743
Aug 1962 464.8 P56
Nematodes, Soil treatment, Verticillium albo-atrum,
Wilt (tomatoes), Soil treatment, Verticillium albo-atrum.

919-68
IN-COVERING SOIL FUNGICIDES, NEMATOCIDES, AND INSECTICIDES
FOR DISEASE CONTROL IN COTTON.
L S Bird
Phytopathology 53 (6):622
Jun 1963 464.8 P56
Cotton, Insecticides, Nematocides, Soil fumigation.

920-68
INFLUENCE OF RICE HULL SOIL AMENDMENTS ON SOIL MICROFLORAL POPULATIONS.
L R Smith L J Ashworth Jr
Phytopathology 53(6):625
Jun 1963 464.8 P56
Rice hulls, Soil amendments.

21-68
INFECTION RELATIONSHIP BETWEEN MELOIDOGYNE INCOGNITA ACRITA AND PUSARIUM OXYSPORUM F. VASINFECTUM IN COTTON.
N A Minton E B Minton
Phytopathology 53(6):524
Jun 1963 464.8 P56
Fusarium oxysporum f. vasinfectum,
Meloidogyne incognita acrita, Plant nematodes,
Wilt (cotton), Fusarium oxysporum f. vasinfectum,
Meloidogyne incognita acrita.

922-68
EVALUATION OF SOIL FUMIGANTS FOR THE CONTROL OF EARLY
MATURITY WILT OF POTATOES ON LONG ISLAND.
R C Cetas W B Harrison
Phytopathology 53(3):347-348
Mar 1963 464.8 P56
Chemical control (plant diseases), Pratylenchus penetrans,
Soil fumigation, Verticillium albo-atrum,
Pratylenchus penetrans, Verticillium albo-atrum.

923-68

PATHOLOGICAL ANATOMY OF LEAF SPOTS OF HOLLY.
E A Herridge
Phytopathology 53(4):481-487, BIBL., PL.
Apr 1963 464.8 P56

Ilex, Plant anatomy, Plant diseases, Ilex.

924-68
COMMENTS ON TESTS OF HERBICIDE MIXTURES.
D P Gowing
Weeds 8(3):379-391, BIBL. 390-391
Jul 1960 79.8 W41
Herbicide residues, Herbicides.

OZONE, A POSSIBLE CAUSE OF WHITE PINE EMERGENCE TIPBURN. C R Berry L A Ripperton Phytopathology 53(5):552-557, BIBL. 556-557, PL. May 1963 464.8 P56 Ozone, Tipburn (pinus strobus).

326-68

THE EFFECT OF FENURON ON FOUR SOUTHWESTERN SHRUBS.
R F Wagle E M Schmutz
Weeds 11(2):149-157, BIBL. 156-157
Apr 1963 79.8 W41
Shruhs.

927-68
A GRAFT-TRANSMISSIBLE FACTOR ASSOCIATED WITH PEAR DECLINE.
T A Shalla L Chiarappa T W Carroll
Phytopathology 53(3):366-367, BIBL.
Mar 1963 464.8 P56
Pears, Plant grafting, Pears.

928-68
GROWTH REDUCTION OF CITRUS SEEDLINGS BY FUSARIUM SOLANI AS INFLUENCED BY THE CITRUS NEMATODE AND OTHER SOIL FACTORS.
S D Van Gundy P H Tsao
Phytopathology 53(4):488-489, BIBL., PL.
Apr 1963 464.8 P56
Citrus, Fusarium oxysporum, Fusarium solani,
Plant growth inhibitors, Radopholus similis,
Fusarium oxysporum, Fusarium solani, Radopholus similis.

29-68
CULTIVATED SOIL.
LONGEVITY OF SEEDS OF WILD OATS, WINTER RYE, AND WHEAT IN.
D C Tingey
Weeds 9(4):607-611
Oct 1961 79.8 W41
Longevity, Seeds, Tillage.

940-68

Diseases

930-68

REPORT AND ABSTRACTS OF THE 1962 ANNUAL MEETING OF THE POTOMAC DIVISION OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY.

Phytopathology 52(11):1216

Nov 1962 464-8 P56

Conferences, Phytopathology.

931-68
THE UNEVEN DISTRIBUTION OF FUSARIUM OXYSPORUM F. CUBENSE IN HONDURAS BANANA SOILS.
E E Trujillo
Phytopathology 52(3):287
Mar 1962 464.8 P56
Bananas, Honduras.

932-68

FRUIT BREAKDOWN OF PEPPERS FOLLOWING LATE SEASON INFECTION WITH TOBACCO MOSAIC VIRUS.

J S Boyle
Phytopathology 52(9):922
Sep 1962 464.8 P56
Mosaic (tobacco), Redpeppers (vegetable).

933-68

PATHOGENICITY AND SYSTEMIC DEVELOPMENT OF SPHACELOTHECA REILIANA IN SORGHUM SPECIES.

P M Halisky L J Petersen
Phytopathology 51(1):65
Jan 1961 464:8 P56
Plant diseases, Sorghum.

34-68
VIABILITY OF THE DOWNY MILDEW FUNGUS OF LIMA BEANS.
R E Wester C Drechsler R W Goth
Phytopathology 52(11):1222
Nov 1962 464.8 P56
Downy mildew (lima beans), Lima beans.

935-68
THE ROLE OF ASSOCIATED FUNGI IN PREVENTION OF BOTRYTIS ROT OF STRAWBERRIES.
D D Bhatt
Phytopathology 52(4):359
Apr 1967 464.8 P56
Rot (strawberries), Strawberries.

936-68
ABSTRACTS OF PAPERS ACCEPTED FOR PRESENTATION AT THE FIFTY-FOURTH ANNUAL MEETING OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY, CORVALLIS, ORE., AUGUST 26, 27, 28, 29, 1962. Phytopathology 52(8):721-758
Aug 1962 464.8 P56
Abstracts, Conferences, Phytopathology, Abstracts.

937-68
SYMPQSIUM ON SCLEROTIUM ROLFSII.
Phytopathology 51(2):107-128
Feb 1961 464.8 P56
Fungus diseases (plants).

038-68
USE OF SPECIFIC PESTICIDES IN DETERMINING PROBABLE CAUSE OF PEANUT POD ROT.
K H Garren
Phytopathology 52(11):1218
Nov 1962 464.8 P56
Fungi, Peanuts, Pesticides, Fungi.

939-68
A WHITEFLY-TRANSHITTED MOSAIC OF RHYNCHOSIA MINIMA AND ITS RELATION TO TOBACCO LEAF CURL AND OTHER VIRUS DISEASES OF PLANSS IN PUERTO RICO.
J Bird Phytopathology 52(3):286
Mar 1962 464.8 P56
Insect vectors, leaf curl (tobacco), Puerto Rico, Puerto Rico,

THE INFLUENCE OF NITROGEN ON THE ROOT DISEASE OF BEAN CAUSED BY FUSARIUM SOLANI F. PHASEOLI.

K E Weinke Phytopathology 52 (8):757
Aug 1962 464.8 P56
Beans, Fusarium solani f. phaseoli, Nitrogen,
Root rot (beans), Fusarium solani f. phaseoli.

941-68
HISTOLOGICAL DIFFERENTIATION OF FUNGAL, CHEMICAL, MECHANI-

HISTOLOGICAL DIFFERENTIATION OF FUNGAL, CHEMICAL, MECHANI-CAL, AND INSECT DAMAGE TO HOLLY LEAVES. E A HETRIDGE Phytopathology 51(1):65 Jan 1961 464.8 P56 Ilex, Leaves, Plant histology.

42-68
A STUDY OF NONINSECT GALLS ON CARYA, QUERCUS, AND SALIX.
J B Wilson C Pinkerton R G Hutchins
Phytopathology 52(11):1222
Nov 1962 464.8 P56
Carya, Plant galls, Quercus, Salix, Carya, Quercus, Salix.

43-68
THE RELATIONSHIP OF NUTRITION TO THE DEVELOPMENT OF BACTERIAL SPOT OF PEPPER.
W W Townsley D F Crossan
Phytopathology 52(5):486
May 1962 464.8 P56
Bacterial spot (redpeppers), Nutrition.

944-68
RELATION BETWEEN PHENOL METABOLISM AND STEM RUST RESISTANCE
IN WHEAT.
Z Kiraly G L Farkas
Phytopathology 52(7):657-664, BIBL. 663-664, TABS.
Jul 1962 464.8 P56
Phenol compounds, Plant disease resistance,
Plant metabolism, Stem rust (wheat), Wheat.

045-68
A COMPARISON OF VIRUS ISOLATES, DWARF-FRUIT AND SPY 227-LETHAL.
D Cation
Phytopathology 51(2):104-106
Feb 1961 464.8 P56
Dwarf fruit, Virus diseases (plants).

946-68
FUNGI ASSOCIATED WITH RED CLOVER ROOTS IN WEST VIRGINIA.
R E Baldwin
Phytopathology 52(11):1216-1217
Nov 1962 464-8 P56
Fungi, Red clover, Roots.

947-68
AN EFFECTIVE PROGRAM FOR THE CONTROL OF BANANA MOSAIC.
A V Adam
Phytopathology 52(3):286
Mar 1962 464.8 P56
Bananas, Plant disease control.

948-68
DIFFERENCES IN INCUBATION PERIODS OF ASTER YELLOWS VIRUS STRAINS.
K Maramorosch
Phytopathology 52(9):925
Sep 1962 464.8 P56
Aster yellows (celery).

49-68
SEED AND POLLEN TRANSMISSION OF PRUNUS RINGSPOT VIRUS IN BUTTERCUP SQUASH.
C R Das J A Milbrath K G Swenson
Phytopathology 51(1):64
Jan 1961 464.8 P56
Pollination, Seeds.

950-68
NEW TYPES OF PRIMARY NECROTIC LESIONS PRODUCED BY COMMON BEAN MOSAIC VIRUS.
W J Zaumeyer R W Goth
Phytopathology 52(11):1222
Nov 1962 464.8 P56
Beans, Mosaic (beans), Virus diseases (plants).

951-68 CONTROL OF WESTERN X-DISEASE OF PEACH. J A Milbrath Phytopathology 52(4):363 Apr 1962 464.8 P56 CONTROL OF THE ROOT ROT COMPLEX OF EASTER LILY. R Baker J Tammen
Phytopathology 52(8):723
Aug 1962 464.8 P56 953-68 THE EFFECT OF NEAR-ULTRAVIOLET IRRADIATION ON THE SPORULATION OF CERTAIN FUNGI. Phytopathology 51(1):65-66 Jan 1961 464.8 P56 Fungi, Sporulation, Ultraviolet rays, Sporulation. YELLOW-POPLAR BUTT ROT INFECTION FROM DEAD ANCILLARY STEMS. J H Ginns Phytopathology 52(11):1218
Nov 1962 464.8 P56
Butt rot (trees), Liriodendron tulipifera. 955-68 THE RELATION OF SPORULATION OF ASCOCHYTA PISI TO WAVE LENGTH, INTENSITY, AND EXPOSURE LENGTH TO MONOCHROMATIC ULTRAVIOLET RADIATION. C M Leach Phytopathology 51(1):66 Jan 1961 464.8 P56 Sporulation, Ultraviolet rays, Sporulation. SOME CONSIDERATIONS OF STRAIN VARIATION IN COTTON SEEDLING PATHOGENS. C R Maier Phytopathology 52(8):741
Aug 1962 464.8 P56
Cotton, Rhizoctonia solani, Seedlings,
Thielaviopsis basicola, Rhizoctonia solani,
Thielaviopsis basicola. 957-68 ANTAGONISMS TO NEMATODE-TRAPPING FUNGI IN SOIL. E Mankau Phytopathology 51(1):66 Jan 1961 464.8 P56 Fungi, Soils. 958-68

AN APPARENTLY VIRUS-FREE LEAF OF A SYSTEMATICALLY INVADED PLANT. I R Schneider Phytopathology 52(11):1220 Nov 1962 464.8 P56 Germ-free life, Leaves, Virus diseases (plants).

959-68 THE CONTROL OF SEED-BORNE SAFFLOWER RUST BY STEAM. A B McCain J M Ogawa Phytopathology 51(1):66 Jan 1961 464.8 P56 Rust (safflower), Soil-borne plant diseases, Steam.

INHIBITORS OF POTATO VIRUS X IN POTATO LEAVES WITH DIF-FERENT TYPES OF VIRUS RESISTANCE.

W J Hooker W S Kim
Phytopathology 52(7):688-693, BIBL. 693
Jul 1962 464.8 P56
Leaves, Plant disease resistance, Potatoes.

EVIDENCE THAT BETA-PROPIOLACTONE CAN INACTIVATE LATENT A STRAWBERRY VIRUS IN FRAGARIA VESCA PLANTS.
P W Miller T R Aspitarte
Phytopathology 51(1):66
Jan 1961 464.8 P56
Fragaria vesca, Hydracrylic acid beta-lactone,
Latent virus (strawberries), Fragaria vesca.

STENDOMYCIN SALICYLATE, A NEW ANTIBIOTIC FOR THE CONTROL OF SPHAEROTHECA PANNOSA VAR. ROSAE.

I F Brown Jr H R Hall

Phytopathology 52(11):1217 Nov 1962 464.8 p56 Antibiotics.

963-68 THE HULL ROT DISEASE OF ALMOND AND THE PATHWAY FOR TRANSLO-CATION OF A TOXIN INVOLVED IN SYMPTOM DEVELOPMENT. C J Mirocha E E Wilson J E DeVay Phytopathology 51(1):66
Jan 1961 464.8 P56 Almonds, Hull rot (prunus amygdalus), Plant translocation,

DISTRIBUTION PATTERN AND PERSISTENCE OF THE SYSTEMIC RESISTANCE INDUCED IN HYPERSENSITIVE TOBACCO PLANTS BY TOBACCO MOSAIC VIRUS. R F Bozarth A F Ross Phytopathology 52(9):922 Sep 1962 464.8 P56 Mosaic (tobacco), Plant disease resistance, Tobacco.

INFLUENCE OF SOIL MOISTURE AND TEMPERATURE ON SURVIVAL OF VERTICILLIUM MICROSCLEROTIA. M J Nadakavukaren C E Horner Phytopathology 51(1)66 Jan 1961 464.8 P56 Soil moisture, Soil temperature.

966-68 RESISTANCE TO CUCURBIT VIRUSES IN CUCUMIS MELO. R E Webb G W Bohn Phytopathology 52(11):1221 Nov 1962 464.8 P56 Cucumis melo, Plant disease resistance, Virus diseases (plants), Cucumis melo.

967-68 MECHANICAL TRANSMISSION OF TWO STRAINS OF SWEET CHERRY RU-GOSE MOSAIC, MILD RUSTY MOTTLE, AND RASP LEAF VIRUSES. G Nvland Phytopathology 51(1):66-67
Jan 1961 464.8 P56
Plant disease transmission, Rasp leaf (cherries),
Rugose mosaic (cherries).

BACTERIAL NECROSIS AND ISOLATION FREQUENCY OF RHIZOCTONIA FROM RHIZOSPHERES UNDER SEVERAL CROPPING SEQUENCES.
A L Andersen D M Huber Phytopathology 52(8) 721
Aug 1962 464.8 P56 Crop rotation, Necrosis, Rhizoctonia.

GILBERTELLA FRUIT ROT OF PEACHES IN CALIFORNIA. Phytopathology 51(1):67
Jan 1961 464.8 P56
California, Fruit rot, Peaches, California, Fruit rot.

970-68 REACTION OF FIVE PEANUT VARIETIES TO CULTURAL CONTROL OF STEM ROT. K H Garren N n Garren
Phytopathology 52(11):1218
Nov 1962 464.8 P56
Cultural control (plant diseases), Peanuts,
Plant physiology, Stem rot (peanuts).

971-68 71-68
THE EFFECT OF GIBBERELLIC ACID ON THE PARASITISM OF RHIZOCTONIA SOLANI ON BEANS AND COTTON.
L J Petersen J E DeVay B R Houston
Phytopathology 51(1):67
Jan 1961 464.8 P56
Gibberellic acid, Kidney beans, Parasitic plants,
Rhizoctonia solani.

PENETRATION AND INFECTION OF PEA ROOTS BY ZOOSPORES OF APHANOMYCES EUTEICHES. Arnamonicus Eureiches.
J L Cunningham D J Hagedorn
Phytopathology 52 (8): 827-834
Aug 1962 464.8 P56
Aphanomyces euteiches, Peas, Plant diseases, Roots,
Zoospores, Aphanomyces euteiches, Zoospores.

20 973-68

973-68
INCREASED PRODUCTION OF GEMINATE BUDS ON PEACH MOSAIC-INFECTED PEACH TREES.
T S Pine
Phytopathology 51(1):67
Jan 1961 464.8 P56
Mosaic (peaches), Trees.

974-68
FUNGI ISOLATED FROM DISCOLORATIONS IN NORTHERN HARDWOODS.
A L Shigo
Phytopathology 52(11):1221
Nov 1962 464.8 P56
Fungi, Hardwoods, Fungi.

975-68
FLOWERING CRAB APPLE VARIETIES AS QUICK INDICATOR HOSTS FOR LATENT APPLE VIRUSES.
JE Reynolds J A Milbrath
Phytopathology 51(1):67
Jan-1961-464.8 p56
Crabapples, Latent virus (apples).

976-68
A STRAIN-HOST COMBINATION FOR STUDYING TOMATO SPOTTED WILT VIRUS INCLUSION.
J G Bald
Phytopathology 52(8):723
Aug 1962 464.8 P56
Plant hosts, Spotted wilt (tomatoes), Plant hosts.

977-68

FACTORS DETERMINING THE RATE OF BEAN YELLOW MOSAIC VIRUS TRANSMISSION BY THE APHID MYZUS PERSICAE.

K G Swenson S S Sohi
Phytopathology 51(1):67
Jan 1961 464.8 P56
Aphididae, Plant translocation, Virus diseases (plants), Yellow mosaic (beans).

978-68
RELATIONSHIP OF THE IRIS BORER (MACRONOCTUA ONUSTA) TO THE SPREAD AND DEVELOPMENT OF SOFT ROT.
C M Boward J G Leach
Phytopathology 52 (11):1219
Nov 1962 464-8 P56
Plant disease transmission.

979-68
FATHOGENICITY OF MONOSPORIC VERSUS POLYSPORIC CULTURES OF UROCYSTIS COLCHICI.
H Tachibana R Duran
Phytopathology 51(1):67
Jan 1961 464.8 P56
Plant diseases.

980-68
TECHNIQUES IN ISOLATION OF PYTHIACEOUS FUNGI FROM SOIL AND DISEASED PINEAPPLE TISSUE.
H W Klemmer R Y Nakano
Phytopathology 52 (9):955-956
Sep 1962 464.8 P56
Fungi, Phytophthora, Pineapples, Pythium, Soils,
Phytophthora, Pythium.

81-68
A KINETIC INVESTIGATION OF THE MODE OF TMV ATTACHMENT TO INFECTIBLE SITES.
W Furumoto S G Wildman
Phytopathology 51(1):65
Jan 1961 464.8 P56
Mode, Mosaic (tobacco), Virus diseases (plants).

982-68
COLONIZATION OF LIMA BEAN PLANTS BY PHYTOPHTHORA PHASEOLI AS AFFECTED BY TEMPERATURE AND AGE OF PLANTS.
R A Hyre
Phytopathology 52(11):1219
Nov 1962 464.8 P56
Fungus diseases (plants), Lima beans, Plant senescence, Temperature.

983-68
TRANSMISSABLE DECLINE DISEASES OF APPLE. M F Welsh F W L Keane
Phytopathology 51(1):67-68
Jan 1961 464-8 P56
Apples, virus diseases (plants).

984-68
CYLINDROCLADIUM ROOT ROT OF CONIFER SEEDLINGS IN MINNESOTA.
N A Anderson W M Bugbee
Phytopathology 52(8):721
Aug 1962 464-8 P56
Cylindrocladium scoparium, Minnesota, Root rot (coniferae),
Seedlings, Cylindrocladium scoparium, Minnesota.

985-68
AN ANALYSIS OF A NEW PHENOMENON OF TMV ABORTIVE INFECTIONS.
J Wu I Rappaport
Phytopathology 51(1):68
Jan 1961 464.8 P56
Mosaic (tobacco).

986-68
INHIBITION OF ERWINIA AMYLOVORA BY TISSUES, EXTRACTS, AND ASH FROM RESISTANT AND SUSCEPTIBLE PEARS.
H L Keil R A Wilson
Phytopathology 52(11):1219
Nov 1962 464.8 P56
Erwinia amylovora, Pears, Plant disease control,
Plant disease resistance, Plant extracts, Erwinia amylovora.

987-68
USE OF PIMARICIN, PENICILLIN, AND POLYMYXIN IN ISOLATING PHYTOPHTHORA SPP. FROM ROOT TISSUES.
J W Eckert P H Tsao L J Klotz K B Jones Phytopathology 51(1):64-65
Jan 1961 464.8 P56
Penicillin, Phytophthora, Pimaricin, Polymyxin, Roots, Tissues, Phytophthora, Pimaricin.

988-68
INACTIVATION OF ALFALFA MOSAIC VIRUS BY PANCREATIC RIBONUC-LEASE.
T P Pirone
Phytopathology 52(8):747-748
Aug 1962 464.8 P56
Mosaic (alfalfa), Ribonuclease.

989-68
CONTROLLING PENICILLIUM DECAY OF ORANGES WITH CERTAIN ALI-PHATIC AMINES.
J W Eckert M J Kolbezen B F Bretschneider H K Nicholas
Phytopathology 51(1):64
Jan 1961 464.8 P56
Amines, Oranges, Penicillium.

990-68
THE EFFECT OF SOIL FERTILITY ON THE DEVELOPMENT OF KENTUCKY BLUEGRASS DISEASES.
E S Elliott
Phytopathology 52(11):1218
Nov 1962 464.8 P56
Plant diseases, Poa pratensis, Soil fertility,
Poa pratensis.

991-68
THE EFFECT OF ENVIRONMENT ON THE TOXIC ACTION OF SULFUR DIOXIDE ON THE SPORES OF BOTRYTIS CINEREA.
H M Couey M Uota
Phytopathology 51(1):64
Jan 1961 464.8 P56
Botrytis cinera, Environment, Spores, Sulfur dioxide,
Botrytis cinera, Spores.

992-68
DETERMINATION OF INOCULUM POTENTIAL OF INFESTED SOIL.
J G Bald D E Munnecke
Phytopathology 52 (8):724
Aug 1962 464.8 P56
Callistephus chinensis, Fusarium oxysporum, Inoculum,
Pythium ultimum, Soils, Callistephus chinensis,
Fusarium oxysporum, Inoculum, Pythium ultimum.

993-68
ACQUISITION AND TRANSMISSION OF ASTERS YELLOWS VIRUS.
K Maramorosch
Phytopathology 52(11):1219
Nov 1962 464.8 P56
Plant disease transmission, Virus diseases (plants).

994-68
RELATIONSHIPS AMONG PRUNUS VIRUSES OF THE NECROTIC RINGSPOT TYPE.
W R Allen
Phytopathology 52(9):922
Sep 1962 464.8 P56
Necrotic ring spot (prunus), Prunus,

```
Virus diseases (plants), Prunus.
995-68
   A PARASITIC RHIZOCTONIA ON SPECIES OF THALLOPHYTES (AL-GAE), BRYOPHYTES, AND PTERIDOPHYTES.
O D Morgan Jr
Phytopathology 52(11):1219
Nov 1962 464.8 P56
Fungus diseases (plants), Rhizoctonia.
996-68
```

STALACTIFORM RUST ON JACK PINE. N A Anderson D W French Phytopathology 52 (8):721 Aug 1962 464.8 P56 Pinus banksiana, Rust (pinus), Pinus banksiana.

AN EVALUATION OF TWO FUNGICIDES AS SOIL TREATMENT WITH AND WITHOUT HERBICIDE FOR TOMATO FRUIT DISEASE CONTROL. DF Crossan & I. Morehart
Phytopathology 52(11):1217
Nov 1962 464.8 P56
Fungicides, Herbicides, Plant disease control,
Soil treatment, Tomatoes.

EFFECT AND INTERACTION OF TEMPERATURE AND HOST GENES ON GROWTH AND PATHOGENICITY OF GLOMERELLA CINGULATA ON LUPIN-US ANGUSTIFOLIUS.
H D Wells I Forbes Jr
Phytopathology 52 (8):757
Aug 1962 464.8 P56 Glomerella cingulata, Lupinus angustifolius, Pathogenesis, Plant genetics, Plant physiology, Temperature, Glomerella cingulata, Lupinus angustifolius, Pathogenesis.

FOUR NEW HOSTS OF CRISTULARIELLA PYRAMIDALIS.

T C Davis 52(11):1217 Nov 1962 Cristulariella pyramidalis, Plant hosts, Cristulariella pyramidalis, Plant hosts.

THE PREVALENCE OF ERWINIA AMYLOVORA IN APPLE BUDS AS DE-TECTED BY PHAGE. C H Baldwin Jr R N Goodman Phytopathology 52(8):724 Aug 1962 464.8 P56 Apples, Erwinia amylovora.

1001-68

TEMPERATURE EFFECTS ON HOST PREDISPOSITION AND DEVELOPMENT CF BLACKSPQT.
J G Palmer P Semeniuk Phytopathology 52 (11):1220 Nov 1962 464.8 P56 Plant disease resistance, Plant hosts, Temperature, Plant disease resistance, Plant hosts.

RELATIONS OF DISEASE DEVELOPMENT AND INTENSITY TO CARBOHY-DRATE LEVELS IN RUSTED BEAN PLANTS. Phytopathology 52(9):924 Sep 1962 464.8 P56 Beans, Carbohydrates, Plant diseases, Rust (beans).

EFFECT OF DEFLOWERING AND TOBACCO RINGSPOT VIRUS ON THE OC-CURRENCE OF CERCOSPORA KIKUCHII ON SOYBEAN.
J L Crane H W Crittendon Phytopathology 52 (11):1217 Nov 1962 464.8 P56 Ring spot (tobacco), Soybeans.

DEVELOPMENT OF SPRING BLACKSTEM IN ALFALFA AS AFFECTED BY NUTRIENTS ADDED TO SPORE SUSPENSIONS AT THE TIME OF INOCU-LATION. E E Banttari B I Renfro
Phytopathology 52 (8):724
Aug 1962 464.8 P56
Alfalfa, Inoculum, Spores, Spring black stem (alfalfa),
Inoculum, Spores.

THE EFFECT OF INFECTION BY HELMINTHOSPORIUM CARBONUM ON SOME CO2 FIXATION AND OTHER ENZYMES IN CCRN SEEDLINGS.

I Malca R C Huffaker F P Zscheile
Phytopathology 52 (8):741
Aug 1962 464.8 P56
Carbon dioxide, Corn, Enzymes, Helminthosporium carbonum,
Seedlings, Helminthosporium carbonum.

DEVELOPMENT OF FUSARIUM CANKER OF BLACK POPLARS. Phytopathology 52(8):724 Aug 1962 464.8 P56 Fusarium solani, Populus nigra, Fusarium solani, Populus nigra.

RELATIONSHIP OF MEADOW NEMATODES TO VERTICILLIUM WILT OF STRAWBERRIES. STRAMBERRIES.

W Abu-Gharbieh E H Varney W R Jenkins
Phytopathology 52(9):921
Sep 1962 464.8 P56
Pratylenchus penetrans, Strawberries,
Verticillium albo-atrum, Wilt (strawberries),
Pratylenchus penetrans, Verticillium albo-atrum.

1008-68

108-68
FACTORS AFFECTING SPORULATION, SPORE SIZE, AND PATHOGENICITY
OF SEVERAL LEGUME CERCOSPORAE.
R D Berger E W Hanson
Phytopathology 52 (8):724
Aug 1962 464.8 P56 Cercospora, Legumes, Pathogenicity, Spores, Cercospora, Pathogenicity, Spores.

RAPID GERMINATION AS A VIABILITY TEST FOR SEED OF ARCEUTHO-BIUM SPP. E F Wicker Phytopathology 52(8):757 Aug 1962 464.8 P56

Arceuthobium, Seed germination, Arceuthobium.

1010-68

STUDIES ON GENETIC CONTROL OF RUST REACTION IN PUCCINIA SORGHI.

R W Berry A L Flangas
Phytopathology 58(2):724
Aug 1962 464.8 P56
Plant genetics, Puccinia sorghi, Rust (corn),
Puccinia sorghi.

1011-68

Old-68
THE EFFECT OF METABOLITES PRODUCED BY FUSARIUM OXYSPORUM F.
LYCOPERSICI (SACC.) SNYD. AND HANS. ON ROOT ELONGATION OF
TOMATO SEEDLINGS.
A Mahadevan N E Caroselli
Phytopathology 52 (9):925
Sep 1962 464.8 P56
Fusarium oxysporum f. lycopersici, Metabolites,
Plant physiology, Roots, Seedlings, Tomatoes,
Fusarium oxysporum f. lycopersici.

1012 - 68

012-68
MITIGATION OF PUSARIUM WILT SYMPTOMS OF TOMATO SEEDLINGS BY
SEED INOCULATION WITH A SPECIES OF CEPHALOSPORIUM.
P W Bhelwa D V Phillips C C Allison
Phytopathology 52(8):725
Aug 1962 464.8 P56
Fusarium oxysporum, Seed treatment, Wilt (tomatoes),
Fusarium oxysporum.

SEEDLING VERSUS MATURE PLANT REACTIONS OF WHEAT TO STRIPE RUST. L H Purdy R E Allan
Phytopathology 52(8):748
Aug 1962 464.8 P56
Plant disease resistance, Seedlings, Stripe rust (wheat),

INHIBITION OF SUGARCANE MOSAIC VIRUS BY MC-2 AND BROMINE. Phytopathology 52(8):722
Aug 1962 464.8 p56
Bromine, Mosaic (sugarcane).

BIBLIOGRAPHY

20 1015-68

1015-68 REPORT AND ABSTRACTS OF THE 1961 MEETING OF THE NORTEASTERN DIVISION OF THE ABERICAN PHYTOPATHOLOGICAL SOCIETY. Phytopathology 52(9):921-927 Sep 1962 464.8 P56

Abstracts, Conferences, Phytopathology, Abstracts.

1016-68 RELEASE AND ACCUMULATION OF ELECTROLYTES BY CELLS AND CELL FRACTIONS AFTER TREATMENT WITH VICTORIN. H S Black H Wheeler

Phytopathology 52 (8):725 Aug 1962 464.8 P56 Flectrolytes, Victorin.

0.17-68
FUNGI WHICH PROVIDE SOME LOCAL BIOLOGICAL CONTROL OF ARCEUTHOBIUM SPP. IN THE PACIFIC NORTHWEST.
E F Wicker C G Shaw
Phytopathology 52 (8):757
Aug 1962 464.8 P56
Arceuthobium, Biological control (weeds), Fungi,
Pacific northwest, Arceuthobium, Pacific northwest.

FACTORS INFLUENCING THE TELIAL AND SPORIDIAL STAGES OF PUC-CINIA STARMANII. L M Blank C R Leathers Phytopathology 52 (8):725 Aug 1962 464.8 P56 Puccinia stakmanii, Spores, Puccinia stakmanii, Spores.

CONTROL OF ROSE BLACK SPOT WITH FUNGICIDES. J H Haas J Tamman Phytopathology 52(9):923-924 Sep 1962 464.8 P56

Black spot (rosa), Fungicides, Rosa.

1020-68

20-68
COMPARISON OF ONE- AND TWO-YEAR-OLD WOOD AS INOCULUM IN INDEXING FOR A LATENT APPLE VIRUS.
E C Blodgett M D Aichelle
Phytopathology 52(8):725
Aug 1962 464.8 P56
Apples, Host indexing (plants), Inoculum,
Latent virus (apples), Inoculum.

1021-68 AN ANTIBACTERIAL SUBSTANCE FROM CAULIFLOWER SEEDS.
F Malekzadeh T P Pirone
Phytopathology 52(8):741
Aug 1962 464.8 P56

Bactericides, Cauliflower, Seeds.

SYNTROPHISM IN VENTURIA INFOUALIS IN RELATION TO PATHOGENI-D # Boone

Phytopathology 52(8):725 Aug 1962 464.8 P56 Pathogenicity.

ANTIZONANT TREATED CLOTH CONTROLS TOBACCO FLECK. G S Taylor S Rich Phytopathology 52(9):927 Sep 1962 464-8 P56 Environment, Ozone.

1024-68 MICROBIAL STIMULATION OF PHYMATOTRICHUM OMNIVORUM. J A Booth G A Gries Phytopathology 52(8):725 Aug 1962 464.8 P56 Soil microbiology.

AMINO ACIDS IN RELATION TO PATHOGENICITY OF TWO WILD-TYPE LINES OF VERTURIA INABQUALIS TO TWO APPLE VARIETIES. WILLIAMS, B J. D H Boone Phytopathology 52(8):757 Aug 1962 464.8 P56 Amino acids, Apples, Pathogenesis, Venturia inaequalis, Pathogenesis, Venturia inaequalis.

1026-68

HISTOLOGICAL STRUCTURE OF CORN STALKS IN RELATION TO FIELD RESISTANCE TO STALK ROT. C W Boothroyd
Phytopathology 52(8):726
Aug 1962 464.8 P56
Corn, Plant disease resistance, Stalk rot (corn).

1027-68

27-68
SIGNIFICANT ASPECTS OF BACTERIAL BLIGHT OF ILEX OPACA
CAUSED BY CORYNEBACTERIUM ILICIS.
M Mandel E F Guba
Phytopathology 52(9):925
Sep 1962 464.8 P56
Ilex opaca.

1028-68

TRANSMISSION OF VIRUSES TO STRAWBERRY BY EXCISED LEAF GRAFTS FROM PLANTS OTHER THAN STRAWBERRY.
A J Braun J A Keplinger
Phytopathology 52 (8):726
Aug 1962 464.8 P56 Plant disease transmission, Plant grafting, Strawberries, Virus diseases (plants).

STUDIES ON THE HOST RANGE AND PATHOGENICITY OF XIPHINEMA INDEX. J D Radewald D J Raski Phytopathology 52(8):748-749 Aug 1962 464.8 P56 Host indexing (plants).

1030-68

THE POTENTIAL VALUE OF SYNTHETIC TOLERANT OR MULTILINE VAR-IETIES FOR CONTROL OF CERBAL RUSTS IN NORTH AMERICA. TETTES FOR CONTROL OF CERRAL RUSTS IN NORTH AMERICA.

J A Browning M D Simons K J Frey
Phytopathology 52(8):726

Aug 1962 464.8 P56

North America, Plant disease resistance, Rust (grain), North America.

SYMPOSIUM ON TROPICAL PLANT PATHOLOGY: INVITATIONAL PAPERS PRESENTED DECEMBER 11, 1961 AT THE MEETING OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY AT BILOXI, MISSISSIPPI. Phytopathology 52 (9):928-953
Sep 1962 464.8 P56 Phytopathology, Symposia, Tropical plants.

1032-68

J32-68
INSECT DISSEMINATION-A NEWLY DISCOVERED MODE OF SPREAD OF BACTERIAL WILT OF BANANA.
I Buddenhagen T A Elsasser
Phytopathology 52 (8): 726
Aug 1962 464.8 P56
Bacterial wilt (bananas), Insect dissemination,
Plant disease transmission, Bacterial wilt (bananas).

EFFECT OF CROP ROTATION ON YIELDS OF CORN, OATS, AND WHEA AND ON CORN STALK ROT. L E Williams A F Schmitthenner Phytopathology 52 (8):757 Aug 1962 464.8 P56 Corn, Crop rotation, Crop yields, Oats, Stalk rot (corn), Wheat. EFFECT OF CROP ROTATION ON YIELDS OF CORN. OATS. AND WHEAT

1034-68

DESIGNATION OF RACES IN PSEUDOMONAS SOLANACEARUM. DESIGNATION OF RACES IN PSEUDOROM.
I Buddenhagen L Sequeira A Kelman
Phytopathology 52(8):726
Aug 1962 464-8 P56
Pseudomonas solanacearum.

CHEMICAL CONTROL OF RHIZOCTONIA BROWN PATCH OF BENTGRASS.

H B Couch L D Moore E R Bedford
Phytopathology 52 (9):923
Sep 1962 464.8 P56
Agrostis, Brown patch (grasses), Rhizoctonia solani,
Agrostis, Rhizoctonia solani.

1036-68

HOST RANGE AND BIOASSAY OF FIELD SOIL FOR CYLINDROCLADIUM SCOPARIUM. W M Bugbee Phytopathology 52(8):726 Aug 1962 464.8 P56 Cylindrocladium scoparium, Plant hosts, Soil microbiology,

```
Cylindrocladium scoparium. Plant hosts.
1037-68
   MULTIPLICATION OF APBELENCHUS AVENAE ON PHYTOPATHOGENIC
   SOIL FUNGI.
S K Mankau R Mankau
   Phytopathology 52(8):741
Aug 1962 464.8 P56
Soil fungi.
   COMPLEMENTARY EFFECTS OF RELATED VIRUSES MIXED IN SERIAL DI-
   LUTIONS.
   D W Burke R O Hampton
   D W BUTKE R O Hampton
Phytopathology 52(8):726
Aug 1962 464.8 P56
Virulence, Virus diseases (plants), Virulence.
1039-68
   A FLUORESCENT-ANTIBODY STUDY OF PROGRESSIVE DISTRIBUTION OF
   SOUTHERN BEAN MOSAIC VIRUS ANTIGEN IN BEAN LEAVES.
   J F Worley
  Phytopathology 52(8):757-758
Aug 1962 464.8 P56
   Antigens, Beans, Fluorescent antibody technic, Leaves.
  PRECONDITIONING AND PLACEMENT OF ORGANIC MATERIALS IN CONTROL OF BEAN ROOT ROT.
   D W Burke
  P w Burke
Phytopathology 52(8):727
Aug 1962 464.8 P56
Fusarium solani, Plant disease control, Root rot (beans),
Fusarium solani.
  TRANSMISSION OF POTATO SPINDLE TUBER VIRUS TO TOMATO.

W B Raymer M J O Brien
Phytopathology 52(8):749
Aug 1962 464.8 P56
Plant disease transmission, Spindle tuber (potatoes),
   Tomatoes.
1042-68
  PREE AMINO ACID CONTENT OF STBIPE RUST UREDOSPORES.
  PREE ANINO ACID CONTENT OF STRIPE ROST
J R Burleigh L B Purdy
Phytopathology 52(8):727
Aug 1962 464.8 P56
Amino acids, Uredospores, Uredospores.
1043-68
   INTERFERENCE STUDIES WITH MIXED INOCULA OF RELATED AND UNRE-
   LATED STBAINS OF PLANT VIBUSES.
J-B Wu S G Wildman
   Phytopathology 52 (8):758
Aug 1964 464.8 P56
Mosaic (tobacco), Virus diseases (plants).
  AMP-08
SOME EFFECTS OF STUBBORN DISEASE ON BARK, FOLIAGE, FRUIT,
AND SIZE OF CITRUS TBEES.
E C Calavan D W Christianson
Phytopathology 52(8):727
Aug 1962 464.8 P56
Citrus, Stubborn disease (citrus).
   GLOEOSPORIUM SBOOT BLIGHT AND DEFOLIATION OF TREMBLING AS-
  G C Marks J G Berbee A J Riker
Phytopathology 52(8):741-742
Aug 1962 464.8 P56
   Aug 1962 464.8 P56
Defoliation, Populus tremuloides.
   EFFECT OF BYDROGEN ION CONCENTRATION ON GROWTH RATES OF FHTOPHTBORA SP.
   Phytopathology 52(8):727
Aug 1962 464.8 P56
   Hydrogen-ion concentration, Phytophthora.
1047-68
   HEAT THERAPY OF BEAN RUST.
```

HEAT THERAPI OF DEAR ROSI. C E Yarwood Phytopathology 52(8):758 Aug 1962 464.8 P56 Bot water treatment (plants), Rust (beans).

```
1048-68
   EVIDENCE FOR THE SUBVIVAL OF THE BIG-VEIN VIRUS WITHIN OL-
PIDIUM RESTING SPORANGIA.
       N Campbell
   Phytopathology 52(8):727
Aug 1962 464.8 P56
Big vein (lettuce), Olpidium brassicae, Spores,
Olpidium brassicae, Spores.
1049-68
   CBARACTERIZATION OF FIVE GERANIUM VIBUS ISOLATES AND IN
VITRO GROWTB OF GERANIUM STEM TIPS.
R A Reinert A C Hildebrandt G E Beck
   Phytopathology 52(8):749
Aug 1962 464.8 P56
   Geranium, Plant physiology, Virus diseases (plants).
   SEMEIOLOGY OF FUSARIUM WILT OF TOMATO.
   H L Chambers M E Corden
Phytopathology 52 (8):727-728
Aug 1962 464.8 P56
   Fusarium oxysporum, Tomatoes, Wilt (tomatoes), Fusarium oxysporum.
1051-68
   THE EFFECT OF RUST ON THE DISTRIBUTION OF C14-CONTAINING
   COMPOUNDS IN BEAN.
A I Zaki R D Durbin
   Phytopathology 52(8):758
Aug 1962 464.8 P56
   Beans, C14, Rust (beans), C14.
   NUTRITION IN RELATION TO ROOT AND TOP GBOWTB OF TRIFOLIUM PRATENSE AND SEVERITY OF PUSARIUM ROOT ROT.
   PRAIRIES AND SEVERITY OF FUSARIUM ROOT ROT.
C C Chi E W Hanson
Phytopathology 52(8):728
Aug 1966 464.8 P56
Fusarium, Plant nutrition, Plant physiology, Red clover,
Boot rot, Fusarium, Red clover, Root rot.
   IMPORTANCE OF NONHOSTS IN MAINTAINING THE INOCULUM POTENTIAL OF VERTICILLIUM.
   OF VERTICILIUM.

C A Martinson C E Horner
Phytopathology 52(8):742
Aug 1962 464.8 P56
Inoculum, Plant hosts, Verticillium albo-atrum, Inoculum,
Plant hosts, Verticillium albo-atrum.
   154-68
SYMPTOM BETARDATION OF PUSARIUM WILT OF TOMATO SEEDLINGS BY A CEPBALOSPORIUM SPECIES.
J A Chisler G E Smith M R Menon C C Allison
Phytopathology 52(8):728
Aug 1962 464.8 P56
Pusarium oxysporum, Seedlings, Tomatoes, Wilt (tomatoes),
Pusarium oxysporum.
1055-68
   DS-68
A NEW STRAIN OF COMMON BEAN MOSAIC VIRUS.
W J Zaumeyer R W Goth
Phytopathology 52(8):758
Aug 1962 464.8 p56
Beans, Mosaic (beans).
1056-68
   D56-68
BIOSYNTBESIS OF INFECTIONS TOBACCO MOSAIC VIRUS RIBONUCLEIC ACID IN A CELL-FREE MEDIUM.
G W Cochran A S Dhaliwal G W Welkie J L Chidester M H Lee Phytopathology 52(8):728
Aug 1962 464.8 P56
   Mosaic (tobacco), Ribonucleic acid.
1057-68
PHOTODYNAMIC INHIBITION OF TOBACCO MOSAIC VIRUS.
    G B Orlob
   Phytopathology 52(8):747
Aug 1962 464.8 P56
   Mosaic (tobacco), Neutral red.
1058-68
   TYROSINASE FORMATION BY STROBILOMYCES STROBILACEOUS.
   R P Collins L Paige
Phytopathology 52(8):728
Aug 1962 464.8 P56
   Enzymes, Phenolases.
```

```
20 1059-68
```

1059-68 DJ9-00 STREPTOMYCIN RESISTANT MUTANTS IN STREPTOMYCES SCABIES. D F Weber J D Menzies Fhytopathology 52(8):756 Aug 1964 464.8 p56 Fungicide resistant fungi, Plant mutation, Streptomycin, Fungicide resistant fungi.

INSECT AND GRAFT TRANSMISSIONS OF ALPHA- AND BETA-CURL VIR-USES OF RASPBERRIES. R H Converse Phytopathology 52(8):728 Aug 1962 464.8 P56 Insect vectors, Plant disease transmission, Plant grafting, Raspberries.

1061-68

O1-68
OVERWINTERING CAPABILITIES OF UREDOSPORES AND MYCELIUM OF PUCCINIA GRAMINIS TRITICI IN THE PACIFIC NORTHWEST.
F I McCracken J W Hendrix
Phytopathology 52 (8):742
Aug 1962 464.8 P56
Hibernation, Mycelium, Pacific Northwest,
Puccinia graminis tritici, Uredospores, Mycelium,
Pacific Northwest, Puccinia graminis tritici, Uredospores.

THE RELATION OF PLANT MATURITY, TEMPERATURE, AND SOIL MOISTURE TO CHARCOAL STALK ROT DEVELOPMENT IN GRAIN SORGHUM. L K Edmunds Phytopathology 52(8):731 Aug 1962 464.8 P56 Charcoal rot (sorghum), Plant senescence, Soil moisture, Sorghum, Temperature.

1063-68

SEED-BORNE ASPECTS OF DIAPORTHE PHASEOLORUM IN SOYBEAN. V R Wallen W I Seaman Phytopathology 52 (8):757 Aug 1966 464.8 P56 Diaporthe phaseolorum, Seed-borne plant diseases, Soybeans, Diaporthe phaseolorum.

1064-68

ETIOLOGY OF TOMATO FRUIT ROT IN THE RED RIVER VALLEY OF TEXAS. TEXAS.
L J Ashworth Jr W R King
Phytopathology 52(8):723
Aug 1962 464.8 P56
Rot (tomatoes), Texas, Tomatoes, Texas.

1065-68

HOP DOWNY MILDEW REACTION IN SELECTED PROGENY OF A SUSCEP-TIBLE VARIETY. R R Romanko Phytopathology 52(8):749 Aug 1962 464.8 P56 Downy mildew (hops), Plant disease resistance.

1066-68

A TECHNIQUE FOR MEASURING CO2 PRODUCTION OF WREAT AT 15-16 PERCENT MOISTURE CONTENT.
R D Durbin C M Christensen
Phytopathology 52(8):730
Aug 1962 464.8 P56 Carbon dioxide, Wheat.

1067-68

SUSCEPTIBILITY OF CERTAIN CITRUS ROOTSTOCKS TO THIELAVIOR-SIS BASICOLA. P H Tsao P H Tsao Phytopathology 52(8):756 Aug 1962 464.8 P56 Citrus, Plant disease resistance, Rootstocks, Thielaviopsis basicola, Rootstocks, Thielaviopsis basicola.

1068-68

INCREASED BACTERIAL POPULATIONS IN SOYBEAN ROOTS DUE TO HOSPHORUS.
J Dunleavy J F Kunkel
Phytopathology 52(8):730
Aug 1962 464.8 P56 Phosphorus, Roots, Soybeans.

HETEROTHALLISM IN PYRENOPHORA TERES. W C McDonald Phytopathology 52(8):742 Aug 1962 464.8 P56

PAGE 14

PIGMENTATION OF SOYBEAN SEED COATS ASSOCIATED WITH BACTERIA. DUNLEAVY, J.
Phytopathology 52(8):730
Aug 1962 464.8 P56 Bacteria, Pigments (plant), Seed coats, Soybeans.

FURTHER STUDIES ON TRE WOODY GALL VIRUS DISEASE OF CITRUS. J M Wallace R J Drake Phytopathology 52(8):756 Aug 1962 464.8 P56 Citrus, Virus diseases (plants), Woody gall (citrus).

1072-68

THE PREVALENCE OF LATENT VIRUSES IN COMMERCIAL APPLE VARIE-TIES.
G G Dimalla Phytopathology 52(8):730 Aug 1962 464.8 P56 Apples, Latent virus (apples).

1073-68
GIANT STEM ENATIONS IN PISUM SATIVUM L. INFECTED WITH THE PEA ENATION MOSAIC VIRUS (PEMV)..
E G Ruppel
Phytopathology 52(8):749
Aug 1962 464.8 P56
Enation mosaic (peas).

7/4-68
REACTION OF GRASS TO STRIPE RUST AT PULLMAN, WASH.
S M Dietz J W Hendrix
Phytopathology 52(8):730
Aug 1962 464.8 P56
Grasses, Plant disease resistance, Stripe rust (grasses), Washington.

1075-68

RESPIRATORY ACTIVITIES OF CELL-FREE PARTICLES FROM PYTHIUM ULTIMUM, RHIZOCTONIA SOLANI, AND SUGAR BEET SEEDLINGS. W J Tolmsoff W J Tolusorr
Phytopathology 52(8):755
Aug 1962 464.8 P56
Extracellular substances, Pythium ultimum, Respiration,
Rhizoctonia solani, Sugar beets, Pythium ultimum,
Rhizoctonia solani.

1076-68

STEMPHYLIUM TWIG AND STEM CANKER OF MORUS. S M Dietz Phytopathology 52(8):729-730 Aug 1962 464.8 P56 Morus, Stemphylium, Morus, Stemphylium.

THE DESTRUCTION OF VIRUSES BY SOIL FUMIGANTS.
MCKEEN, C D.
Phytopathology 52(8):742-743
Aug 1962 464.8 P56
Soil fumigation, Virus diseases (plants).

EFFECT OF D-D AND VARIOUS DICHLOROPROPENES ON THE RESIS-TANCE OF PEACH SEEDLINGS TO BACTERIAL CANKER. J E DeVay F L Lukezic W H English Phytopathology 52(8):729 Aug 1962 464.8 P56 D-D, Peaches, Plant disease resistance, D-D.

RELATIONSHIPS OF PEA ENATION MOSAIC VIRUS (PEMV) ISOLATES. E G Ruppel D J Hagedorn Phytopathology 52 (8):749 Aug 1962 464.8 P56 Enation mosaic (peas).

1080-68

080-68
A REVISED SYSTEM FOR IDENTIFICATION OF RACES OF UNOMYCES PHASEOLI VAR. PRASEOLI.
A D Davison E K Vaughn Phytopathology 52(8):729
Aug 1962 464.8 P56 Uromyces phaseoli var. phaseoli.

EFFECT OF ANAEROBIC FERMENTATION IN SOIL ON SURVIVAL OF SCLEROTIA OF VERTICILLIUM DARLIAE.

J D Menzies Phytopathology 52(8):743

Aug 1962 464.8 P56 Permentation, Soil treatment, Verticillium dahliae, Soil treatment, Verticillium dahliae.

1082-68

PBYSIOLOGY OF SELECTIVE PATHOGENICITY IN FUSARIUM OXY-SPORUM.
D Bavis
Phytopathology 52(8):729
Aug 1962 464.8 P56
Fusarium oxysporum, Pathogenesis, Plant physiology,
Fusarium oxysporum, Pathogenesis.

1083-68

THE EFFECT OF TEMPERATURE ON CROWN RUST REACTIONS.

A A Saari M B Moore
Phytopathology 52(8):749-750
Aug 1962 464.8 P56
Crown rust (oats), Plant disease resistance, Temperature.

1084-68

THE ROLE OF NATURALLY OCCURRING FUNGITOXICANTS IN SELECTIVE PATBOGENICITY OF FUSARIUM OXYSPORUM.

D Davis
Phytopathology 52(8):729
Aug 1962 464.8 P56
Fusarium oxysporum, Pathogenesis, Fusarium oxysporum,

1085-68

Pathogenesis.

INBERITANCE OF RESISTANCE TO COMMON BUNT, TILLETIA CARIES, IN A CROSS OF P.I. 178383 X ELGIN WBEAT.

B. J. Metzger C. R. Rohde E. J. Trione
Phytopathology 52(8):743
Aug 1962 464.8 P56
Beredity, Plant genetics, Tilletia caries, Wheat,
Tilletia caries.

1086-68 INHIBITION OF SPORE GERMINATION OF ALTERNARIA TENUIS BY

SULFUR DIOXIDE.

H M Couey
Phytopathology 52(8):729
Aug 1962 464.8 P56
Alternaria tenuis, Spore germination, Sulfur dioxide,
Alternaria tenuis, Spore germination.

1087-68

NEW PORMULATIONS FOR COTTON SEEDLING BLIGHT.

J A Pinckard W Birchfield
Phytopathology 52(8):747
Aug 1962 464.8 P56
Cotton.

1088-68

INPLUENCE OF BARLEY STRAW ON THE EARLY STAGES OF PATHOGENE-SIS IN PUSARIUM ROOT ROT OF BEAN. R J Cook Phytopathology 52(8):728 Aug 1962 464.8 P56 Barley straw, Beans, Fusarium solani, Root rot (beans), Fusarium solani.

1089-68

A VIRUS DISEASE OF PEAR CAUSED BY CBLOROTIC LEAFSPOT OF APPLES.

J A Milbrath J E Reynolds
Phytopathology 52(8):743
Aug 1962 464.8 P56
Chlorotic leafspot (apples), Pears.

1090-68

ADAPTED TOLERANCE TO ORGANIC FUNGICIDES BY AN ISOLATE OF HILZOCTONIA SOLANI.

B N Elsaid J B Sinclair
Phytopathology 52(8):731
Aug 1962 464.8 P56
Fungicide resistant fungi, Fungicides, Rhizoctonia solani, Fungicide resistant fungi, Rhizoctonia solani.

1091-68

DIRECT RECOVERY OF TOBACCO RATTLE VIRUS FROM ITS NEMATODE VECTOR.

H L Sanger M W Allen A H Gold
Phytopathology 52(8):750
Aug 1962 464.8 P56
Nematode vectors, Rattle disease (tobacco), Tobacco,
Trichodorus, Nematode vectors, Trichodorus.

1092-68
VAPOR ACTION OF ORGANIC MERCURIALS AGAINST SEED-BORNE CEREAL DISEASES.
D C Arny
Phytopathology 52(8):723
Aug 1962 464.8 P56
Grain, Mercury, Seed treatment, Seed-borne plant diseases.

1093-68
CROWN ROT DISEASE OF IRIS.
B S MacWithey Jr
Phytopathology 52(8):740-741
Aug 1962 464.8 P56
Crown rot (iris), Iris.

1094-68

VARIATION IN PHYTOPBTBORA CRYPTOGEA FROM ALFALFA.
D C Erwin
Phytopathology 52(8):731
Aug 1962 464.8 P56
Alfalfa, Phytophthora cryptogea.

1095-68
TRANSMISSION OF UNSTABLE VIRUSES FROM LIQUID-NITROGEN-FROZEN
PLANT TISSUE.
B L Sanger A H Gold
Phytonathology 52(8):750

Phytopathology 52(8):750 Aug 1962 464.8 P56 Plant disease transmission, Virus diseases (plants).

DYS-58
PATBOGENICITY AND POPULATION DYNAMICS OF PARATYLENCBUS HAMATUS TEORNE AND ALLEN, ON MENTHA SPP.
I. R Faulkner
Phytopathology 52(8):731
Aug 1962 464.8 P56
Mentha, Nematode population,
Pathogenesis, Mentha, Nematode population,
Paratylenchus hamatus,
Paratylenchus hamatus, Pathogenesis.

1097-68
1-PROLINE AND L-ALANINE AS SUBSTITUTES FOR HIGHER TEMPERATURES IN THE GERMINATION OF PUNGUS SPORES.
L P Miller
Phytopathology 52(8):743

Phytopathology 52(8):743
Aug 1962 464.8 P56
Germination (spores), Temperature, Germination (spores).

1098-68
THE OCCURRENCE AND CONTROL OF TYPBULA ITOANA AND CALONECTRIA GRAMINICOLA ON TURFGRASS.
TH Filer A G Law
Phytopathology 52(8):731
Aug 1962 464-8 P56
Turf.

1099-68
INACTIVATION OF TOBACCO MOSAIC VIRUS INFECTIOUS RIBONUCLEIC ACID BY HGCL2 AND THE REVERSAL OF TBIS EFFECT WITB CYSTEINE.
V Santilli S Katz
Phytopathology 52(8):750
Aug 1962 464.8 P56
Cysteine, Mercury chloride, Mosaic (tobacco),
Ribonucleic acid.

1100-68
LINKAGE OF GENES CONDITIONING RESISTANCE TO RUST IN FLAX.
H H Flor
Phytopathology 52(8):732
Aug 1962 464.8 P56
Plant disease resistance, Plant genetics, Rust (flax).

1101-68
INPLUENCE OF MOISTURE CONTENT, TEMPERATURE, AND TIME OF STORAGE UPON SURVIVAL OF CERTAIN MICROFLORA IN BARLEY KER-

STORAGE UPON SURVIVAL OF CERTAIN MICROFLORA IN BARLEY F NELS. R W Lutey C M Christensen Phytopathology 52(8):740 Aug 1962 464.8 P56 Barley, Grain moisture, Storage diseases, Temperature.

1102-68
MECBANISMS OF VARIATION OF VERTICILLIUM ALBO-ATRUM.
C Fordyce Jr R J Green Jr
Phytopathology 52(8):732
Aug 1962 464.8 P56

Verticillium albo-atrum.

20 1103-68

1103-68
PENETRATION OF RED FIR BY THE DWARF MISTLETOE ARCEUTHOBIUM CAMPYLOPODUM.
R F Scharpf J R Parmeter
Phytopathology 52 (8):750
Aug 1962 464.8 P56
Abies magnifica, Arceuthobium campylopodum, Abies magnifica,
Arceuthobium campylopodum.

104-68
EVIDENCE FOR THE SIMULTANEOUS TRANSMISSION OF TWO VIRUSES BY THE ASTER LEAFHOPPER (MACROSTELES FASCIFRONS).
R A Frederiksen
Fhytopathology 52(8):732
Aug 1962 464.8 P56
Aster leafhopper, Blue dwarf (oats), Insect vectors, Macrosteles fascifrons, Plant disease transmission, Aster leafhopper, Macrosteles fascifrons.

OBTAINING VIRUS-FREE STRAWBERRIES BY EXCISION AND CULTURING OF APICAL MERISTEMS OF PLANTS INFECTED WITH THE YELLOW EDGE, CRINKLE, AND VEINBANDING VIRUSES AND CERTAIN OTHER VIRUS COMPLEXES.

P W Miller R O Belkengren Phytopathology 52(8):743-744

Aug 1964 464.8 P56

Crinkle (strawberries), Strawberries,

Vein banding (strawberries), Virus diseases (plants),

Yellow edge (strawberries).

1106-68
FUSARIUM ROOT ROT OF SOYBEAN.
E R French
Phytopathology 52(8):732
Aug 1962 464.8 P56
Fusarium, Root rot (soybeans), Soybeans, Fusarium.

1107-68

RELATION OF CHLOROGENIC ACID IN POTATO TO RESISTANCE TO INFECTION BY VERTICILLIUM ALBO-ATRUM.

S S Patil R L Powelson R A Young
Phytopathology 52(8):747
Aug 1962 464.8 P56
Chlorogenic acid, Plant disease resistance, Potatoes,
Verticillium albo-atrum, Chlorogenic acid,
Verticillium albo-atrum.

1108-68
CHANGES IN VIRULENCE OF SOFT-ROT OF BACTERIA DURING LABORATORY CULTIVATION AND AFTER ULTRAVIOLET LIGHT IRRADIATION.
B A Friedman
Phytopathology 52(8):732
Aug 1962 464.8 P56
Bacteria, Culture media, Ultraviolet rays, Virulence, Virulence.

1109-68
SEASONAL POPULATION OF RHIZOSPHERE FUNGI ASSOCIATED WITH CORN ROOTS.
R E Miller C W Bootroyd
Fhytopathology 52 (8):744
Aug 1962 464.8 P56
Corn, Fungi, Roots.

1110-68
ERGOT OF MAIZE IN MEXICO.
S Fuentes M d L de la Isla A E Rodriguez
Phytopathology 52 (8):733
Aug 1962 464.8 P56
Corn, Mexico.

1111-68
EFFECT OF CROP ROTATION ON ALFALPA AND SOYBEAN STANDS. ROOT ROTS, AND YIELDS.
A F Schmitthenner L E Williams
Phytopathology 52(8):751
Aug 1962 464.8 P56
Alfalfa, Crop rotation, Crop yields, Soybeans.

1112-68
THE RELATIONSHIP BETWEEN LEAF UNCURLING STAGES AND INFECTION PATTERNS ON BANANA LEAVES CAUSED BY CERCOSPORA MUSAE.
R H Fulton
Phytopathology 52 (8):733
Aug 1962 464.8 P56
Bananas, Cercospora musae, Leaves, Sigatoka (bananas),
Cercospora musae.

1113-68
DETECTION AND IDENTIFICATION OF LATENT VIRUSES IN APPLE. G I Mink J R Shay
Phytopathology 52(8):744
Aug 1962 464.8 P56
Apples, Latent virus (apples).

1114-68
THE EFFECT OF GROWTH REGULATORS ON OAK WILT DEVELOPMENT.
T F Geary J E Kuntz
Phytopathology 52(8):733
Aug 1962 464.8 P56
Plant growth inhibitors, Wilt (quercus).

1.115-68
BUD UNION ANATOMY OF PEAR (PYRUS) DECLINE TREES.
H Schneider
Phytopathology 52(8):751
Aug 1962 464.8 P56
Decline (pears), Pears, Plant anatomy, Plant grafting.

116-68
ON THE GENETICS OF HYPOMYCES SOLANI F. CUCURBITAE TO PCNB
AND TCNB.
S G Georgopoulos
Phytopathology 52(8):733
Aug 1962 464.8 F56
Hypomyces solani f. cucurbitae, Pentachloronitrobenzene,
Plant genetics, Hypomyces solani f. cucurbitae.

NOTRIENT STUDIES ON LEUCOSTOMA PERSOONII AND A ZYTHIACEAE SPECIES PATHOGENIC ON PRUNUS DOMESTICA.

L F L Lukezic J E DeVay Phytopathology 52(8):740 Aug 1962 464.8 P56 Fungus diseases (plants), Plant nutrition, Prunus domestica.

1118-68
THE EFFECT OF RUST ON THE WEIGHT, GROWTH RATE, AND P32
CONTENT OF BEAN.
D L Gerwitz
Phytopathology 52(8):733
Aug 1962 464.8 P56
Beans, Plant physiology, P32, Rust (beans), P32.

1119-68
EFFECT OF ROOT EXUDATES IN OVERCOMING THE SOIL FUNGISTATIC PRINCIPLE.
L R Schreiber R J Green Jr
Phytopathology 52(8):751
Aug 1962 464.8 P56
Exudates, Fungicides, Soils.

1120-68
RELATIONSHIP OF ROOT-KNOT NEMATODES TO THE DEVELOPMENT OF PUSARIUM WILT IN THE SWEETPOTATO.
M J Giamalva W J Martin T P Hernandez
Phytopathology 52(8):733
Aug 1962 464.8 P56
Fusarium oxysporum, Root-knot nematodes, Sweetpotatoes,
Fusarium oxysporum, Root-knot nematodes.

1121-68
SEPARATION OF CERTAIN STONE PRUIT VIRUSES IN MOUNTMORENCY CHERRY SEED.
J D Moore
Phytopathology 52(8):744
Aug 1962 464.8 P56
Cherries, Seeds, Virus diseases (plants).

1122-68
THE EFFECT OF TEMPERATURE ON MULTIPLICATION AND MOVEMENT OF CABBAGE VIRUS A IN NICOTINIA GLUTINOSA L.
L C Gonzalez G S Pound
Phytopathology 52(8):733-734
Aug 1962 464.8 P56
Temperature.

1123-68
A STRAIN OF BEAN VIRUS 2 THAT OVERCOMES RESISTANCE IN PEA CONDITIONED BY THE MO MO GENOTYPE.
W T Schroeder R Provvidenti
Phytopathology 52(8):751
Aug 1962 464.8 P56
Peas, Plant disease resistance, Plant genetics,
Virus 2 (beans).

1124-68

REVERSIONS OF ERWINIA AMYLOVORA FROM TRE AVIRULENT ROUGH
TO TRE VIRULENT SMOOTH FORM ON EXPOSURE TO APRID EXTRACTS.
R N Goodman W H Shaffer Jr C R Raldwin Jr
Phytopathology 52 (8):734
Aug 1962 464.8 P56
Animal extracts, Aphididae, Erwinia amylovora, Aphididae,
Erwinia amylovora.

1125-68
EXPRESSIONS OF VIRULENCE AMONG ISOLATES OF PSEUDOMONAS SAV-ASTANONOI FROM OLIVE AND OLFANDER.
A R Magie E E Wilson
Phytopathology 52 (8):741
Aug 1962 464.8 P56
Nerium, Olives, Virulence, Nerium, Virulence.

126-68
EXPRESSION OF THE MONOGENIC CHLOROTIC-LESION RESISTANCE TO RELMINTHOSPORUM TURCICUM IN CORN SEEDLINGS.
H M Hilu A L Rooker
Phytopathology 52(8):736
Aug 1962 464.8 P56
Corn, Plant disease resistance, Seedlings.

1127-68
EXUDATION PATTERNS FROM REAN SEEDS AND RYPOCOTYLS AND TREIR EFFECT ON FUSARIUM SOLANI F. PRASEOLI.
M N Schroth W C Snyder
Phytopathology 52(8):751
Aug 1962 464.8 P56
Reans, Exudates, Fusarium solani f. phaseoli, Seeds,
Fusarium solani f. phaseoli.

1128-68
EFFECT OF STREPTOMYCIN AND PIMARICIN ON GROWTR AND RESPIRATION OF PYTRIUM SPP.
R R Hine
Phytopathology 52(8):736
Aug 1962 464.8 P56
Pimaricin, Plant physiology, Pythium, Streptomycin, Pythium.

129-68
INTERACTION OF VERTICILLIUM DAHLIAE AND PRATYLENCRUS PENETRANS IN TOMATO WILT.
W. R. Mountain C. D. McKeen
Phytopathology 52 (8):744
Aug 1962 464.8 P56
Pratylenchus penetrans, Verticillium dahliae,
Wilt (tomatoes), Pratylenchus penetrans,
Verticillium dahliae.

130-68
PHYTOPRTHORA WILT OF CARNATION.
R R Rine M Aragaki
Phytopathology 52(8):736
Aug 1962 464.8 P56
Dianthus caryophyllus, Phytophthora,
Wilt (dianthus caryophyllus), Dianthus caryophyllus,
Phytophthora.

131-68
EFFECTS OF PREINOCULATION AND POSTINOCULATION HOST TEMPERATURES ON INFECTION OF WHEAT SEEDLINGS BY PUCCINIA STRIIFORMIS.
E L Sharp
Phytopathology 52(8):751-752
Aug 1962 464.8 P56
Puccinia striiformis, Seedlings, Temperature, Wheat,
Puccinia striiformis.

1132-68
CONTROL OF WHEAT STEM RUST WITH NICKEL AND CARRAMATE SPRAYS.
C D Hobbs M C Futrell
Phytopathology 52(8):736
Aug 1962 464.8 P56
Carbamates, Nickel, Stem rust (wheat).

133-68
RESISTANCE OF BARLEY TO USTILAGO NUDA.
D L Mumford D C Rasmusson
Phytopathology 52(8):744-745
Aug 1962 464.8 P56
Rarley, Plant disease resistance, Ustilago nuda.

134-68
DYNAMICS OF TRE MYCOFLORA OF SURTERRANEAN PARTS OF WINTER WHEAT IN THE DRYLAND AREA OF WASRINGTON.
J A Roes
Phytograthology 52(8):736

Aug 1962 464.8 P56 Fungi, Roots, Washington, Wheat, Washington.

1135-68
TOLERANCE TO PCNR AND PATHOGENICITY CORRELATED IN NATURAL OCCURRING ISOLATES OF RRIZOCTONIA SOLANI.

M N Shatla J B Sinclair
Phytopathology 52(8):752
Aug 1962 464.8 P56
Fungicide resistant fungi, Pentachloronitrobenzene,
Rhizoctonia solani, Fungicide resistant fungi,
Rhizoctonia solani.

1136-68
EFFECT OF HIGH DOSES OF D-D ON SOIL ORGANISMS AND THE GROWTR AND YIELD OF LEMON TREES.
R C Raines J P Martin T A DeWolfe S R Roswell M J Garber Phytopathology 52 (8):723
Aug 1964 464.8 P56
Crop yields, D-D, Lemons, Plant physiology, D-D.

137-68
CHLOROTIC LEAF SPOT AND DWARFING, AS POSSIBLE CONTAMINANTS
OF STEM-PITTING VIRUS, AND THEIR OVER-ALL INFLUENCE ON THE
GROWTH RABIT OF APPLES.
A del Mundo
Phytopathology 52(8):745
Aug 1962 464.8 P56
Apples, Chlorotic leafspot (apples), Plant dwarfing.

1138-68
TRE EFFECT OF SINGLE AND MULTIPLE VIRUS INFECTION UPON NUCLEIC ACID CONTENT IN PRUNUS MARALEB SEEDLINGS.
R P Honeycutt
Phytopathology 52(8):737
Aug 1962 464.8 P56
Nucleic acids, Prunus mahaleb, Seedlings,
Virus diseases (plants), Prunus mahaleb.

139-68
A ROOT ROT OF CORN CAUSED RY HELMINTHOSPORIUM PEDICELLATUM.
R J Shepherd D R Rall W E Pendery
Phytopathology 52(8):752
Aug 1962 464.8 P56
Corn, Root rot (corn).

140-68
INBERITANCE OF CHLOROTIC-LESION RESISTANCE TO HELMINTHOSPORIUM TURCICUM IN CORN SEEDLINGS.
A L Hooker
Phytopathology 52 (8):737
Aug 1962 464.8 P56
COTN, Helminthosporium turcicum, Plant disease resistance,
Plant genetics, Seedlings, Helminthosporium turcicum.

141-68
INHIRITION OF CALLUS AND ROOT GROWTR IN TOMATO STEMS EXCISED FROM PLANTS INOCULATED WITR A COMMINATION OF TOBACCO MOSAIC VIRUS AND POTATO VIRUS X.

R H Murakishi
Phytopathology 52(8):745
Aug 1962 464.8 P56
Callus (plants), Immunization, Mosaic (tobacco),
Plant growth inhibitors, Roots, Tomatoes, Immunization.

142-68

PPFECTS OF TEMPERATURE, SOIL MOISTURE, AND TIME OF INOCULATION ON SYMPTOM DEVELOPMENT OF SORGHUM CHARCOAL ROT.

D C H Hsi
Phytopathology 52(8):737
Aug 1962 464.8 P56
Charcoal rot (sorghum), Immunization, Soil moisture,
Temperature, Immunization.

1143-68
CHARACTERISTICS OF PROTEINLESS MUTANTS OF TOBACCO MOSAIC VIRUS.
A Siegel M Zaitlin O P Sehgal
Phytopathology 52(8):752
Aug 1962 464.8 P56
Mosaic (tobacco), Proteins, Virus mutation.

144-68
INTERRELATION OF BACTERIAL NECROSIS OF FUSARIUM TO CROP ROTATION, ISOLATION FREQUENCY, AND BEAN ROOT ROT.
D M Huber A L Anderson
Phytopathology 52(8):737
Aug 1962 464.8 P56
Crop rotation, Fusarium, Root rot (beans), Fusarium.

20 1145-68

1145-68
SEROLOGICAL AND BIOCHEMICAL EVIDENCE OF THE SIMILARITY BETTWEEN PSEUDOMONAS SAVASTANOI AND P. TONELLIANA.
A R Magie E E Wilson
Phytopathology 52 (8):741
Aug 1962 464.8 P56
Biochemistry, Pseudomonas savastanoi, Serological tests,
Pseudomonas savastanoi.

1146-68
CALCIUM CONTENT OF LEAVES FROM STUBBORN AND NON-STUBBORN DISEASED WASHINGTON NAVEL ORANGE TREES.
G V Johnson L W Storm
Phytogathology 52(8):737
Aug 1962 464.8 P56
Calcium, Leaves, Oranges, Stubborn disease (citrus).

147-68
THE MECHANISM OF RESISTANCE TO INFECTION WITH POTATO VIRUS Y IN ITALIAN EL PEPPER (CAPSICUM ANUUM).
J N Simons
Phytopathology 52(8):752
Aug 1962 464-8 P56
Flant disease resistance.

1148-68
INTERNAL MICROFLORA OF STORED SOYBEAN SEEDS.
E W Kennedy
Phytopathology 52(8):738
Aug 1962 464.8 P56
Microflora, Seeds, Soybeans, Storage diseases, Microflora.

149-68
ULTRASTRUCTURE OF MICROSCLEROTIA OF VERTICILLIUM ALBOATRUM.
M J Nadakavukaren
Phytopathology 52(8):745
Aug 1962 464.8 P56
Sclerotia, Verticillium albo-atrum, Sclerotia,
Verticillium albo-atrum.

1150-68
THE ENDOTROPIC MYCORRHIZA OF ACER SACCHARUM MARSH.
K J Kessler Jr
Phytopathology 5248):738
Aug 1962 464.8 p56
Fungi, Mycorrhiza.

1151-68
EFFECT OF ALTERNATE WETTING AND DRYING ON SPORULATION AND SURVIVAL OF RHYNCHOSPORIUM SECALIS.
W P Skoropad
Phytopathology 52 (8):752
Aug 1962 464-8 P56
Rhynchosporium secalis, Sporulation, Rhynchosporium secalis, Sporulation.

1152-68
PHENOL CONTENT IN RUST INFECTED AND NITROGEN FERTILIZED WHEAT LEAVES.
Z Kiraly
Phytopathology 52(8):738
Aug 1962 464.8 P56
Leaves, Nitrogen, Phenol compounds, Stem rust (wheat),
Wheat.

1153-68
STUDIES ON THE GERMINATION OF CONIDIOSPORES OF POWDERY MILDEW OF WHEAT.
K R SadaSivan Nair A H Ellingboe
Phytopathology 52(8):745
Aug 1962 464.8 P56
Germination (spores), Powdery mildew (wheat),
Germination (spores).

1154-68
A FACTOR IN ROOT SAP OF CITRUS ROOTSTOCKS ASSOCIATED WITH RESISTANCE TO CITRUS NEMATORE.
J D Kirkpatrick S D Van Gundy W P Bitters
Phytopathology 52(8):738
Aug 1962 464.8 P56
Citrus, Plant nematode resistance, Plant nematodes,
Rootstocks, Tylenchulus semipenetrans, Rootstocks,
Tylenchulus semipenetrans.

1155-68

FACTORS AFFECTING SPORULATION AND INFECTIONS BY THE HOP DOWNY MILDEW FUNGUS, PSEUDOPERONOSPORA HUMULI.
C B Skotland
Phytopathology 52(8):753

Aug 1962 464.8 P56 Downy mildew (hops), Environment, Hops, Pseudoperonospora humuli, Sporulation, Pseudoperonospora humuli, Sporulation.

1156-68
LUPINE, ANOTHER LEGUME HOST OF THE WILT PUSARIUM PROM U. S. COTTON.
G M Armstrong J K Armstrong
Phytopathology 52(8):722
Aug 1962 464.8 P56
Cotton, Fusarium, Lupinus angustifolius, Fusarium,
Lupinus angustifolius.

THE RELATIONSHIP BETWEEN SEVERITY OF ANTHRACNOSE OF SYCAMORE AND TEMPERATURE.

D Neely E B Himelick
Phytopathology 52(8):745
Aug 1962 464.8 P56
Anthracnose (platanus occidentalis), Platanus, Temperature.

1158-68
STUDIES ON THE GERMINATION OF CONIDIOSPORES OF BOTRYTIS
CINEREA.
T Kosuge J C Dutra
Phytopathology 52(8):738
Aug 1962 464.8 P56
Botrytis cinerea, Seed germination, Botrytis cinerea.

1159-68
WHEAT STRIATE MOSAIC IN CANADA.
J T Slykhuis
Phytopathology 52(8):753
Aug 1962 464.8 P56
Canada, Striate mosaic (wheat), Wheat, Canada.

1160-68
THE EFFECT OF GRAPE WASHINGS ON THE GERMINATION OF SPORES OF FUNGI ASSOCIATED WITH BUNCH ROT OF GRAPES.
T Kosuge J C Dutra W B Hewitt
Phytopathology 52(8):738
Aug 1962 464.8 P56
Bunch rot (grapes), Fungi, Grapes, Seed germination, Spores.

1161-68
MEASURES OF THE DESTRUCTIVE POTENTIAL OF STRIPE RUST IN WASHINGTON.
W L Nelson
Phytopathology 52(8):746
Aug 1962 464.8 P56
Crop yields, Stripe rust (wheat), Washington.

1162-68
PRODUCTION OF PROTEOLYTIC ENZYMES BY FOUR PATHOGENS OF APPLE PRUIT.
J Kuc E B Williams
Phytopathology 52(8):739
Aug 1962 464.8 P56
Apples, Enzymes.

1163-68

FACTORS INPLUENCING GERM TUBE DEVELOPMENT IN CONIDIA OF CERATOCYSTIS ULMI.

E B Smalley
Phytopathology 52(8):753
Aug 1962 464.8 P56
Ceratocystis ulmi, Conidia, Seed germination,
Ceratocystis ulmi, Conidia.

1164-68
INOCULATION AND COLONIZATION OF STUMPS OF PINUS ECHINATA BY FOMES ANNOSUS.
E G Kuhlman P F Hendrix Jr C S Hodges Jr Phytopathology 52(8):739
Aug 1962 464.8 P56
Fomes annosus, Immunization, Pinus echinata, Timber, Fomes annosus, Immunization, Pinus echinata.

165-68
CLUBROOT ON SWEET ALYSSUM, LOBULARIA MARITIMA, IN CALIFOR-NIA.
C W Nichols R Bardin A W Culver
Phytopathology 52(8):746
Aug 1962 464.8 P56
California.

1166-68 REPRODUCTION OF VERTICILLIUM IN THE RHIZOSPERE AND SUBSE-QUENT ROOT INFECTION OF RESISTANT AND SUSCEPTIBLE MINT SPECIES.
M L Lacy C E Horner Phytopathology 52(8):739 Aug 1962 464.8 P56 Mentha, Plant disease resistance, Rhizosphere, Roots, Verticillium albo-atrum, Mentha, Verticillium albo-atrum.

CCNTROL OF CARNATION STREAK VIRUS BY SHOOT TIP CULTURE. Phillips
Phytopathology 52(8):747
Aug 1962 464.8 P56
Dianthus caryophyllus.

CARBON TETRACHLORIDE INACTIVATION OF THE AGENT OF DISEASE IN HELMINTHOSPORIUM VICTORIAE. G D Lindberg Phytopathology 52(8):739 Aug 1962 464.8 P56

Carbon tetrachloride, Helminthosporium victoriae.

EVALUATION OF MULTIGENIC FIELD RESISTANCE OF THE POTATO TO PHYTOPHTHORA INFESTANS IN 10 YEARS OF TRIALS TOLUCA, MEX-ICO.
J S Niederhauser Phytopathology 52(8):746 Aug 1962 464.8 p56 Mexico, Phytophthora infestans, Plant disease resistance,

Plant genetics, Potatoes, Mexico, Phytophthora infestans.

RELATIONSHIP OF SOIL MICROBES TO THE WIDESPREAD SOIL FUNGI-STASIS.
B T Lingappa J L Lockwood Phytopathology 52 (8):739 Aug 1962 464.8 p56 Soil fumigation, Soil microorganisms.

LCSS OF WILDFIRE RESISTANCE IN TOBACCO DUE TO CHROMOSOME FRAGMENTATION. G W Stokes Phytopathology 52(8):753 Aug. 1962 464.8 P56 Chromosomes, Plant disease resistance, Tobacco, Wildfire (tobacco).

CHANGES IN THE NITROGEN METABOLISM OF VICTORIN-TREATED OAT VARIETIES.
H H Luke T E Freeman Phytopathology 52(8):740 Aug 1962 464.8 P56 Nitrogen, Oats, Plant metabolism, Victorin.

173-68
PHLORIDZIN-ITS METABOLISM AND ROLE IN RESISTANCE TO VENTURIA INAEQUALIS, INCITANT OF APPLE SCAB.
R L Noveroske E B Williams J Kuc
Phytopathology 52 (8):746
Aug 1962 464-8 P56
Phlorizin, Plant metabolism, Scab (apples),
Venturia inaequalis.

FUNGISTATIC PROPERTIES OF A BACTERIUM ISOLATED FROM THE Notes Tarte Profession SOIL. R M Old R D Wilcoxson Phytopathology 52(8):747 Aug 1962 464.8 P56 Bacteria, Fungicides.

IDENTIFICATION OF TWO CITRUS VIRUS DISEASES BY SEROLOGICAL AGGLUTINATION. L W Storm R B Streets Phytopathology 52(8):754 Aug 1962 464.8 P56 Citrus, Serological tests, Virus diseases (plants).

ENZYMATIC PROPERTIES OF A XYLANASE SYSTEM PRODUCED BY DI-PLODIA VITICOLA. G Strobel Phytopathology 52(8):754

Aug 1962 464.8 P56 Diplodia viticola, Enzymes, Diplodia viticola. A METHOD FOR MAINTAINING CULTURES AND PRODUCING INOCULATION OF UROCYSTIS COLCHICI.
H Tachibana Phytopathology 52(8):754 Aug 1962 464.8 P56 Culture media.

THE EFFECT OF SOIL MOISTURE ON THE DEVELOPMENT OF EASTER LILY ROOT ROT. J Tammen Phytopathology 52(8):754 Aug 1962 464.8 P56 Lilium longiflorum, Soil moisture, Lilium longiflorum.

1179-68 SEROLOGICAL EVIDENCE THAT OLPIDIUM ZOOSPORES CARRY TOBACCO NECROSIS VIRUS. D S Teakle P S Teakle
Phytopathology 52(8):754
Aug 1962 464.8 P56
Necrosis (tobacco), Olpidium brassicae, Serological tests,
Zoospores, Necrosis (tobacco), Olpidium brassicae, Zoospores.

THE COMPARATIVE FUNGICIDAL PROPERTIES OF ACIDIC NITROGEN DERIVATIVES OF POLYHALO-ALKYL SULFENYL CHLORIDES.

W D Thomas Jr M D Bankuti
Phytopathology 52(8):754-755
Aug 1962 464.8 P56 Acids, Fungicides, Nitrogen.

CULTURAL GROWTH AT DIFFERENT TEMPERATURES OF ASCOCHYTA GOSSYPII FROM GEORGIA, ALABAMA, AND TEXAS. L S Bird Phytopathology 53(6):621-622 Jun 1963 464.8 P56 Alabama, Blight (cotton), Georgia, Texas, Alabama, Georgia,

FURTHER EVIDENCE ON SYSTEMIC RESISTANCE INDUCED BY LOCALIZED NECROTIC VIRUS INFECTIONS IN PLANTS. G Loebenstein Phytopathology 53 (3):306-308, BIBL., PL.
Mar 1963 464.8 P56
Datura stramonium, Gomphrena globosa, Mosaic (tobacco),
Plant disease resistance, Datura stramonium,
Gomphrena globosa.

1183-68 TWO VIRUS DISEASES OF IRISES IN ISRAEL. G Loebenstein M Alper Phytopathology 53(3):349-350 Mar 1963 464.8 P56 Tris.

SYMPOSIUM ON PLANT DISEASE LOSSES. Phytopathology 54(11):1305 Nov 1964 464.8 P56 Crop losses, Phytopathology, Plant diseases, World agricultural situation.

LOCAL INFECTION OF RICE FLORETS BY THE RICE KERNEL SMUT ORGANISM, TILLETIA HORRIDA. G E Templeton Phytopathology 51(2):130-131 Feb 1961 464.8 P56 Plant diseases, Rice, Smut (rice).

INACTIVATION OF TOBACCO MOSAIC VIRUS BY VOLATILE CHEMICALS. D N Wiggs G B Lucas Phytopathology 52(10):983-985 Oct 1962 464.8 P56 Chemical control (plant diseases), Mosaic (tobacco), Volatile substances.

1187-68 SOME GAPS IN OUR KNOWLEDGE OF SCLEROTIUM ROLFSII. C Wilson Phytopathology 51(2):116-117

20 1188-68

Peb 1961 464.8 P56 Sclerotium rolfsii, Sclerotium rolfsii.

1188-68
CORN STUNT VIRUS TRANSMISSION AND ATTENUATION IN A NEW HOST.
K Maramorosch
Phytopathology 53 (3):350
Mar 1963 464.8 P56
Stunt (corn).

1189-68
RECOVERY OF ASTER YELLOW VIRUS FROM CARROT TISSUE CULTURES INOCULATED IN VITRO.
J Mitsuhashi K Maramorosch
Phytopathology 54 (7):747
Jul 1964 464.8 P56
Aster yellows (carrots), Phytopathology,
Virus diseases (plants).

1190-68

FLECTRONMICROGRAPHS OF RICE DWARF AND WOUND TUMOR VIRUS IN ULTRATEIN SECTIONS OF TEEIR RESPECTIVE ARTHROPOD AND PLANT HOSTS.

E Shikata K Maramorosch T Fukushi Phytopathology 54 (8):908

Aug 1964 464.8 P56

Crown galls (plants), Dwarf disease (rice), Electron microscopy, Insect vectors, Plant injuries, Rice.

1191-68
MAINTENANCE OF PATHOGEN-FREE PLANTING STOCK.
G L Stout
Phytopathology 52(12):1255-1258
Dec 1962 464.8 P56
Plant protection, Storage.

1192-68
FACTORS INFLUENCING STORAGE DECAY OF SUGAR BEETS BY PHOMA ETTAE AND OTHER FUNGI.
M W Cormack J E Moffatt
Phytopathology 51(1):3-5
Jan 1961 464.8 P56
Fungi, Storage diseases, Sugar beets.

1193-68
APBID TRANSMISSION OF POTATO VIRUS A TO THE KATAHDIN VARIETY.
J P MacKinnon R H Bagnall
Phytopathology 52 (7):718-719
Jul 1962 464.8 P56
Insect vectors, Myzus persicae, Plant disease transmission,
Potatoes, Myzus persicae.

1194-68
PREPARATION OF CUCUMBER MOSAIC VIRUS ANTISERUM FOR USE IN VECTOR TRANSMISSION STUDIES.
R J McClanahan D J deZeeuw
Phytopathology 53(6):674-676
Jun 1963 464.8 P56
Antiserum, Insect vectors, Mosaic (cucumbers),
Precipitin test, Antiserum.

1195-68
EPPECT OF CYANIDE IN ANAEROBIC TREATMENT OF BARLEY FOR CONTROL OF LOOSE SMUT.
I. E Tyner
Phytopathology 52(11):1228-1229
Nov 1962 464.8 P56
Barley, Chemical control (plant diseases),
Loose smut (barley), Ustilago nuda.

1196-68
NEW EVIDENCE ON THE DISTRIBUTION OF WHEAT STREAK MOSAIC VIRUS AND THE RELATION OF ISOLATES FROM RUMANIA, JORDAN, AND CANADA.

J T Slykhuis W Bell
Phytopathology 53(2):236-237, BIBL.
Feb 1963 464.8 P56

1197-68

CONTROL OF POWDERY MILDEW OF CUCUMBERS WITH POLYBUTENE EMULSIONS.

J F Bradbury R W Pisher
Plant Dis Rep 47 (12):1062-1064
15 Dec 1963 1.9 P69P
Cucumbers, Emulsions, Polybutenes,
Powdery mildew (cucumbers).

1198-68
EVALUATION OF TREATMENTS FOR CONTROL OF SOIL- BORNE PESTS IN CELERY SEEDBEDS.
J F Darby C E Dieter G J Rau
Plant Dis Rep 46(6):441-443
15 Jun 1962 1.9 P699
Celery, Chemical control (plant diseases),
Soil-borne plant diseases.

1199-68

FUSARIUM WILT OF BEAN IN SOUTH CAROLINA AND SOME HOST RELATIONS OF THE BEAN FUSARIUM.

G M Armstrong J K Armstrong Plant Dis Rep 47 (12):1088-1091, BIBL.

15 Dec 1963 1.9 P69p Cowpeas, Fungi, Fusarium.

200-68
A RINGSPOT OF WATERMELON FRUIT IN GEORGIA ASSOCIATED WITH WATERMELON MOSAIC VIRUS.
D J Morton R E Webb
Phytopathology 53(6):624
Jun 1963 464.8 P56
Mosaic (watermelons).

1201-68
INCREASING RELATIVE FREQUENCY OF SPECIFIC FUNGUS ISOLATIONS WITH SOIL MICROBIOLOGICAL SAMPLING TUBES.
C Martinson R Baker
Phytopathology 52 (7):619-621
Jul 1962 464.8 P56
Soil sampling.

1202-68
INFLUENCE OF GLUCOSE, CELLULOSE, AND INORGANIC NITROGEN COMPOUNDS ON BIOLOGICAL CONTROL OF BEAN ROOT ROT.
C. L. Maurer R. Baker
Phytopathology 54 (12):1435
Dec 1964 464.8 P56
Beans, Biological control (pests), Cellulose, Glucose,
Nitrogen compounds, Root rot (beans).

1203-68

OBTAININING PATHOGEN-PREE STOCK BY SHOOT TIP CULTURE.
R Baker D J Phillips
Phytopathology 52(12):1242-1244, BIBL. 1244
Dec 1962 464.8 P56
Culture.

204-68
INOCULUM POTENTIAL RELATIONSHIPS OF RHIZOCTONIA SOLANI
MEASURED WITH SOIL MICROBIOLOGICAL SAMPLING TUBES.
C A Martinson
Phytopathology 53(6):634-638, BIBL.
Jun 1963 464.8 P56
Pentachloronitrobenzene, Rhizoctonia solani,
Soil microbiology, Soil sampling, Rhizoctonia solani.

J D Phillips R Baker
Plant Dis Rep 46(7):506-508
15 Jul 1962 1.9 P69P
Crown rot (petunia), Phytophthora.

1206-68
INPLUENCE OF ORGANIC AMENDMENTS ON SURVIVAL OF FUSARIUM OXYSPORUM F. CUBENSE IN THE SOIL.
I Sequeira
Phytopathology 52(10):976-982, BIBL. 982, TABS.
Oct 1962 464-8 P56
Organic compounds, Plant nutrition, Plant physiology, Soil chemistry.

1207-68

EFFECT OF UREA APPLICATIONS ON SURVIVAL OF FUSARIUM OXYSPORUM F. CUBENSE IN SOIL.

L Sequeira
Phytopathology 53(3):332-336, BIBL. 336, TABS.
Mar 1963 464.8 P56
Urea, Wilt (bananas).

208-68
OBJECTIVES IN CHEMOTHERAPY.
A E Dimond
Phytopathology 52(11):1115-1118, BIBL. 1117-1118
Nov 1962 464.8 P56
Chemical control (plant diseases), Plant biochemistry.

1209-68 THE EFFECT OF ADSORPTION OF ORGANIC CATIONS TO PLANT TISSUE ON THEIR USE AS SYSTEMIC FUNGICIDES.

L V Edgington A E Dimond Phytopathology 54 (10):1193-1197, BIBL. 1196-1197, TABS. Oct 1964 464.8 P56 Adsorption, Fungicides, Ions. 1210-68 A CHEMICAL TBAT RETARDS DEVELOPMENT OF DUTCH ELM DISEASE. L V Edgington Preparation Phytopathology 53(3):349
Mar 1963 464.8 P56
Ceratocystis ulmi, Chemical control (plant diseases),
Dieback (ulmus), Tree diseases, Ceratocystis ulmi. OBTAININING PATHOGEN-FREE STOCK BY CULTURED CUTTING TECH-A W Dimock Phytopathology 52 (12):1239-1241 Dec 1962 464.8 P56 1212-68 INFLUENCE OF GIBBERELLIN ON BUD DIFFERENTIATION OF SOUR CBERRY AND ON DAMAGE BY SOUR CHERRY YELLOWS. W Basak K G Farker R W Goodno T B Barksdale Plant Dis Rep 46 (6):404-408, TABS 15 Jun 1962 1.9 P69P Gibberellins, Yellows (cherries). RELATION OF SOIL PB TO DEVELOPMENT OF POINSETTIA ROOT FOTS. D F Bateman Phytopathology 52(6):559-566, BIBL. 565-566 Jun 1962 464.8 P56 Bydrogen-ion concentration. CELLULASE AND THE RHIZOCTONIA DISEASE OF BEAN. D F Bateman Phytopathology 54(11):1372-1377, BIBL. 1376-1377 Nov 1964 464.8 P56 Beans, Cellulase, Rhizoctonia. THE INTERACTION OF POTATO VIRUSES X AND Y IN TOBACCO LIAF TISSUE DIFFERING IN AGE. Phytopathology 52(3):226-233, BIBL. 232-233 Mar 1962 464.8 P56 Tobacco. 1216-68 FRUIT SET REDUCTIONS IN CHERRY TREES POLLINATED BY TREES

WITE SOUR CBERRY YELLOWS.
R D Way R M Gilmer
Phytopathology 53 (3):352-353
Mar 1963 464.8 P56
Sour cherry yellows (cherries).

1217-68 REACTION OF TWENTY-ONE COMMERCIAL CARNATION VARIETIES TO PSEUDOMONAS CARYOPBYLLI. PE Nelson R S Dickey
Phytopathology 53 (3):320-324, BIBL.
Mar 1963 464.8 P56
Bacterial wilt (dianthus caryophyllus),
Dianthus caryophyllus.

1218-68 SUDDEN WILT OF MUSKMELON IN NEW YORK STATE. J A Grozier A F Sherf Phytopathology 53(3):348 Mar 1963 464.8 p56 Wilt (muskmelons).

TBIELAVIOPSIS BASICOLA IN SOIL. D F Bateman Phytopathology 53(3):347 Mar 1963 464.8 P56 Root rot (beans), Root rot (corn), Root rot (wheat), Thielaviopsis basicola, Thielaviopsis basicola.

SYMPOSIUM ON CHEMICAL CONTROL: THEORETICAL CONSIDERATION OF SOIL FUMIGATION. J B Bemwall

Phytopathology 52(11):1108-1115 Nov 1962 464.8 P56 Chemical control (plant diseases), Mathematical analysis, Soil fumigation, Symposia.

1221-68 NEW HOST RELATIONSBIPS FOR SOME MEMBERS OF THE GENUS FOMES. G A Rosenthal Plant Dis Rep 47(5):444 15 May 1963 1.9 P69P Quercus phellos, Quercus phellos.

222-08
SYSTEMIC INSECTICIDES FOR INDIRECT CONTROL OF BEAN YELLOW MOSAIC VIRUS IN SEED FIELDS OF YELLOW LUPINE.
D B Leuck D W Bomer E W Beck
Plant Dis Rep 46 (4):240-242, TABS
15 Apr 1962 1.9 P69P Insecticides, Lupine, Mosaic (beans).

1223-68 223-68
RELATIONSBIP BETWEEN CLIMATIC FACTORS AND INCIDENCE OF THE SIGATOKA LEAF-SPOT DISEASE OF BANANAS.
L Calpouzos T Theis C Colber C M Rivera A Santiago Plant Dis Rep 46(11):758-761
15 Nov 1962 1.9 P69P
Sigatoka (bananas).

1224-68 224-68
LEAF GALLS ON SIDERASIS FUSCATA CAUSED BY THE ROOT-KNOT NEMATODE, MELOIDOGYNE INCOGNITA INCOGNITA.

B N Miller A A DiEdwardo
Phytopathology 52(10):1070-1073
Oct 1962 464.8 P56
Meloidogyne incognita incognita, Root-knot nematodes,
Meloidogyne incognita incognita, Root-knot nematodes.

1225-68 MYCOSPBAERELLA FRUIT ROT OF WATERMELON. N C Schenck Phytopathology 52(7):635-638 Jul 1962 464.8 P56 Rot (tomatoes), Watermelons, Rot (tomatoes).

1226-68 SCLEROTIUM ROLFSII, BISTORY, TAXONOMY, BOST RANGE, AND DIS-TRIBUTION. E West Phytopathology 51(2):108-109 Feb 1961 464.8 P56 Fungus diseases (plants), Mycology, Sclerotium rolfsi, Mycology, Sclerotium rolfsii.

ADDITIONAL HOSTS OF THE FIG MOSAIC VIRUS. B C Burnett Plant Dis Rep 46(9):693
15 Sep 1962 1.9 P69P
Figs, Bost indexing (plants), Mosaic (figs),
Virus diseases (plants).

1228-68 PLANT DISEASE LOSSES AS THEY OCCUR WORLDWIDE.
J Vallega L Chiarappa
Phytopathology 54 (11): 1305-1308, BIBL. 1308
Nov 1964 464.8 P56
Crop losses, Phytopathology, Plant diseases,
World agricultural situation.

1229-68 ARTIFICIAL INOCULATION OF LONGLEAF PINE WITH SCIRRBIA ACI-COLA. G A Snow Phytopathology 51(3):186-188 Mar 1961 464.8 P56 Immunization, Pinus palustris.

DISEASES AFFECTING PRODUCTION OF CERTIFIED TOMATO PLANTS IN GEORGIA DURING 1942-1963.

T J Ratcliffe D J Morton
Plant Dis Rep 47 (12):1065-1066
15 Dec 1963 1.9 P69P
Bacteria, Crop yields, Plant diseases, Tomatoes.

FIELD OCCURENCE AND PROPERTIES OF THE COWPEA STRAIN OF SOUTHERN BEAN MOSAIC VIRUS. C W Kuhn Phytopathology 53(6):732-733

20 1232-68

Jun 1963 464.8 P56 Cowpeas, Mosaic (cowpeas).

1232-68
SUMMATION TO SYMPOSIUM ON SCLEROTIUM ROLFSI.
P Aycock
Phytopathology 51(2):107-108
Peb 1961 464-8 P56
Pungi.

1233-68
PREVENTION OF CYTOSPORA INVASION OF INJURED STEMS OF PRUNE TREES WITH WOUND TREATMENTS.
A W Helton
Phytopathology 52 (10):1061-1064
Oct 1962 464.8 P56
Chemical control (plant diseases), Cytospora,
Plant injuries, Plant protection, Prunes, Cytospora.

1234-68

EFFECTS OF SELECTED CYTOSPORA ISOLATES FROM STONE PRUITS ON CERTAIN STONE PRUIT VARIETIES.

A W Helton D E Konicek
Phytopathology 51 (3):152-157, BIBL. 157
Mar 1961 464.8 P56

Cytospora, Fruit, Fungus diseases (plants), Cytospora.

1235-68
ROCT GRAPTING OF CITY-PLANTED AMERICAN FLMS.
E B Himelick D Neely
Plant Dis Rep 46 (2):86-87
15 Feb 1966 1.9 P69P
Plant grafting, Roots, Ulmus.

236-68
ARTIFICIAL INOCULATION OF PEARL MILLET PLANTS WITH SCLEROSPORA GRAHINICOLA.
A HUSAIN R N Thakur D S Bhander
Plant Dis Rep 47(12):1080-1082
15 Dec 1963 1.9 P69P
Immunization, Oospores, Pearlmillet, Storage, Oospores.

1237-68
POWDERY MILDEW - A NEW DISEASE OF RAPESEED AND MUSTARD IN INDIA.
D S Bhander R N Thakur A Hussain
Plant Dis Rep 47 (11):1039
15 Nov 1963 1.9 P69P
Brassica, Rapeseed, Brassica.

1238-68
ABILITY OF SINGLE WHITEFLIES TO TRANSMIT CONCOMITANTLY A STRAIN OF INPECTIOUS CHLOROSIS OF MALVACEAE AND OF LEONURUS MOSAIC VIRUS.
E Flores K Silberschmidt
Phytopathology 53(2):238, BIBL.
Feb 1963 464.8 p56
Aleyrodidae, Insect vectors, Aleyrodidae.

1239-68
WEB BLIGHT -A SEVERE DISEASE OF BEANS AND SOYBEANS IN MEXICO.
A Crispin C C Gallegos
Plant Dis Rep 47(11):1010-1011, PL.
15 Nov 1963 1.9 P69P
Beans, Soybeans, Web blight (beans), Web blight (soybeans).

1240-68
ELECTRON MICROSCOPIC DEMONSTRATION OF SUGARCANE MOSAIC VIRUS PARTICLES IN CELLS OF SACCHARUM OFFICINARUM AND ZEA MAYS.
F Herold J Weibel
Phytopathology 53 (4):469-471, BIBL., PL.
Apr 1963 464.8 P56
Electron microscopy, Mosaic (sugarcane), Sugarcane, Sugarcane.

1241-68

RELATION BETWEEN CHLOROGENIC ACID CONTENT AND RESISTANCE TO COFFEE CANKER INCITED BY CERATOCYSTIS FIMBRIATA.

E Echandi C E Fernandez
Phytopathology 52 (6):544-546
Jun 1962 464.8 p56
Canker (coffee), Ceratocystis fimbriata,
Ceratocystis fimbriata.

1242-68
EFFECT OF CERTAIN CHEMICAL TREATMENTS ON COLONIZATION OF SLASH PINE STUMPS BY POMES ANNOSUS.
C H Driver
Plant Dis Rep 47(6):569-571

15 Jun 1963 1.9 P69P Chemical control (plant diseases), Fomes annosus, Pinus elliottii, Fomes annosus, Pinus elliottii.

1243-68
FURTHER DATA ON BORAX AS A CONTROL OF SURFACE INFECTION OF SLASH PINE STUMPS BY FOMES ANNOSUS.
C H Driver
Plant Dis Rep 47(11):1006-1009, TABS.
15 Nov 1963 1.9 P69P
BORAX, Pomes annosus, Pinus elliottii, Tree diseases, Fomes annosus, Pinus elliottii.

1244-68
SYSTEMIC INFECTION OF CORN BY FUSARIUM MONILIPORME.
D C Foley
Phytopathology 52 (9):870-872
Sep 1962 464.8 P56
Corn, Fusarium moniliforme.

1245-68
A NEW BACTERIAL DISEASE OF SOYBEANS.
J Dunleavy
Phytopathology 54(8):891-892
Aug 1964 464.8 P56
Soybeans.

246-68
BLUEBONNET 50 RICE SUSCEPTIBLE TO STRAIN H OF SUGARCANE MOSAIC VIRUS.
L Anzalone Jr
Phytopathology 53(6):621
Jun 1963 464.8 P56
Mosaic (sugarcane).

1247-68
SUSCEPTIBILITY OF CERTAIN CONVOLVULACEAE TO INTERNAL CORK.
TOBACCO RINGSPOT, AND CUCUMBER MOSAIC VIRUSES.
W J Martin
Phytopathology 52(7):607-611, TABS.
Jul 1962 464.8 P56
Internal cork (convolvulaceae), Mosaic (cucumbers),
Plant disease resistance, Ring spot (tobacco).

1248-68
EFFECT OF EXCORTIS ON SATSUMA ORANGE.
J B Sinclair R T Brown
Phytopathology 52 (6):581-582, BIBL. 581-582
Jun 1962 464.8 P56
Oranges, Virus diseases (plants).

1249-68

SPREAD OF PETAL BLIGHT OF CAMELLIAS BY AIR-BORNE ASCOSPORES
OF SCLEROTINIA CAMELLIAE.
N Zummo A G Plakidas
Phytopathology 51(1):69
Jan 1961 464.8 P56
Air-borne plant diseases, Ascospores, Fungicides,
Ascospores.

1250-68

TOLERANCE AMONG NATURALLY OCCURING ISOLATES OF RHIZOCTONIA SOLANT TO PENTACHLORONITROBENZENE.

M N Shatla J B Sinclair
Phytopathology 53(6):625
Jun 1963 464.8 P56
Pentachloronitrobenzene, Rhizoctonia solani.

1251-68
INHIBITION OF SUGARCANE MOSAIC VIRUS BY MILK.
L Anzalone Jr
Plant Dis Rep 46 (4):213-215, TABS
15 Apr 1962 1.9 P69P
Milk, Mosaic (sugarcane).

1252-68
CORTICUM SALMONICOLOR IN THE UNITED STATES.
E C Tims
Plant Dis Rep 47(12):1055-1059, BIBL. 1058-1059, PL.
15 Dec 1963 1.9 P69P
Blight (apples), Blight (pears).

1253-68
PATHOLOGICAL HISTOLOGY OF YOUNG SOUR ORANGE PLANTS BUD-INOCULATED WITH FOUR CITRUS VIRUSES.
H M Elsaid
Phytopathology 54(8):892
Aug 1964 464.8 P56
Plant histology, Sour oranges.

PAGE 22

1254-68
INFECTION OF SEEDLING COTTON BY AN ISOLATE OF RHIZOCTONIA SOLANI.
B B Khadga B B Exner J B Sinclair Phytopathology 53 (6):623
Jun 1963 464.8 P56
Cotton, Rhizoctonia solani, Rhizoctonia solani.

255-68
THE EFFECT OF HIGH NITROGEN FEBTILIZER ON THE CONTBOL OF BACTEBIAL LEAFSPOT OF PEPPERS CAUSED BY XANTHOMONAS VESICATORIA AND THE YIELDS OF MARKETABLE FRUIT.

J H Jenkins N L Horn Phytopathology 53 (6):623
Jun 1963 464.8 P56
Bacterial leaf spot (redpeppers), Nitrification, Xanthomonas vesicatoria.

1256-68
EFFECT OF TEMPERATURE AND AGE OF HOST ON INFECTION OF SUNFLOWERS BY SCLEROTIUM BATATICOLA.
S B Mathur W E Sackston
Phytopathology 53 (3):350
Mar 1963 464.8 P56
Sunflowers.

257-68
A NEW BLACK SPOT OF CAULIFLOWER FROM INDIA.
J V Kachroo
Plant Dis Rep 47(12):1086-1087, PL.
15 Dec 1963 1.9 P69P
Black spot (cauliflower), Cauliflower.

1258-68
A WEW POWDERY MILDEW OF DOLICHOS LABLAB FROM INDIA.
T Raghunath
Plant Dis Rep 47(12):1083-1084
15 Dec 1963 1.9 P69P
Hyacinth dolichos.

1259-68
NONPATHOGENICITY OF PRATYLENCHUS PENETRANS TO STERILE LOWEUSH BLUEBERRY SEEDLINGS.
R C McCrum M T Hilborn
Plant Dis Rep 46(2):84-85
15 Feb 1962 1.9 P69P
Blueberries, Pratylenchus penetrans.

260-68
PRECAUTIONS IN ISOLATING THIELAVIOPSIS BASICOLA WITH CARROT DISCS.
A B Lloyd J L Lockwood
Phytopathology 52(12):1314-1315
Dec 1962 464.8 P56
Carrots, Thielaviopsis basicola.

1261-68
A METHOD OF CONTROLLED INOCULATIONS WITH CONIDIOSPORES OF EMYSIPHE GRAMINIS VAR. TRITICI.
K R S Wair & H Ellingboe
Phytopathology 52 (7):714
Jul 1962 464.8 P56
Immunization, Immunization.

1262-68
INCIDENCE OF SYSTEMIC DEAD-ARM AND ITS RELATION TO TOPO-GRAPHY IN MICHIGAN VINEYARDS.
P H Barnes
Plant Dis Rep 47(10):872-874
15 Oct 1963 1.9 P69P
Grape vineyards, Topography.

263-68
INCREASED SUSCEPTIBILITY TO ROOT ROTS IN VIRUS INFECTED PEAS.
J D Farley J L Lockwood
Phytepathology 54(8):892
Aug 1964 464.8 P56
Peas, Plant disease resistance, Root rot (peas).

1264-68
IMPERITANCE OF RESISTANCE TO TOBACCO BINGSPOT AND CUCUMBER MOSAIC VIBUS IN BLACK COWPEA CROSSES.
D J deZeeuw R A Crum
Phytopathology 53(3):337-340, BIBL. 339-340, TABS.
Har 1963 464.8 P56
Cowpeas, Mosaic (cucumbers), Ring spot (tobacco).

1265-68

CELL-ASSOCIATED VIRUS INFECTIVITY OF TISSUE CULTURES DERIVED FROM SUSCEPTIBLE AND RESISTANT SOURCES.

H H Murakishi
Phytopathology 54(8):902
Aug 1964 464.8 p56
Mosaic (tobacco), Tissue culture, Virulence, Viruses.

266-68
EFFECT OF SOIL TEMPERATURE, HOST VARIETY, AND FUNGUS STRAIN
ON THIELAVIOPSIS ROOT ROT OF PEAS.
A B Lloyd J L Lockwood
Phytopathology 53(3):329-331, BIBL.
Mar 1963 464.8 P56
Root rot (peas), Soil temperature, Thielaviopsis basicola.

1267-68
PENETRATION OF MERISTEMATIC TISSUES OF CORN BY PHYSODERMA MAYDIS.
J W Broyles
Phytopathology 52(10):1013-1016
Oct 1962 464.8 P56
Corn, Fungi.

1268-68
CHEMOTHERAPEUTIC CONTROL OF WHEAT LEAF RUST WITH PHENYL-HYDRAZONES.
E G Jaworski P F Hoffman
Phytopathology 53 (6):639-642, BIBL., TABS.
Jun 1963 464.8 P56
Drug therapy, Hydrazones, Leaf rust (wheat),
Phenylhydrazine, Puccinia recondita, Puccinia recondita.

1269-68
INVESTIGATIONS OF ANTIGENIC COMPONENTS PRODUCED BY SWEET POTATO ROOTS IN RESPONSE TO BLACK ROT INFECTION.
N Kawashima H Hyodo I Uritani
Phytopathology 54 (9):1086-1092, BIBL. 1092
Sep 1964 464.8 P56
Antigens, Black rot (sweetpotatoes), Immunochemistry,
Sweetpotatoes.

1270-68
CHEMICAL CONTROL OF PUCCINIA PITTERIANA ON POTATOES IN ECUADOR.
JR Diaz J Echeverria
Plant Dis Rep 47(9):800-801
15 Sep 1963 1.9 P69P
Chemical control (plant diseases), Potatoes.

1271-68

LOSSES CAUSED BY RHIZOCTONIA SOLANI BORNE ON BEAN SEED.
M Chorin A Halfon-meiri
Plant Dis Rep 46 (11) H790-791
15 Nov 1962 1.9 P69P
Crop losses, Rhizoctonia solani.

1272-68
CONTROL OF BACTERIAL SPOT WITH DODINE.

R H Daines
Plant Dis Rep 46(4):251-253
15 Apr 1962 1.9 P69P
Bacterial spot (peaches), Dodine.

1273-68
CONTROL OF BLACK ROT BY PREBEDDING HEAT TREATMENT OF SWEET-POTATO ROOTS.

R H Daines I A Leone E Brennan
Phytopathology 52(11):1138-1140
Nov 1962 464.8 P56
Black rot (sweetpotatoes), Heat, Plant disease control,
Sweetpotatoes.

1274-68
A VARIANT CULTURE OF XANTHOMONAS MALVACEARUM OBTAINED FROM WEED ROOTS.
T E Smith
Phytopathology 52(12):1313-1314
Dec 1962 464.8 P56
Culture media, Plant extracts, Roots, Weeds,
Xanthomonas malvacearum.

1275-68
STORAGE OF FUNGI IN SEEDS OF SMALL GRAINS.
W F Crosier S W Braverman
Phytopathology 53 (3):348
Mar 1963 464.8 P56
Barley, Helminthosporium, Oats, Rye, Wheat,
Helminthosporium.

20 1276-68

1276-68

SCREENING EGGPLANTS FOR RESISTANCE TO VERTICILLIUM WILT.

S W Braverman
Phytopathology 53(3):347
Mar 1963 464.8 p56
Eggplant, Verticillium.

1277-68
PATHOLOGICAL ANATOMY OF RAPID DECLINE OF SPY 227 APPLE.
R M Gilmer
Phytopathology 52(10):1027-1030
Oct 1962 464.8 P56
Apples, Decline (apples), Plant anatomy,
Virus diseases (plants).

1278-68
GREEN MOTTLE VIRUS PRODUCES RUSSET RING SYMPTOMS ON APPLE FRUIT.
D H Palmiter
Phytopathology 53(5):603-604, BIBL., PL.
May 1963 464.8 P56
Green ring mottle (apples), Russet ring (apples).

1279-68

REBUCTIONS IN FRUIT SETS ON CHERRY TREES POLLINATED WITH POLLEN FROM TREES WITH SOUR CHERRY YELLOWS.

R D Way R M Gilmer
Phytopathology 53(4):399-401, BIBL. 400-401, TABS.
Apr 1963 464.8 P56
Sour cherry yellows (cherries).

280-68
LETTER TO THE EDITOR: SOME SYNONYMS OF SOUR CHERRY YELLOWS VIRUS.
R M Gilmer
Phytopathology 53(3):369-370, BIBL. 369-370
Mar 1963 464.8 P56
Sour cherries, Sour cherry yellows (cherries).

1281-68
STABILITY OF PATHOGENICITY OF B BIOTYPES OF THE ROOT-KNOT NEMATODE MELOIDOGYNE INCOGNITA ON TOMATO.

N N Winstead R D Riggs
Plant Dis Rep 47(10):870-871
15 Oct 1963 1.9 P69P
Meloidogyne incognita, Plant nematodes,
Root knot (tomatoes), Meloidogyne incognita,
Root knot (tomatoes).

1282-68
BLUEBERRY STEM BLIGHT CAUSED BY BOTRYOSPHAERIA DOTHIDEA (B. RIBIS).
W Witcher C N Clayton
Phytopathology 53 (6):705-712, BIBL. 711-712, TABS.
Jun 1963 464.8 p56
Blueberries.

1283-68
CONTROL OF SCAB OF CUCUMBER AND SQUASH WITH FUNGICIDES.
D L Strider
Plant Dis Rep 47(5):418-419
15 May 1963 1.9 P69P

264-68
STRAINS OF, RESISTANCE TO, AND ANTAGONISTS OF SCLEROTIUM ROLFSII.
W E Cooper
Phytopathology 51(2):113-116, BIBL. 115-116
Feb 1961 464.8 P56
Resistance, Sclerotium rolfsii, Resistance,
Sclerotium rolfsii.

1285-68
EPIPHYTOLOGY OF TOBACCO BROWN SPOT CAUSED BY ALTERNARIA LONGIPES.
C von Ramm G B Lucas
Phytopathology 53(4):450-455, BIBL., TABS., PL. Apr 1963 464.8 p56
Brown spot (tobacco).

1286-68
SOIL TRANSMISSION OF TOBACCO RINGSPOT VIRUS.
J W Hendrix
Phytopathology 51(3):194
Mar 1961 464.8 P56
Plant disease transmission, Ring spot (tobacco), Soils,
Virus diseases (plants).

1287-68

THE RELATIONSHIP BETWEEN CERTAIN CHEMICAL SOIL PACTORS AND THE INOCULUM POTENTIAL OF PHYTOPHTHORA PRASITICA VAR. NICOTIANAE.
P D Dukes J L Apple
Phytopathology 53 (6):622
Jun 1963 464.8 P56
Flue-cured tobacco, Phytophthora parasitica var. nicotianae, Soil hydrogen-ion concentration.

STRAINS OF PSEUDOMONAS SOLANACEARUM DIFFERING IN PATHOGEN-ICITY TO TOBACCO AND PEANUTS. A Kelman L H Person Phytopathology 51(3):158-161, BIBL., 160-161 Mar 1961 464.8 P56 Peanuts, Pseudomonas solanacearum, Tobacco, Pseudomonas solanacearum.

1289-68
EPFICACY OF SCREENING SOUTHERN PEAS IN THE SEEDLING STAGE FOR CLADOSPORTUM SPOT RESISTANCE.
D L Strider R W Toler
Phytopathology 53(6):625-626
Jun 1963 464.8 P56
Cowpeas.

1290-68

RELATIVE IHIBITORY POWER OF JUICES FROM VARIOUS PLANTS ON TOBACCO MOSAIC VIRUS.

G B Lucas D N Wiggs
Phytopathology 53 (6):624
Jun 1963 464.8 P56

Mosaic (tobacco), Nicotiana glutinosa, Nicotiana glutinosa.

1291-68
NATURALLY OCCURRING QUINONES IN WHEAT AND BARLEY AND THEIR TOXICITY TO LOOSE SHUT FUNGI.

M E Mace T T Hebert
Phytopathology 53(6):692-700, BIBL. 699-700, TABS.
Jun 1963 464.8 P56
Benzoquinones, Loose smut (barley), Loose smut (wheat),
Quinones, Ustilago nuda, Ustilago tritici, Ustilago nuda,
Ustilago tritici.

1292-68
TRYPAN BLUE AND BOILING LACTOPHENOL FOR STAINING AND CLEAR-ING BARLEY TISSUES INFECTED WITH USTILAGO NUDA.
D J Morton
Phytopathology 51(1):27-29
Jan 1961 464.8 P56
Barley, Tissues, Trypan blue, Ustilago nuda.

1293-68
INOCULATION OF OAKS WITH URNALA CRATERIUM (SCHF.) PR. PRODUCES CANKERS IDENTICAL TO STRUMELLA CANKERS. D R Houston
Plant Dis Rep 47(10):867-869
15 Oct 1963 1.9 P69P
Quercus.

1294-68
THE EFFECT OF CYCLOHEXIMIDE ON THE GERMINATION OF CONIDIA OF COCCOMYCES HIEMALIS.
M J Starzyk
Phytopathology 53(2):235
Feb 1963 464.8 P56
Coccomyces hiemalis, Cycloheximide, Coccomyces hiemalis.

1295-68
COLLETOTRICBUMS ASSOCIATED WITH LILY BULBS.
F K Sobers A G Plakidas
Phytopathology 52(9):884-887
Sep 1962 464.8 P56
Bulbs, Lilium.

1296-68
THE COMPARATIVE EFFECTS OF VARIOUS FUNGICIDE PROGRAMS ON PRUIT NUMBERS AND YIELDS OF APPLE TREES.
H F Winter
Plant Dis Rep 46(8):560-564, TABS
15 Aug 1962 1.9 P69P
Apples, Fungicides.

1297-68
ISOLATION OF PYTBIUM FROM SOIL PARTICLES.
A F Schmitthenner
Phytopathology 52(11):1133-1138, BIBL. 1138, TABS.
Nov 1962 464.8 P56
Pythium ultimum, Soil separates, Pythium ultimum.

1298-68
EFFECTS OF FOLIAR UREA TREATMENT ON NUMBERS OF ACTINOMYCETES ANTAGONISTIC TO FUSARIUM ROSEUM F. CEREALIS IN THE RHIZOSPHERE OF CORN SEEDLINGS.
R K HORST L J HERT
Phytopathology 52 (5): 423-427
May 1962 464.8 P56
Corn, Foliar application, Fusarium roseum f. cerealis, Fusarium roseum f. cerealis.

1299-68
PATHOGENIC AND CULTURAL VARIABILITY OF SINGLE ZOOSPORE ISO-LATES OF PHYTOPHTHORA MEGASPERMA VAR. SOJĀE.
J W Hilty A F Schmitthenner
Phytopathology 52 (9):859-862
Sep 1962 464.8 P56
Fungi, Zoospores.

1300-68

CLOSER PLANTING OF TOMATOES PAVORS BLOSSOM-END ROT.
J D Wilson
Plant Dis Rep 47(8):729-731
15 Aug 1963 1.9 P69P

301-68
SUSCEPTIBILITY OF CERTAIN VERTICILLIUM-RESISTANT TOMATO VARIETIES TO AN OHIO ISOLATE OF THE PATHOGEN.
L J Alexander
Phytopathology 52(10):998-1000
Oct 1962 464.8 P56
Fungi, Ohio, Plant disease resistance, Tomatoes,
Verticillium albo-atrum, Ohio, Verticillium albo-atrum.

302-68
A NEW CORN DISEASE IN OHIO.
B F Janson C W Ellett
Plant Dis Rep 47(12):1107-1108
15 Dec 1963 1.9 P69P
Cicadellidae, Corn, Stunt (corn), Virus diseases (plants), Cicadellidae.

1303-68
A LEAF BLIGHT OF CIMARRON OATS.
G J Ikenberry Jr H C Young Jr
Phytopathology 51(2):80-83
Peb 1961 464.8 P56
Cimarron blight (oats), Oats.

04-68
INTER-RELATIONSHIPS AMONG FUNGI ASSOCIATED WITH STRAWBERRIES IN OREGON.
D Bhatt E K Vaughan
Phytopathology 53(2):217-220, BIBL., TABS.
Feb 1963 464.8 P56
Botrytis, Cladosporium, Fusarium, Oregon, Penicillium,
Botrytis, Cladosporium, Fusarium, Oregon, Penicillium.

1305-68
EFFECTS OF MINERAL FERTILIZERS ON DAMPING-OFF OF TABLE BEETS.
J W Yale Jr E K Vaughn
Phytopathology 52(12):1285-1287
Dec 1962 464.8 P56
Beets, Damping-off (beets), Fertilizers, Minerals.

1306-68

KABATIELLA CAULIVORA, A SEED-BORNE PATHOGEN OF TRIFOLIUM INCARNATUM IN OREGON.

C M Leach
Phytopathology 52(11):1184-1190
Nov 1962 464.8 P56
Crimson clover, Oregon, Seed-borne plant diseases,
Crimson clover, Oregon.

TRANSMISSION OF THE RINGSPOT VIRUS OF STONE FRUITS FROM SQUASH TO SQUASH BY POLIAGE CONTACT.

K G Swenson G P Carpenter Phytopathology 51(1):68-69
Jan 1961 464.8 P56
Plant translocation, Ring spot (fruit).

308-68
MODE OF INFECTION OF SWEET CHERRY BY PSEUDOMONAS SYRINGAE.
H R Cameron
Phytopathology 52(9):917-921, BIBL. 920-921, TABS.
Sep 1962 464.8 P56
Mazzard cherries, Plant disease transmission,
Pseudomonas syringae.

1309-68
INHIBITION OF POLYGALACTURONASE BY CATIONS.
M E Cordon J E Elson D L Bell
Phytopathology 54 (12): 1432
Dec 1964 464.8 P56
Enzymology, Ions, Pectinase.

1310-68
SUSCEPTIBILITY OF PEAR ROOTS TO PHYTOPHTHORA.
H R Cameron
Phytopathology 52(12):1295-1297
Dec 1962 464.8 P56
Pears, Phytophthora, Plant disease resistance, Roots, Phytophthora.

811-68
BOTRYTIS SP. ON DOUGLAS FIR SEEDLINGS.
M Halber
Plant Dis Rep 47(6):556
15 Jun 1963 1.9 P69P
Botrytis, Pseudotsuga menziesii, Botrytis,
Pseudotsuga menziesii.

312-68
LONGEVITY OF UREDIOSPORES OF RACE 33 OF UROMYCES PHASEOLI VAR. PHASEOLI IN STORAGE.
A D Davison E K Vaughan
Phytopathology 53(6):736-737
Jun 1963 464.8 P56
Rust (beans), Spores, Uromyces phaseoli var. phaseoli,
Spores, Uromyces phaseoli var. phaseoli.

1313-68
ISOLATION AND IDENTIFICATION OF TOMATO RING SPOT VIRUS ASSOCIATED WITH ROSE PLANTS AND ROSE MOSAIC VIRUS.
R S Halliwell J A Milbrath
Plant Dis Rep 46 (8):555-557, BIBL. 556-557
15 Aug 1962 1.9 P69P
Mosaic (rosa), Ring spot (tomatoes).

314-68
COLONIZATION OF PLANT DEBRIS IN SOIL BY VERTICILLIUM DAHLI-AE.
C. A Martinson C E Horner
Phytopathology 54(8):900
Aug 1964 464.8 P56
Plant ecology, Soil fungi, Verticillium dahliae.

1315-68
DIMORPHISM AND INTERACTIONS BETWEEN THE OAK WILT FUNGUS AND ASSOCIATED FUNGI.
W H Brandt
Plant Dis Rep 47 (7):579-582
15 Jul 1963 1.9 P69P
Ceratocystis fagacearum, Polymorphism,
Ceratocystis fagacearum, Polymorphism.

1316-68

EFFECT OF REPEATED APPLICATIONS OF DODINE AND OF CAPTAN ON APPLE SCAP FOLIAGE LESIONS.

J J Albert F H Lewis
Plant Dis Rep 46 (3):163-167, TABS
15 Mar 1962 1.9 P69P
Captan, Dodine, Scab (apples).

317-68
THE NATURE AND OCCURRENCE OF AN ANNUAL CANKER OF MAPLE IN PENNSYLVANIA.
J M Skelly F A Wood
Phytopathology 53(3):352
Mar 1963 464.8 P56
Acer saccharum, Canker (acer), Acer saccharum,
Canker (acer).

1318-68

SPORULATION OF CERATOCYSTIS FAGACEARUM IN WOUNDS ON INFECTED OAK TREES.

F W Cobb R A Schmidt C L Fergus F A Wood Phytopathology 53(3):348
Mar 1963 464.8 P56
Ceratocystis fagacearum, Quercus prinus, Spores, Ceratocystis fagacearum, Quercus prinus, Spores.

1319-68
ETIOLOGICAL STUDIES OF THE ASH DIE-BACK DISEASE. STOMATES AS INFECTION COURTS.
R D Schein J A Snow
Phytopathology 53 (3):352
Mar 1963 464.8 P56
Stomata.

20 1320-68

1320-68
ETIOLOGICAL STUDIES ON THE ASH DIE-BACK DISEASE. LEAF AGE AND SUSCEPTIBILITY.
R D Schein
Phytopathology 53 (3):351-352
Mar 1963 464.8 P56
Kidney beans, Uromyces phaseoli, Kidney beans,
Uromyces phaseoli.

1321-68
FRANKLINIELLA FUSCA, AN ADDITIONAL VECTOR FOR THE TOMATO SPOTTED WILT VIRUS, WITH NOTES ON THRIPS TABACI, ANOTHER VECTOR.
K Sakimura
Phytopathology 53 (4):412-415, BIBL., TABS.
Apr 1963 464.8 P56
Frankliniella fusca, Spotted wilt (tomatoes), Thrips tabaci, Frankliniella fusca, Thrips tabaci,

1322-68
PEANUT YIELDS AND QUALITY INCREASED BY DELAYED HARVEST AND DISEASE CONTROL.
A L Harrison
Phytopathology 53(6):623
Jun 1963 464.8 P56
Harvesting date, Pentachloronitrobenzene.

1323-68
LEAF SPOT OF SESAME CAUSED BY CYLINDROSPORIUM SESAMI.
R G Orellana
Phytopathology 51(2):89-92
Feb 1961 464.8 P56
Fungi, Fungus diseases (plants), Leaf spot (sesame).

|324-68
EUCHARIS MOTTLE STRAIN OF TOBACCO RINGSPOT VIRUS.
R P Kahn H A Scott R L Monroe
Phytopathology 52 (11):1211-1216, BIBL. 1216
Nov 1962 464.8 p56
Ring spot (tobacco).

1325-68

SPORULATION AND SPOROPBORE SURVIVAL OF ECHINODONTIUM TINCTORUM.

O C Maloy
Plant Dis Rep 47 (7):627-631, BIBL. 630-631

15 Jul 1963 1.9 P69P
Fungus diseases (plants), Sporophore, Sporulation,
Sporophore, Sporulation.

1326-68
METABOLISM OF DL- AND L-PHENYLALANINE IN MALUS RELATED TO SUSCEPTIBILITY AND RESISTANCE TO VENTURIA INAEQUALIS.
J Bolowczak J Kuc E B Williams
Phytopathology 52 (7):699-703
Jul 1962 464.8 P56
Malus, Plant disease resistance, Plant metabolism,
Venturia inaequalis, Malus, Venturia inaequalis.

1327-68
SOME BISTOLOGICAL AND GENETIC RELATIONSHIPS OF RESISTANCE OF WHEAT TO LOOSE SHOT.

T A Gaskin J F Schafer
Phytopathology 52 (7):602-607
Jul 1962 464.8 P56
Loose smut (wheat), Plant disease resistance,
Plant genetics, Plant histology, Wheat.

1328-68

EFFECT OF ROOT EXUDATES ON GERMINATION OF CONIDIA AND MICROSCLEROTIA OF VERTICILLIUM ALBO-ATRUM INHIBITED BY THE SOIL
PUNGISTATIC PRINCIPLE.

L R Schreiber R J Green Jr
Phytopathology 53 (3):260-264, BIBL. 264, TABS., PL.
Mar 1963 464.8 P56
Conidia, Root excretions, Verticillium albo-atrum, Conidia,
Verticillium albo-atrum.

1329-68
MUTATIONS FOR VIRULENCE IN PUCCINIA CORONATA.
D E Zimmer J F Schafer F L Patterson
Phytopathology 53(2):171-176, BIBL. 176, TABS.
Feb 1963 464.8 P56
Plant genetics, Plant mutation, Puccinia coronata,
Uredospores, Virulence, Puccinia coronata, Uredospores,

1330-68
CHLOROTIC LEAF SPOT FROM A MECBANICALLY TRANSMISSIBLE VIRUS FROM APPLE.
R M Lister J B Bancroft J R Shay
Phytopathology 54 (10): 1300-1301
Oct 1964 464.8 P56
Apples, Chlorotic leafspot (apples),
Plant disease transmission.

1331-68

WBEAT LEAF RUST RESISTANCE COMBINATIONS.
J F Schaefer R M Caldwell P L Patterson L E Compton
Phytopathology 53(5):569-573, BIBL. 572-573, TABS.
May 1963 464.8 P56
Bybrids, Leaf rust (wheat), Plant disease resistance,
Puccinia recondita, Hybrids, Puccinia recondita.

1332-68
CHARACTERISTICS OF FILAMENTOUS VIRUSES ISOLATED MECBANICALLY FROM APPLE.
R M Lister J B Bancroft M J Nadakavukaren
Phytopathology 54(8):899
Aug 1964 464.8 P56
Apples, Virology, Viruses.

1333-68

THE GROWTH CURVE OF BEAN POD MOTTLE VIRUS DURING SYSTEMIC INFECTION.

A G Gillaspie
Phytopathology 54(8):893
Aug 1964 464.8 P56
Beans, Pod mottle (beans).

1334-68
COMPLEMENTARY STRAINS OF PHYTOPHTHORA PALMIVORA FROM CEYLON RUBBER.
V Satchuthananthavale
Phytopathology 53(6):729
Jun 1963 464.8 P56
Ceylon, Mycology, Phytophthora palmivora, Plant breeding, Rubber, Ceylon, Phytophthora palmivora.

1335-68
CONTROL OF BARLEY YELLOW DWARF IN WINTER OATS BY A SYSTEMIC INSECTICIDE.
J L Peterson S Lund R S Filmer
Plant Dis Rep 47(6):472-473
15 Jun 1963 1.9 P69P
Barley, Insecticides, Yellow dwarf (barley), Barley.

1336-68
EFFECT OF SOME SINGLE ELEMENT DEFICIENCIES ON PATHOGENICITY
OF PRATYLENCEUS PENETRANS TO PEPPER PLANTS.
M F Shaifee W R Jenkins
Plant Dis Rep 46 (7): 472-475
15 Jul 1962 1.9 P69P
Piper nigrum, Plant nutritional deficiencies,
Pratylenchus penetrans.

1337-68
RELATIONSHIP BETWEEN TOMATO RINGSPOT AND PEACH YELLOW BUD MOSAIC VIRUSES.
C H Cadman R M Lister
Phytopathology 51(1):29-31, BIBL. 31
Jan 1961 464.8 P56
Ring spot (tomatoes), Yellow bud mosaic (peaches).

1338-68
APPINITIES OF VIRUSES AFFECTING FRUIT TREES AND RASPBERRY.
C H Cadman
Plant Dis Rep 47 (6):459-462
15 Jun 1963 1.9 P69P
Bush dwarf (raspberries), Prunus, Prunus.

1339-68

PATHOGENICITY TO SORGHUM AND CORN OF A HYBRID BETWEEN THE HEAD SMUT FUNGI ON EACH OF THESE CROPS.

I A Al-Sohaily C J Mankin G Semeniuk Phytopathology 53 (3):360-361, BIBL. Mar 1963 464.8 P56 Bead Smut (corn), Head Smut (sorghum), Hybrids, Hybrids.

1340-68
PHYSIOLOGIC SPECIALIZATION OF SPHACELOTHECA REILIANA TO SORGHUM AND CORN.
I A Al-Sohaily C J Mankin G Semeniuk
Phytopathology 53 (6):723-726, TABS.
Jun 1963 464.8 P56
Head Smut (corn), Head smut (sorghum).

1341-68
CORN STALK ROT SYMPTOMS INDUCED BY ROOT INJURY.
A J Pappelis
Phytopathology 53 (6):624-625
Jun 1963 464.8 P56
Plant injuries, Stalk rot (corn).

1342-68
INCREASED STALK ROT SUSCEPTIBILITY IN CORN POLLOWING ROOT AND LEAF INJURY.
A J Pappelis
Phytopathology 53(6):624
Jun 1963 464.8 P56
Plant injuries, Stalk rot (corn).

343-68
SUCCULENT-TYPE PLANTS AS SOURCES OF PLANT VIRUS INHIBITORS.
J N Simons R Swidler L M Moss
Phytopathology 53(6):677-683, TABS.
Jun 1963 464-8 P56
Mosaic (tobacco), Plant disease resistance, Succulents,
Virucides.

1344-68
THE MECHANICS OF RESISTANCE TO POTATO VIRUS Y INFECTION IN CAPSICUM ANNUM WAR. ITALIAN EL.
J N Simons L M Moss
Phytopathology 53(6):684-691, TABS.
Jun 1963 464.8 P56
Flant disease resistance.

1345-68
INFECTION OF LYCHEE AND PEACH SEEDLINGS WITH CULTURES OF CLITOCHBE TABESCENS.
M Cohen
Phytopathology 53(3):358-359, BIBL.
Mar 1963 464-8 P56
Peaches.

1346-68
ETIOLOGICAL STUDIES ON THE ASH DIE-BACK DISEASE.
E W Ross
Phytopathology 53(3):351
Mar 1963 464.8 P56
Dieback (fraxinus).

1347-68

FUNGI ASSOCIATED WITH CROWN ROT OF BOXED BANANAS.
G L Greene R D Goos
Phytopathology 53(3):271-275, BIBL., TABS., PL.
Mar 1963 464.8 P56

Crown rot (bananas), Pusarium roseum, Fusarium roseum.

1348-68
TOXIN PRODUCTION BY HELMINTHOSPORIUM VICTORIAE ON SYNTHETIC MEDIA CONTAINING DIFFERENT NITROGEN SOURCES.
R W Berry M C Putrell
Phytogathology 51 (3):177-179
Mar 1961 464.8 P56
Culture media, Toxins.

1349-68
DWARF PASCICLE ABNORMALITY OF SHORT LEAF PINE.
P A Young
Plant Dis Rep 47(11):1022-1023, PL.
15 Nov 1963 1.9 P69P
Pinus, Tree abnormalities, Pinus.

350-68
CONTROL OF SCLEROTIUM ROLFSII WITH CHEMICALS.
A L Harrison,
Phytopathology 51(2):124-128, BIBL. 127-128, TABS.
Feb 1961 464.8 P56
Fungicides, Plant disease control, Sclerotium rolfsii,
Sclerotium rolfsii.

351-68
PHYSIOLOGY OF SCLEROTIUM ROLPSII, WITH EMPHASIS ON PARASITISM.
G M Watkins
Phytopathology 51(2):110-113
Peb 1961 464.8 P56
Fungi, Parasitism, Physiology, Sclerotium rolfsii,
Physiology, Sclerotium rolfsii.

1352-68
WEATHER, SPACE, TIME, AND CHANCE OF INFECTION.
P E Waggoner
Phytopathology 52(11):1100-1108, TABS.
Nov 1962 464.8 P56

Plant diseases, Time, Weather.

1353-68
SYMPTOMS OF FUSARIUM WILT IN RELATION TO QUANTITY OF FUNGUS
AND ENZYME ACTIVITY IN TOMATO STEMS.
A Matta A E Dimond
Phytopathology 53 (5):574-578, BIBL.
May 1963 464.8 P56
Enzymes, Esterases, Fusarium oxysporum f. lycopersici,
Oxidases, Pectase, Wilt (tomatoes),
Fusarium oxysporum f. lycopersici.

1354-68
ISOLATES OF OAT STEM RUST RACE 6 VIRULENT ON VARIETY SAIA
IN ISRAEL.
I Tobolsky I Wahl
Phytopathology 53(2):239-240, BIBL.
Feb 1963 464.8 P56
ISrael, Puccinia graminis, Stem rust (oats), Israel,
Puccinia graminis.

1355-68
PROPHYLACTIC EFFECT OF A PLANT ANTITRANSPIRANT.
GALE, J.
A Poljakoff-Mayber
Phytopathology 52(7):715-717
Jul 1962 464.8 P56

1356-68
STORAGE VIABILITY OF BEAN RUST UREDOSPORES.
R D Schein
Phytopathology 52(7):653-657
Jul 1962 464.8 P56
Germination (spores), Rust (beans), Storage, Uredospores,
Germination (spores), Uredospores.

1357-68

THE SIGNIFICANCE OF EMPTY NUTS IN THE GUAM DISEASE OF COCONUT PALMS.

F O Holmes
Phytopathology 53(3):349
Mar 1963 464.8 P56
Coconuts, Copra, Guam disease (coconuts).

358-68
ISOLATION OF TOBACCO VEIN DISTORTING VIRUS FROM TOBACCO PLANTS INFECTED WITH APHID-TRANSMISSABLE BUSHY-TOP.
J S Cole
Phytopathology 52 (12):1312
Dec 1962 464.8 P56
Aphididae, Plant disease transmission, Tobacco, Viruses, Aphididae.

1359-68
EVALUATION OF TOLERANCE TO ROOT ROT CAUSED BY PHYTOPHTHORA PARASITICA IN SEEDLINGS OF CITRUS AND RELATED GENERA.
J B Carpenter J R Furr
Phytopathology 52(12):1277-1285, BIBL. 1284-1285, TABS.
Dec 1962 464.8 P56
Citrus, Phytophthora parasitica, Plant disease resistance,
Root rot (citrus), Seedlings, Phytophthora parasitica.

1360-68
SHOCK SYMPTOMS OF THE STONE FRUIT RINGSPOT VIRUS COMPLEX IN APRICOT.
T S Pine
Phytopathology 53(2):179-183, BIBL., PL.
Feb 1963 464.8 P56
Apricots, Fruit, Ring spot (fruit).

1361-68
ANTHRACNOSE OF DESMODIUM IN GEORGIA.
H D Wells Jr, I Forbes
Plant Dis Rep 47 (9):837-839
15 Sep 1963 1.9 P69P
Anthracnose (desmodium), Seed-borne plant diseases.

1362-68
PRESERVATION OF ACTIVITY OF SOME FRUIT VIRUSES.
H C Kirkpatrick
Plant Dis Rep 46 (9):628-630, BIBL 629-630
15 Sep 1962 1.9 P69P
Ring spot (fruit).

1363-68

RELATION OF SEED POSITION AND POD LOCATION TO TOBACCO RINGSPOT VIRUS SEED TRANSMISSION IN SOYBEAN.

K L Athow F A Laviolette
Phytopathology 52(7):714-715
Jul 1962 464.8 p56

20 1364-68

Plant disease transmission, Seeds, Soybeans.

1364-68
TRANSMISSION OF BEAN POD MOTTLE VIRUS IN SOYBEANS BY BEETLES*
J F Ross
Plant Dis Rep 47(12):1049-1050, BIBL.
15 Dec 1963 1.9 F69P
Bean pods, Coleoptera, Mottle (soybeans),
Plant disease transmission, Bean pods, Coleoptera.

1365-68
HISTOLOGY OF ROOTS OF SUSCEPTIBLE AND RESISTANT VARIETIES OF ONION IN RELATION TO THE PINK ROOT FUNGUS.
B E Struckmeyer C G Nichols R H Larson W H Gabelman Phytopathology 52 (11):1163-1168
Nov 1962 464.8 P56
Pink root (onions), Plant disease resistance, Plant histology, Roots.

366-68
RELATION OF BISTOCHEMICAL TESTS FOR PHENOLS TO VERTICILLIUM WILT RESISTANCE OF POTATOES.
J G McLean J Letourneau J W Guthrie
Phytopathology 51(2):84-89, TABS.
Feb 1961 464-8 P56
Phenols, Potatoes, Verticillium wilt, Verticillium wilt.

1367-68

TIME-TEMPERATURE RELATIONSHIPS IN THERMAL INACTIVATION OF SCLEROTIA OF MACROPHOMINA PHASEOLI.

R V Bega R S Smith
Phytopathology 52(7):632-635
Jul 1962 464.8 P56
Hot water treatment (plants), Macrophomina phaseoli,
Temperature, Time, Macrophomina phaseoli.

1368-68
ON THE ATTEMPTED INDUCTION OF RESISTANCE IN OATS TO CROWN RUST RACE 264 BY ARTIFICIAL IRRADIATION.
M D Simons R S Caldecott K J Prey Plant Dis Rep 46(2):88-91, BIBL
15 Feb 1962 1.9 F69P
Crown rust (oats), Irradiation.

369-68
TURBULENT TRANSFER OF FUNGUS SPORES.
A L Robert
Phytopathology 52(11):1095-1100, BIBL. 1095-1100.
NOV 1962 464.8 P56
Fungi dissemination, Spores, Weather, Spores.

1370-68
REACTIONS OF WINTER OATS TO SQIL-BORNE MOSAIC.
F A Coffman T T Hebert U R Gore W P Byrd
Plant Dis Rep 46(6):438-440
15 Jun 1962 1.9 P69P
Mosaic (oats), Soil-borne plant diseases.

1371-68
PATHOGENIC RACES OF TILLETIA CONTROVERSA IN THE PACIFIC NORTHWEST.
J A Hoffman E L Kendrick J P Meiners

Phytopathology 52(11):1153-1157, BIBL. 1157 Nov 1962 464.8 P56 Pacific northwest, Pathogenesis, Tilletia controversa, Pacific northwest, Pathogenesis, Tilletia controversa.

13/2-68
DOES THE CORN LEAF BLIGHT FUNGUS SURVIVE WISCONSIN WINTERS.
P E Hoppe
Plant Dis Rep 46(6):444-445
15 Jun 1962 1.9 P69P
Leaf blight (corn), Wisconsin.

373-68
REBUCTION OF ASTER YELLOWS IN PLAX VIA SYSTEMIC INSECTICIDES.
R A Frederiksen
Plant Dis Rep 46(11):813-817, TABS.
15 Nov 1962 1.9 P69P
Aster yellows (flax), Insecticides.

374-68
HILL TECHNIQUE FOR EVALUATING THE RESISTANCE OF CEREALS TO FARLEY YELLOW DWARF VIRUS.
R M Endo
Phytopathology 53(6):649-652, BIBL., PL.
Jun 1963 464.8 P56
Aphididae, Yellow dwarf (barley).

1375-68
A VASCULAR DISEASE OF SOYBEANS CAUSED BY CORYNEBACTERIUM SP.
J Dunleavy
Plant Dis Rep 47 (7):612-613
15 Jul 1963 1.9 P69p
Soybeans, Vascular system (plants).

376-68
SUSCEPTIBILITY OF COTTON AND RELATIVES TO RENIFORM NEMATODE IN LOUISIANA.
W Birchfield L R Brister
Plant Dis Rep 47 (11):990-992, BIBL. 991-992
15 Nov 1963 1.9 P69P
Cotton, Plant nematode resistance, Plant pest control,
Reniform nematodes.

1377-68
INTERACTION OF GENES CONDITIONING REACTION OF ALGERIAN BARLEY AND PATHOGENICITY OF ERYSIPHE GRAMINIS F. SP. HORDEI.
J G Moseman C W Schaller
Phytopathology 52(6):529-533, TABS.
Jun 1962 464.8 P56
Barley, Erysiphe graminis f. sp. hordei, Genetics,
Erysiphe graminis f. sp. hordei.

1378-68

NATURE OF PREDISPOSITION OF CASTORBEANS TO BOTRYTIS. II.
RACEME COMPACTNESS, INTERNODE LENGTH, POSITION OF STAMINATE
FLOWERS, AND BLOOM IN RELATION TO CAPSULE SUSCEPTIBILITY.
C A Thomas R G Orellana
Phytopathology 53(3):249-251, BIBL., PL.
Mar 1963 464.8 P56
Botrytis, Castorbeans, Botrytis.

1379-68

HOST RANGES AND RACES OF THE CORN RUSTS.
A H Robert
Phytopathology 52(10):1010-1012
464.8 P56
Plant hosts, Puccinia sorghi, Rust (corn), Plant hosts, Puccinia sorghi.

1380-68
INPLUENCE OF SOIL TEMPERATURE, ISOLATES, AND METHOD OF INOCULATION ON RESISTANCE OF MINT TO VERTICILLIUM WILT. S Z Berry C A Thomas
Phytopathology 51(3):169-174, TABS.
Mar 1961 464.8 P56
Immunization, Mentha, Plant disease resistance,
Soil temperature, Verticillium wilt,
Plant disease resistance, Verticillium wilt.

1381-68
OOSPORE PRODUCTION BY SINGLE-ZOOSPORE ISOLATES OF PHYTOPHTHORA FRAGARIAE IN CULTURE.
R H Converse K K Shiroishi
Phytopathology 52(8):807-809
Aug 1962 464.8 P56
Culture media, Oospores, Phytophthora fragariae, Zoospores,
Oospores, Phytophthora fragariae, Zoospores.

1382-68
TWO NEW TYPES OF LOCAL LESIONS PRODUCED ON BEANS BY THE COMMON BEAN MOSAIC VIRUS.
W J Zaumeyer R W Goth
Phytopathology 53(4):490-491, BIBL., PL.
Apr 1963 464.8 P56
Mosaic (beans).

1383-68
ACTIVITY OF RHIZOCTONIA IN SOIL AS AFFECTED BY CARBON DI-OXIDE.
G C Papavizas C B Davey
Phytopathology 52(8):759-766, BIBL. 765-766, TABS.
Aug 1962 464.8 P56
Carbon dioxide, Rhizoctonia, Soils, Rhizoctonia.

384-68
RELATIONS OF 10 ISOLATES OF WATERMELON MOSAIC VIRUS (WMV). RE Webb H A Scott
Phytopathology 54(7):749
Jul 1964 464.8 P56
Mosaic (watermelons), Virology, Virus diseases (plants),
Watermelons.

385-68
CULTURE OF PHYTOPHTHORA PHASEOLI ON LIVING AND STERILIZED MEDIA.
R W Goth R E Wester

PAGE 28

Phytopathology 53(2):233-234, BIBL., PL. Feb 1963 464.8 P56 Cowny mildew (lima beans).

13E6-68
APHANOMYCES ROOT ROT OF PEAS AS AFFECTED BY ORGANIC AND MIN-ERAL SOIL AMENDMENTS.

C B Davey G C Papavizas
Phytopathology 51 (2):131-132
Peb 1961 464.8 P56
Aphanomyces euteiches, Plant diseases, Root rot (peas), Soil amendments, Aphanomyces euteiches.

A NEW SEVERE SYMPTOM-INDUCING STRAIN OF COMMON BEAN MOSAIC VIRUS. W J Zaumeyer R W Goth Phytopathology 54 (11):1378-1385, BIBL. 1384-1385 Nov 1964 464.8 P56 Beans, Mosaic (beans).

1388-68

EFFECT OF VIRUS INFECTION ON PERSISTENCE OF LADINO CLOVER. K W Kreitlow A W Alettion Phytopathology 54 (8):898 Aug 1964 464.8 P56 Ladino clover, Virus diseases (plants).

1389-68

DR. THOMAS TAYLOR AND THE DELINTING OF COTTON SEED. J A Stevenson Plant Dis Rep 46(4):230-231 15 Apr 1962 1.9 P69P Lint cotton-

1390-68

EFFECTS PRODUCED IN COTTON FIBER BY RHIZOPUS, A BOLL ROT FUNGUS. M E Simpson P B Marsh
Fhytopathology 54 (7):748
Jul 1964 464.8 P56
Boll rot (cotton), Cotton, Pungus diseases (plants),
Natural fibers, Phytopathology, Rhizopus.

A DEPENDABLE LOCAL LESION ASSAY FOR TURNIP YELLOW MOSAIC VI-RUS. TO Diener F G Venifer Fhytopathology 54 (10):1258-1260 Oct 1964 464.8 P56 Assay, Yellow mosaic (turnips).

1392-68 992-68
A DEPENDABLE LOCAL LESION ASSAY FOR TURNIP YELLOW MOSAIC VIRUS (TYMV).
TO Diener F G Jenifer Phytopathology 54 (7):746
Jul 1964 464.8 P56 Biological assay, Phytopathology, Turnips, Yellow mosaic (turnips).

EVALUATION OF SWEETPOTATO BREEDING STOCKS FOR SUSCEPTIBILITY TO INTERNAL CORK VIRUS. E M Hildebrand E M Hildebrand Phytopathology 52(11):1168-1172 Nov 1962 464,8 E56 Internal cork (sweetpotatoes), Plant breeding, Plant disease resistance, Sweetpotatoes.

OCCURRENCE ON PHYLLOSTICTA LEAF SPOT IN BEANS IN 1963. R W Goth W J Zaumeyer Plant Dis Rep 47(12):1079 15 Dec 1963 1.9 P69P Beans, Fungus diseases (plants), Lima beans.

1395-68

ISOLATION OF THIELAVIOPSIS BASICOLA FROM BEAN RHIZOSPHERE. G C Papavizas C B Davey
Phytopathology 51 (2):92-96, TABS.
Feb 1961 464.8 P56 Beans, Thielaviopsis basicola.

1396-68

TWO NEW STRAINS OF ALFALFA MOSAIC VIRUS SYSTEMICALLY INFECTIOUS TO BEAN. W J Zaumeyer Phytopathology 53(4):444-449, BIBL. 448-449, PL. Apr 1963 464.8 P56

Beans, Mosaic (alfalfa).

TRANSMISSION OF SOME GLADIOLUS VIRUSES ON TOOLS IN HARVESTING FLOWERS AND CORMS. Philip Brierley Plant Dis Rep 46(7):505 15 Jul 1962 1.9 P69P Gladiolus, Virus diseases (plants).

SELECTIVE PATHOGENESIS WITHIN PHYTOPHTHORA DRECHSLERI. C A Thomas J M Klisiewicz Phytopathology 53(3):368, BIBL. Mar 1963 464.8 P56 Phytophthora drechsleri, Root rot (safflower), Safflower, Phytophthora drechsleri, Root rot (safflower).

1399-68

THREE COWPEA MOSAIC VIRUSES FROM GLADIOLUS. P Brierley F F Smith
Plant Dis Rep 46(5):335-337
15 May 1962 1.9 P69P Gladiolus, Mosaic (cowpeas).

1400-68

APPLE ROT CAUSED BY PYRENOCHAETA MALI N. SP. Phytopathology 53(5):589-591, BIBL., PL. May 1963 464.8 P56
Rot (apples).

1401-68

CONTROL OF BERRY AND LEAF ABSCISSION AND MOLD CONTROL IN PACKAGED MISTLETOE. M A Smith Plant Dis Rep 47(11):1001-1005, PL. 15 Nov 1963 1.9 P69P Arceuthobium, Berries, Leaves, Molds.

INFLUENCE OF VITAMINS AND OTHER COMPOUNDS ON THE DEGREE OF INFECTION OF WHEAT BY PUCCINIA GRAMINIS TRITICI.

C D Hobbs M C Futrel1 Phytopathology 53(2):230-231, BIBL-Feb 1963 464.8 P56 Calcium chloride, Pantothenic acid, Potassium nitrate, Puccinia graminis tritici, Rust (wheat), Vitamins, Wheat, Puccinia graminis tritici.

THE ACTION OF PROPIONATE ON WHEAT STEM RUST AND SORGHUM HEAD SMUT.
M C Futrell J W Berry Phytopathology 54(8):893 Aug 1964 464.8 P56 Chemical control (plant diseases), Head smut (sorghum), Propionates, Stem rust (wheat).

1404-68

CHEMOTHERAPEUTIC EFFECTS OF STREPTONYCIN ON ESTABLISHMENT AND PROGRESSION OF SYSTEMIC DOWNY MILDEW INFECTION IN HOPS. C E Horner Phytopathology 53(4):472-474, BIBL. 474
Apr 1963 464.8 P56
Downy mildew (hops), Drug therapy, Pseudoperonospora humuli,
Streptomycin, Pseudoperonospora humuli.

ADVANTAGES OF DETERMINING THE TOLERANCE OF STRAWBERRIES BY GRAFTING WITH LEAVES INFECTED WITH A VIRUS COMPLEX. P W Miller Plant Dis Rep 46(5):371
15 May 1962 1.9 P69P
Plant grafting, Strawberries, Virus diseases (plants).

1406-68

INCIDENCE AND CONTROL OF TILLETIA CONTRAVERSA IN PERENNIAL GRASSES. J R Hardison Phytopathology 53(5):579-585, BIBL. 584-585 May 1963 464.8 P56 Agropyron intermedium, Dwarf bunt, Tilletia contraversa, Agropyron intermedium, Dwarf bunt, Tilletia contraversa.

CONTROL OF GLOEDTINIA TEMULENTA IN SEED FIELDS OF LOLIUM PERENNE BY CULTURAL METHODS. Phytopathology 53(4):460-464, BIBL., TABS.

20 1408-68

Apr 1963 464.8 P56 Cultural control (plant diseases), Lolium perenne.

1408-68
PHYTOPHTHORA CINNAMOMI ASSOCIATED WITH LAWSON CYPRESS MORTALITY IN LOUISIANA.
WA Campbell A F Verrall
Plant Dis Rep 47(9):808
15 Sep 1963 1.9 P69P
Louisiana, Phytophthora cinnamoni, Seedlings,
Wood destroying fungi, Louisiana, Phytophthora cinnamoni.

1409-68
INHERITANCE OF STEM RUST REACTION IN TWO DURUM VARIETIES, ACME AND MINDUM.
F J Gough N D Williams
Phytopathology 53 (3):295-299, BIBL., TABS.
Mar 1963 464.8 P56
Durum wheat, Puccinia graminis, Stem rust (wheat),
Puccinia graminis.

1410-68
WEAK PEACH, A NEW VIRUS DISEASE OF PEACH.
G Kenknight
Plant Dis Rep 46(4):287-289
15 Apr 1962 1.9 P69P
Virus diseases (plants), Weak peach (peaches).

LATENT PERIODS IN THE APHID TRANSMISSION OF BARLEY YELLOW DWARF VIRUS.

W F Rochow
Phytopathology 53(3):355-356, BIBL.
Mar 1963-464.8 P56
Aphididae, Yellow dwarf (barley).

412-68
FACTORS AFFECTING PIGMENTATION BY TWO WOOD-INHABITING FUNGI. A L Shigo
Phytopathology 54(8):907-908
Aug 1964 464.8 P56
Pigments, Wood staining fungi.

1413-68
OBSERVATIONS ON THE SUCCESSION OF FUNGI ON HARDWOOD PULPWOOD BOLTS.
A L Shigo
Plant Dis Rep 46(5):379-380
15 May 1962 1.9 P69P
Fungus diseases (plants).

414-68
HYPOGOTYL REACTION TO RUST INFECTION AS A MEASURE OF RESISTANCE OF SAFFLOWER.
D E Zimmer
Phytopathology 52(11):1177-1180
Nov 1962 464.8 P56
Plant disease resistance, Plant physiology,
Rust (safflower), Safflower.

1415-68
MEASUREMENT OF SPRAY-OIL VOLATILITY AND ITS RELATION TO
SIGATOKA FUNGUS DISEASE CONTROL AND PHYTOTOXICITY ON BANANA
LEAVES.
N E Delfel L Calpouzos C Colberg
Phytopathology 52(9):913-917, BIBL. 917
Sep 1962 464.8 P56
Bananas, Essential oils, Leaves, Sigatoka (bananas).

1416-68
SOME CONTRIBUTIONS FROM THE TROPICS TO PLANT DISEASE CONTROL METHODS.
L Calpouzos
Phytopathology 52(9):942-945, BIBL. 945
Sep 1962 464.8 P56
Plant disease control, Tropical plants.

417-68
BLACK ROOT ROT IN FLORIDA SANDHILLS.
G W Smalley R L Scheer
Plant Dis Rep 47(7):669-671
15 Jul 1963 1.9 P69P
Black root rot (pinus), Fungus diseases (plants),
Pinus elliottii, Sandy soils, Pinus elliottii.

1418-68
THIELAVIOPSIS BASICOLA ASSOCIATED WITH DECLINING SWEET ORANGE SEEDLINGS IN PLORIDA.
WA Feder H W Ford
Plant Dis Rep 47 (7):666-668

15 Jul 1963 1.9 P69P Fungus diseases (plants), Oranges, Plant nematodes, Thielaviopsis basicola.

1419-68
THE ROLE OF PLANT PATHOLOGY IN TROPICAL PLANTATION AGRICULTURE.
T J Grant
Phytopathology 52(9):930-936, BIBL. 935-936
Sep 1962 464.8 P56
Agriculture, Phytopathology, Plantations, Tropical plants.

1420-68
INFLUENCE OF ENVIRONMENTAL FACTORS ON THE DEVELOPMENT OF WHEAT BUNT IN THE PACIFIC NORTHWEST. IV. EFFECT OF SOIL TEMPERATURE AND SOIL MOISTURE ON INFECTION BY SOIL-BORNE SPORES.
L H Purdy E L Kendrick
Phytopathology 53(4):416-418, BIBL.
Apr 1963 464.8 P56
Soil moisture, Soil temperature, Stinking smut (wheat).

1421-68
POSTINFECTION DEVELOPMENT OF FLAG SMUT OF WHEAT IN RELATION TO CONTROLLED SOIL MOISTURE.

I. H Purdy
Phytopathology 54(9):1178-1179
Sep 1964 464.8 P56
Flag smut (wheat), Soil moisture, Wheat.

422-68

EFFECT OF RECURRENT PHENOTYPIC SELECTION ON RESISTANCE OF ALFALFA TO TWO PHYSIOLOGICAL RACES OF UROMYCES STRIATUS MEDICAGINIS.

R R Hill Jr R T Sherwood J W Dudley Phytopathology 53(4):432-435, BIBL., TABS. Apr 1963 464.8 P56

Alfalfa, Plant breeding, Plant disease resistance, Plant genetics.

1423-68
INTRASPECIFIC VARIATION IN PATHOGENICITY IN THE GENUS HELMINTHOSPORIUM TO GRAHINUS SPECIES.
R R Nelson D M Kline
Phytopathology 52 (10): 1045-1049, TABS.
Oct 1962 464.8 P56
Helminthosporium, Plant nematode resistance,
Helminthosporium.

RELATION OF PARASITIC NEMATODES TO POSTEMERGENCE DAMPING-OFF OF COTTON.

B B Brodie W E Cooper Phytopathology 54 (8):1023-1027, TABS.
Aug 1964 464.8 P56
Cotton, Damping-off (cotton), Parasitism, Plant nematodes.

1425-68
PEACH MOSAIC VIRUS IN HORTICULTURAL PLUM VARIETIES.
T S Pine L C Cochran
Plant Dis Rep 46 (7):495-497
15 Jul 1962 1.9 P69P
Mosaic (peaches), Plums.

1426-68
A SYNTHETIC HYBRID OF TWO VARIETIES OF PUCCINIA GRAMINIS.
R U Cotter B J Roberts
Phytopathology 53 (3):344-346, BIBL.
Mar 1963 464.8 P56
Hybrids, Pathogenesis, Plant disease resistance,
Plant genetics, Puccinia graminis, Stem rust (oats),
Hybrids, Pathogenesis, Puccinia graminis.

1427-68

COMPARATIVE REACTIONS OF CERTAIN COTTONS TO PUSARIUM AND VERTICILLIUM WILTS.

A B Wiles
Phytopathology 53(5):586-588, BIBL., PL.
May 1963 464.8 P56
Fusarium oxysporum f. vasinfectum, Plant disease resistance, Verticillium albo-atrum, Wilt (cotton),
Fusarium oxysporum f. vasinfectum, Verticillium albo-atrum.

428-68
COTTONWOOD CANKER CAUSED BY FUSARIUM SOLANI.
E R Toole
Plant Dis Rep 47(11):1032-1035, TABS.
15 Nov 1963 1.9 P69P
Fusarium solani, Populus, Fusarium solani, Populus.

PAGE 30

1429-68
SITE AFFECTS RATE OF DECAY IN CHERRYBARK OAK.
F R Toole
Plant Dis Rep 47(6):568
15 Jun 1963 1.9 P69P
Quercus falcata leucophylla, Wood decay,
Wood destroying fungi, Quercus falcata leucophylla.

1430-68
INFLUENCE OF TEMPERATURE, HUMIDITY, AND INOCULUM CONCENTRATION ON DEVELOPMENT OF BELMINTHOSPORIUM SATIVUM AND SEPTORIA PASSERINII IN EXCISED BARLEY LEAVES.

D J Morton
Phytopathology 52(7):704-708, TABS.
Jul 1962 464-8 P56
Barley, Helminthosporium sativum, Bumidity, Immunization, Temperature, Belminthosporium sativum, Immunization.

1431-68
IDENTITY OF MOSAIC VIRUS OF COWPEA.
R W Toler
Phytopathology 54(8):910
Aug 1964 464.8 P56
Mosaic (cowpeas), Virology.

1432-68
TCLYPOSPORIUM SMUT, A NEW DISEASE ON PEARL MILLET, PENNISETUM GLAUCUM IN THE UNITED STATES.
B D Wells G W Burton D K Ourecky Plant Dis Rep 47(1):16-19, BIBL. 18-19
15 Jan 1963 1.9 P69P
Fearlmillet.

1433-68
SYMPTOMS ASSOCIATED WITH WATERMELON MOSAIC VIRUS IN SOUTH GEORGIA.
D J Morton R E Webb
Plant Dis Rep 47(8):772-773
15 Aug 1963 1.9 P69P
Georgia, Mosaic (watermelons), Watermelons, Georgia, Watermelons.

434-68
COWPEA (SOUTHERN PEA) DISEASES IN GEORGIA,1961-1962.
R W Toler S S Thompson J M Barber
Plant Dis Rep 47(8):746-747
15 Aug 1963 1.9 P69P
Bacterial diseases (plants), Cowpeas,
Fungus diseases (plants), Georgia, Virus diseases (plants),
Georgia.

435-68
ATTRITION OF A SAGUARO FOREST.
S.M Alcorn C May
Plant Dis Rep 46 (3):156-158
15 Mar 1962 1.9 P69P
Cereus giganteus.

1436-68

PATHOGENICITY OF HELMINTHOSPORIUM VICTORIAE AND RELATED SPECIES ON OATS AND BARLEY.

V E Wilson B C Murphy Plant Dis Rep 47(7):647-651
15 Jul 1963 1.9 P69P
Barley, Belminthosporium victoriae, Oats, Pathogenesis, Helminthosporium victoriae, Pathogenesis.

1437-68
FUNGI ASSOCIATED WITH THE DISCOLORATIONS AROUND ROOT COLUMNS CAUSED BY FORES IGNIARIUS.
A L Shigo
Plant Dis Rep 47(9):820-823
15 Sep 1963 1.9 P69P
Fungus diseases (plants), Wood destroying fungi.

FROSPECTIVE PRUITS OF INTERNATIONAL COOPERATION IN TROPICAL PLANT PATBOLOGY.

B & Rodenhiser
Phytopathology 52(9):950-953
Sep 1962 464.8 P56
International cooperation, Phytopathology, Tropical plants.

1439-68
SOIL TRANSMISSION OF THE TOBACCO RINGSPOT VIRUS IN THE RIO GRANDE VALLEY.

D M McLean J B Machmer
Phytopathology 53(6):624
Jun 1963 464.8 P56
Ring spot (tobacco), Rio grande valley, Rio grande valley.

1440-68
FUNGICIDAL ACTIVITY OF N-ARYL ITACONIMIDES.
B Von Schmeling
Phytopathology 52(8):819-822
Aug 1962 464.8 P56
Fungicides.

1441-68
WATER RELATIONS IN BANANA PLANTS INFECTED WITH PSEUDOMONAS SOLANACEARUM.
C B Beckman W A Brun I W Buddenhaggen Phytopathology 52(11):1144-1148, BIBL. 1148
Nov 1962 464.8 P56
Bananas, Plant physiology, Plant water relations, Pseudomonas solanacearum.

1442-68
RELATION OF VASCULAR OCCLUDING REACTIONS IN BANANA ROOTS TO PATHOGENICITY OF ROOT-INVADING FUNGI.
C H Beckman S Balmos
Phytopathology 52(9):893-897, TABS.
Sep 1962 464.8 P56
Bananas, Fungi, Plant physiology, Roots.

1443-68
CONTROL OF BOP DOWNY MILDEW BY CHEMICAL DESSICANTS. R R Romanko
Phytopathology 54(12):1439-1442, TABS.
Dec 1964 464.8 P56
Chemical control (plant diseases), Defoliants,
Downy mildew (hops), Bops.

444-68
SCLEROTIUM FORMATION BY HELMINTHOSPORIUM HAWAIIENSE.
T K Ramachandra-Reddy
Phytopathology 53(2):232, BIBL., PL.
Feb 1963 464.8 P56
Sclerotia.

1445-68
APPLE SCAB II. EFFECT OF SERIAL APPLICATIONS OF FUNGICIDES ON LEAF LESIONS ON PREVIOUSLY UNSPRAYED TREES.
J W Heuberger R K Jones
Plant Dis Rep 46(3):159-162
15 Mar 1962 1.9 P69P
Fungicides, Scab (apples).

1446-68
SOME PROPERTIES AND FINE STRUCTURE OF A NEW VIRUS ISOLATED FROM GLADIOLUS.
R I B Francki J W Randles T S Chambers
Phytopathology 54 (8):892-893
Aug 1964 464:8 P56
Gladiolus, Virus diseases plants.

1447-68
SYSTEMIC INFECTION OF LETTUCE BY BREMIA LACTUCAE.
R B Marlatt R W Lewis R T McKittrick
Phytopathology 52(9):888-890
Sep 1962 464.8 P56
Lettuce.

1448-68
RESISTANCE IN MUSKMELON TO A STRAIN OF WATERMELON MOSAIC VIRUS.
R E Foster B E Dennis
Phytopathology 53(5):600-602, BIBL. 601-602
May 1963 464.8 P56
Mosaic (watermelons), Muskmelons, Plant disease resistance.

1449-68
FUNGICIDAL CONTROL OF BIG VEIN IN THE IRRIGATED LETTUCE CROP.
R B Marlatt R T McKittrick
Phytopathology 53 (5):597-599, BIBL., TABS.
May 1963 464.8 P56
Big vein (lettuce), Dichloropropane dichloropropene mixture,
Fungicides, Pentachloronitrobenzene, Soil fumigation.

450-68
A VIRUS INHIBITOR FROM TOBACCO.
M Zaitlin A Siegel
Phytopathology 53(2):224-227, BIBL., TABS.
Feb 1963 464.8 P56
Biological control, Mosaic (tobacco), Tobacco, Virucides, Tobacco.

20 1451-68 1451-68 PATHOGENICITY OF AN ISOLATE OF VERTICILIUM ALBO-ATRUM FROM A M Boyle Phytopathology 53(2):242, BIBL. Feb 1963 464.8 P56 Olives, Verticillium albo-atrum, Verticillium albo-atrum. ACCUMULATIONS OF SULFUR35 AROUND CUCUMBER ANTHRACNOSE LES-IONS. M J Goode Phytopathology 54 (8):893 Aug 1964 464.8 P56 Anthracnose (cucumbers), Cucumbers, Sulfur. 1453-68 FCMES ANNOSUS ROOT ROT OF SHORTLEAF, LOBLOLLY, AND SLASH PINE IN ARKANSAS. C L Wilson Plant Dis Rep 47(4):328
15 Apr 1963 1.9 P69P
Fomes annosus, Pinus echinata, Pinus elliotti,
Pinus elliottii, Pinus taeda, Root rot (pinus echinata),
Root rot (pinus taeda), Fomes annosus, Pinus echinata,
Pinus elliotti, Pinus taeda, Root rot (pinus echinata). IMMUNITY TO RACE 2 OF SPINACH DOWNY MILDEN. P G Smith R E Webb C H Luhn Phytopathology 52 (7):597-599 Jul 1962 464.8 P56 Downy mildew (spinach), Plant disease resistance, Plant genetics, Spinach. 1455-68 455-68
THE USE OF FUSARIUM CULTURE FILTRATE MEDIA IN THE ISOLATION OF FUSARIA FROM SOIL.
JR Parmeter Jr JR Hood
Phytopathology 51(3):164-168
har 1961 464.8 P55 Culture media, Soil treatment. THERMOTHERAPY OF PLANTING MATERIAL. F Baker Phytopathology 52(12):1244-1255, BIBL. 1253-1255 Dec 1962 464.8 P56 Plant disease control, Planting, Thermotherapy. 1457-68 INFLUENCE OF VIRUS AND FUNGUS LESIONS ON PLANT EXUDATION AND CHLAMYDOSPORE GERMINATION OF FUSARIUM SOLANI F. PHASEOLI.

M N Schroth D S Teakle
Phytopathology 53(5):610-612, BIBL. 610-612, PL.
May 1963 464.8 P56
Exudates, Fusarium solani, Kidney beans, Fusarium solani, Kidney bears. 1458-68 158-68
INFLUENCE OF NONSUSCEPTIBLE PLANTS ON THE SURVIVAL OF FUSARIUM SOLANI F. PHASEOLI IN SOIL.
M N Schroth F F Hendrix Jr
Phytopathology 52(9):906-909
Sep 1962 464.8 P56
Fusarium solani f. phaseoli, Plant disease resistance,
Soils, Fusarium solani f. phaseoli. SYSTEMIC RESISTANCE INDUCED BY LOCALIZED VIRUS INFECTIONS IN EEANS AND COWPEAS. A F Ross A F Ross
Phytopathology 54(12):1436
Dec 1964 464.8 P56
Eeans, Cowpeas, Immunization, Plant disease resistance,
Virus diseases (plants). 1460-68 NECROTIC SYMPTOMS OF TOBACCO NECROSIS VIRUS IN ROOTS. NECROTIC SIMPLONS OF TOTAL ACCOUNTS OF T

PENETRATION AND HOST-PARASITE RELATIONSHIPS OF FUSARIUM

PENETRATION AND HOST-PARASITE RELATIONSHIPS SOLANI F. PHASEOLI IN THE BEAN PLANT. T Cristou W C Snyder Phytopathology 52(3):219-226, BIBL. 225-226 Mar 1962 464.8 P56

1462-68 Spores. 1464-68 1465-68 1467-68 1468-68 1470-68

Beans, Pusarium solani f. phaseoli, Fusarium solani f. phaseoli. SYMPOSIUM ON PATHOGEN FREE STOCK: INVITATIONAL PAPERS PRE-SENTED JUNE 15, 1960 AT THE MEETINGS OF THE PACTFIC DIV-ISION OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY FOR HORTICULTURAL SCIENCE, WESTERN REGION, AT EUGENE, ORE-GON. INTRODUCTION. S Wilhelm Phytopathology 52(12):1234
Dec 1962 464.8 P56
Conferences, Oregon, Phytopathology, Plant disease control, Symposia, Oregon. UREDOSPORE PRODUCTION BY UROMYCES PHASEOLI. E Yarwood Phytopathology 51(1):22-27 Jan 1961 464.8 P56 164-68
EFFECT OF PHYTOTOXIC SUBSTANCES FROM DECOMPOSING PLANT
RESIDUES ON ROOT ROT OF BEAN.
T A Toussoun Z A Patrick
Phytopathology 53(3):265-270, BIBL. 269-270, PL.
Mar 1963 464.8 PS6 Phytotoxicity, Plant residues, Root rot (beans), Soil organic matter, Phytotoxicity. CROP VALUE AND DISEASE. C E Yarwood Plant Dis Rep 46(11):755-757 15 Nov 1962 1.9 P69P Plant diseases. HEAT ADAPTATION IN A RUST AND A VIRUS. C E Yarwood E W Holm Phytopathology 52(7):709-712 464.8 P56 Heat, Necrosis, Rust (beans), Tobacco. EARLY REFERENCES TO ARMILLARIA ROOT ROT IN CALIFORNIA. W W Gardner R D Raabe Plant Dis Rep 47(5):413-415 15 May 1963 1.9 P69P Fungus diseases (plants), Grape vineyards, Root rot. LEAF TRICHOMES AS AVENUES FOR INFECTION BY CORYNEBACTERIUM MICHIGANENSE. D G Kontaxis Phytopathology 52(12):1306-1307 Dec 1962 464.8 P56 Corynebacterium michiganense. 1469-68 FUSARIUM WILT OF HEMP. C Noviello W C Snyder Phytopathology 52(12):1315-1317 Dec 1962 464.8 P56 Fusarium oxysporum. 170-58
EFFECT OF LIMING OF SOIL ON BARLEY POWDERY MILDEW.
J Vlamis C E Yarwood
Plant Dis Rep 46 (12):886-887
15 Dec 1962 1.9 P69P
Liming, Powdery mildew (barley). RADISH MOSAIC VIRUS. R N Campbell Phytopathology 54(8):890 Aug 1964 464.8 p56 Mosaic (radishes). OBTAINING VIRUS-FREE STOCK BY INDEX TECHNIQUES. G Nyland J A Milbrath
Phytopathology 52(12):1235-1239, BIBL. 1239
Dec 1962 464.8 P56
Host indexing (plants).

1461-68

1473-68
EFFECT OF GIEBERELLIC ACID ON DEVELOPMENT OF HYPOCOTYL
LESIONS CAUSED BY RHIZOCTONIA SOLANI ON RED KIDNEY BEAN.
L J Petersen J E DeVay B R Houston
Phytopathology 53(6):630-633, BIBL., PL.
Jun 1963 464.8 P56
Gibberellic acid, Radioactive tracers, Radioisotopes,
Rhizoctonia solani.

1474-68
THE CELERY LATE BLIGHT ORGANISM SEPTORIA APIICOLA.
R L Gabrielson R G Grogan
Phytopathology 54(10):1251-1257, BIBL. 1257
Oct 1964 464.8 P56
Celery, Late blight (celery).

TRANSMISSION STUDIES OF A HIGHLY VIRULENT VARIANT OF LETTUCE MCSAIC VIRUS.

D.L. McLean M.G. Kinsey
Flant Dis Rep 47(6):474-476
15 Jun 1963 1.9 P69P

476-68
SIGNIFICANCE OF MORPHOLOGICAL BARRIERS AND OSMOTIC PRESSURE
IN RESISTANCE OF MATURE PEACH LEAVES TO POWDERY MILDEW.
A R Weinhold H English
Phytopathology 54 (11): 1409-1414, BIBL. 1414, TABS.
Nov 1964 464.8 P56
Leaves, Osmotic pressure, Plant disease resistance,
Plant morphology, Powdery mildew (peaches).

1477-68
EPFECT OF THE HELMINTHOSPORIUM LEAFSPOT DISEASE ON ORGANIC ACID CONTENT OF CORN SEEDLINGS.
I Malca F P Zscheile Jr
Phytopathology 53(3):341-343, BIBL.
Mar 1963 464.8 P56
Carboxylic acids, Corn, Belminthosporium carbonum,
Leaf spot (corn), Helminthosporium carbonum.

178-68
PURIFICATION AND SEROLOGY OF A VIRUS ASSOCIATED WITH THE GRAPE YELLOW VEIN DISEASE.
E V Gooding Jr
Phytopathology 53 (4):475-480, BIBL. 480, TABS., PL. Apr 1963 464.8 P56
Purification, Serological tests, Yellow vein (grapes), Purification.

1479-68
A NEW FORM OF FUSARIUM OXYSPORUM.
J M Klisiewicz B R Houston
Phytopathology 53 (2):241, BIBL.
Feb. 1963 464.8 p56
Fusarium oxysporum, Safflower, Fusarium oxysporum.

480-68
QUANTITATIVE ANALYSIS OF INTERFERENCE PRODUCED BY RELATED STRAINS OF THV COMPARED WITH NONINFECTIOUS TMV COMPONENTS.
J-H Wu W Hudson S G Wildman
Phytopathology 52(12):1264-1266
Dec 1962 464.8 P56
Interference phenomenon, Mosaic (tobacco),
Quantitative analysis.

481-68
CAUSE AND PREVENTION OF THE RAPID SPREAD OF THE ASCOCHYTA DISEASE OF CBRYSANTHEMUM.
K F Baker A W Dimock L B Davis
Phytopathology 51(2):96-101
Feb 1961 464.8 P56
Ascochyta, Chrysanthemum, Fungus diseases (plants),
Plant disease control, Ascochyta.

1482-68
A CHARACTERISTIC FORM OF TOBACCO MOSAIC VIRUS IN TOMATO AND CHENOPODIUM MURALE.
J G Bald A D Paulus
Phytopathology 53(6):627-629, BIBL., PL.
Jun 1963 464.8 P56
Chenopodium murale, Mosaic (tobacco), Chenopodium murale.

1483-68
A SELECTIVE ANTIBIOTIC MEDIUM FOR ISOLATION OF PHYTOPHTHORA AND PYTHIUM FROM PLANT ROOTS.
J W Eckert P H Tsao
Phytopathology 52(8):771-777, BIBL. 777, TABS.
Aug 1962 464.8 P56
Antibiotics, Culture media, Phytophthora, Plant extracts,

Pythium, Roots, Phytophthora, Pythium.

1484-68

REDUCTION OF SOIL POPULATIONS OF THE CITRUS NEMATODE BY
THE ADDITION OF ORGANIC MATERIALS.

R Mankau R J Minteer
Plant Dis Rep 46(5):375-378
15 May 1962 1.9 P69P
Citrus, Plant nematodes.

1485-68
SURVIVAL AND YIELD OF WINTER CEREALS AFFECTED BY YELLOW DWARF.
R M Endo C M Brown
Phytopathology 52(7):624-627
Jul 1962 464.8 P56
Crop yields, Grain, Yellow dwarf (barley).

1486-68
INCOMPATIBILITY OF PRICE AND COOK NUCELLAR EUREKA
LEMON TREES ON NO. 1452 CITRUMELO ROOTSTOCK.
J D Kirkpatrick W P Bitters F J Foote
Plant Dis Rep 46 (4):267-268
15 Apr 1962 1.9 P69P
Lemons, Plant grafting.

487-68
THIELAVIOPSIS BASICOLA AS A CITRUS ROOT PATHOGEN.
P B Tsao S D Van Gundy
Phytopathology 52(8):781-786, BIBL. 786
Aug 1962 464.8 P56
Citrus, Roots, Thielaviopsis basicola.

488-68
INTRANUCLEAR INCLUSION BODIES IN THE LEAVES OF COTTON PLANTS
INFECTED WITH LEAF CRUMPLE VIRUS.
P W Tsao
Phytopathology 53(2):243-244, BIBL., PL.
Feb 1963 464.8 P56
Inclusion bodies, Leaf crumple (cotton).

489-68
SOIL MOISTURE IN RELATION TO GROWTH REDUCTION OF SWEET
ORANGE SEEDLINGS BY THIELAVIOPSIS BASICOLA.
P H Tsao
Phytopathology 53(6):738-739
Jun 1963 464.8 P56
Fungus diseases (plants), Soil moisture, Sweet oranges,
Thielaviopsis basicola, Sweet oranges,
Thielaviopsis basicola.

1490-68
CROWN GALL ON AVOCADO.
DE Munnecke G A Zentmyer
Phytopathology 54(10):1302-1303
Oct 1964 464.8 P56
Avocados, Crown galls (avocados).

491-68
APPLE SCAB III. EFFECT OF SERIAL APPLICATIONS OF FUNGICIDES ON LEAF LESIONS ON PREVIOUSLY UNSPRAYED TREES --INHIBITION OF CONIDIAL GERMINATION, REMOVAL (SUPPRESSION) OF THE ORGANISM, AND SUBSEQUENT DEVELOPMENT OF LATE TERMINAL INFECTION.

R K Jones J W Heuberger J D Bates
Plant Dis Rep 47(5):420-424, TABS.
15 May 1963 1.9 F69F
Fungicides, Plant injuries, Scab (apples), Seed germination.

492-68
A REVIEW OF PROBLEMS IN TEACHING TROPICAL PLANT PATHOLOGY.
A S Muller
Phytopathology 52(9):948-950
Sep 1962 464.8 P56
Phytopathology, Teaching, Tropical plants.

1493-68
THREE ALTERNARIA SPECIES PATBOGENIC ON CERTAIN CULTIVATED CRUCIFERS.
W Changsri G F Weber
Phytopathology 53 (6):643-648, BIBL., PL.
Jun 1963 464.8 P56
Cruciferae, Cruciferae.

494-68
A RAPID METHOD FOR PURIFYING TOBACCO RINGSPOT VIRUS AND ITS MORPBOLOGY BY ELECTRON MICROSCOPY AND NEGATIVE STAINING.
N K Corbett D A Roberts
Phytopathology 52 (9):902-905
Sep 1962 464.8 P56

20 1495-68

Bing spot (tobacco), Viruses,

GENETICS OF RESPONSE IN PEPPER TO THREE STRAINS OF POTATO WIRES V. A A Cook A A COON Phytopathology 53(6):720-722, BIBL., TABS. Jun 1963 464.8 P56 Alleles, Capsicum annum, Genes, Plant genetics, Redpeppers (vegetable), Capsicum annum.

FED ROOT AND BUTT ROT IN A GEORGIA SLASH PINE PLANTATION.

J S Boyce Jr
Plant Dis Rep 47(6):572-573

15 Jun 1963 1.9 P69p
Butt rot (trees), Georgia, Pinus elliottii,
Polyporus tomentosus, Georgia, Pinus elliottii, Polyporus tomentosus.

1497-68

497-68
DIFFERENTIAL REACTION OF STOCKS OF THE SAME LONG-TIME INBRED LINE OF ZEA MAYS TO HELMINTHCSPORIUM TURCICUM.
A A Fleming G M Kozelnicky
Plant Dis Rep 47(11):955-957, BIBL. 956-957
15 Nov 1963 1.9 P69P
Corn, Belminthosporium turcicum, Plant breeding,
Plant disease resistance, Corn, Helminthosporium turcicum.

1498-68

COLONIZATION OF PINE STEM SECTIONS BY FOMES ANNOSUS AND CTBER FUNGI IN TWO SLASH PINE STANDS. Boyce Jr Plant Dis Rep 47(4):320-324 15 Apr 1963 1.9 P69P Fomes annosus, Pinus elliotti, Pinus elliottii, Fomes annosus, Pinus.

1499-68

PENICILLIUM CORE ROT OF GLADIOLUS. C R Jackson Phytopathology 52(8):794-797
Aug 1962 464.8 P56
Gladiolus, Penicillium funiculosum, Rot (gladiolus), Penicillium funiculosum.

1500-68

APPABENT ERADICATION OF MOSAIC OF SWEETPOTATOES IN GEORGIA AIDED BY THE DISAPPEARENCE OF THE INSECT VECTOR.

Jr J B Girardeau T J Ratcliffe
Plant Dis Rep 47(9):791-792
15 Sep 1963 1.9 P69p
Georgia, Insect vectors, Mosaic (sweetpotatoes), Georgia.

1501-68

SAPBOPHYTIC GROWTH OF FUSABIUM OXYSPORUM F. NIVEUM IN SOIL. B B Bine Phytopathology 52(8):840-843, TABS. Aug 1962 464-8 P56 Saprophytes, Soils.

1502-68

02-68 ABBILLABIA MELLEA IN HAWAII. R D Raabe E E Trujillo Plant Dis Rep 47(8):776 15 Aug 1963 1.9 P69P Fungus diseases (plants), Hawaii, Hawaii.

1503-68

SYMPTOM STABILITY IN SWEET CBERBY TREES AFFECTED BY CRINKLE LEAF AND DEEP SUTURE. A W Belton Plant Dis Rep 46(5):325-327
15 May 1962 1.9 P69P
Crinkle leaf (cherries), Deep suture (cherries).

CBEMOTBERAPEUTIC SUPPRESSION AND EXAGGERATION OF CYTOSPORA CANKED DISEASE IN PEACH TREES. A W Belton Phytopathology 53(5):562-568, BIBL.
May 1963 464.8 P56
Canker (peaches), Cycloheximide, Plant disease resistance.

INDUCED TOLERANCE TO FUNGICIDES IN THREE SPECIES OF FUNGIA A B Partridge A E Rich Phytopathology 52 (10):1000-1004 Oct 1962 464.8 P56 Fungicide resistant fungi, Plant physiology,

PAGE 34

Sclerotinia fructicola, Stemphylium sarcinaeforme, Fungicide resistant fungi, Sclerotinia fructicola, Stemphylium sarcinaeforme.

1506-68

RELATIVE MERITS OF SHIBOFUGEN AND PEACH TREES AS INDICATORS FOR PRUNUS RINGSPOT VIRUS IN PRUNE TREES. W Helton Phytopathology 52(9):846-849 Sep 1962 464.8 P56 Indicator plants, Peaches.

1507-68

RELATIVE EFFICIENCY OF THREE METHODS OF INOCULATING TREE STEMS WITH CYTOSPOBA FUNGI. W Helton Phytopathology 52(12):1266-1268 Dec 1962 464.8 P56 Cytospora, Fungi, Trees, Cytospora.

1508-68

VIRUS-FUNGUS RELATIONSHIPS IN A ROOT-BOT COMPLEX IN RED CLO-VER. R D Watson Phytopathology 54(8):911 Aug 1964 464.8 P56

Fungus diseases (plants), Red clover, Root rot (red clover), Virus diseases (plants)

1509-68

FAILURE TO CONTROL CORN STALK ROTS WITH ABOVE GROUND APPLI-CATIONS OF PROTECTANT FUNGICIDES.

J P Britton A I Hooker
Plant Dis Rep 47(6):470-471
15 Jun 1963 1.9 P69P Fungicides, Plant disease control, Stalk rot (corn).

1510-68

A SECOND MAJOR GENE LOCUS IN CORN CONDITIONING RESISTANCE TO PUCCINIA SORGHI. A L Hooker

Phytopathology 53(2):221-223, BIBL., TABS.

Peb 1963 464.8 P56

Corn, Genes, Puccinia sorghi, Rust (corn), Puccinia sorghi.

INHERITANCE OF CHLOROTIC-LESION RESISTANCE TO HELMINTHOSPO-RIUM TURCICUM IN SEEDLING CORN. A L Hooker Phytopathology 53(6):660-662, BIBL, 661-662
Jun 1963 464.8 P56
Genes, Helminthosporium turcicum, Leaf blight (corn),
Plant disease resistance, Helminthosporium turcicum.

1512-68
AN AGITATOR-INCUBATOB FOR ASEPTIC CULTURING OF VIRUS-INFECTED CELLS AND TISSUE IN LIQUID MEDIA.

H B Thornberry
Plant Dis Rep 46(6):456-458

15 Jun 1962 1.9 P69P Culture media.

RESISTANCE TO THE WILDFIRE DISEASE IN RELATION TO THE GENE-RESISTANCE TO THE WILDFIRE DISEASE IN RELATION TO CHRCHOSOME SET RATTO IN TOBACCO.

J H Smiley G W Stokes
Phytopathology 51 (3): 174-175
Mar 1961 464.8 P56
Genes, Plant disease resistance, Plant genetics, Wildfire (tobacco).

1514-68

MECHANICAL INOCULATION OF THE POTATO SPINDLE TUBER VIRUS IN THE GENUS SOLANUM.
G D Easton D C Merriam
Phytopathology 53(3):349
Mar 1963 464.8 P56 Spindle tuber (potatoes) .

DISEASE DEVELOPMENT, DISEASE INTENSITY, AND CARBOHYDRATE LEVELS IN RUSTED BEAN PLANTS. R E Inman Phytopathology 52(11):1207-1211, BIBL. 1211 Nov 1962 464.8 P56 Beans, Carbohydrates, Plant biochemistry, Rust (beans).

1516-68
HOST-SPECIFIC SYCOPERSICON STRAINS OF TOHACCO MCSAIC VIRUS.
J J McRitchie L J Alexander
Phytopathology 53(4):394-398, BIBL. TABS.
Apr 1963 464.8 P56
Lycopersicon, Mosaic (tobacco), Lycopersicon.

1517-68
APHID TRANSMISION OF WHITE CLOVER MOSAIC VIRUS.
R W Goth
Phytopathology 52(11):1228
Nov 1962 464.8 P56
Aphididae, Insect vectors, Mosaic (white clover),
Plant disease transmission, White clover, Aphididae.

IS18-68
INCCULATING EARLEY SEEDLINGS WITH USTILAGO NUDA AND WHEAT SEEDLINGS WITH U. TRITICI.
T Kavanagh
Fhytopathology 51(3):175-177
Mar 1961 464.8 P56
Barley, Immunization, Seedlings, Ustilago nuda,
Ustilago tritici, Wheat.

TEMPERATURE IN RELATION TO LOOSE SMUT IN HARLEY AND WHEAT. T Kavanagh Phytopathology 51(3):189-193 Mar 1961 464.8 p56 Loose smut (oats), Temperature.

1520-68
VIRUS CAUSE OF HLUE DWARF OF OATS AND ITS TRANSMISSION TO EARLEY AND FLAX.
E E Banttari M H Moore
Phytopathology 52 (9):897-902, TABS.
Sep 1962 464.8 P56
Harley, Hlue dwarf (oats), Flax, Oats,
Plant disease transmission, Viruses.

1521-68
PRAGARIA VIRGINIANA, AN INDICATOR HOST FOR VEINHANDING VIRUS OF STRAWHERRY.
T B King H Sting1
Plant Dis Rep 47(11):998-1000, PL.
15 Nov 1963 1.9 P69P
Clones, Vein banding (strawberries), Clones.

522-68
MCDE OF ACTION OF SEPTORIA LINICOLA.
R P Covey
Phytopathology 52(11):1229-1230
Now 1962 464.8 P56
Pungus diseases (plants), Plant physiology,
Septoria linicola.

1523-68
RELATION OF MOISTURE CONTENT AND LENGTH-OF-STORAGE PERIOD TO CHANGES IN THE FUNGUS FLORA AND GERMINATION PERCENTAGE OF WBEAT.
D B Sauer C M Christensen Phytopathology 54(8):905
Aug 1964 464.8 P56
Fungi, Bumidity, Storage, Storage diseases, Wheat.

1524-68
ANGULAR LEAF SPOT OF STRAWBERRY CAUSED BY XANTHOMONAS FRAGARIAE SP. NOV.
H W Kennedy T B King
Phytopathology 52(9):873-875
Sep 1962 464.8 P56
Angular leafspot (strawberries), Strawberries,
Xanthomonas fragariae.

1525-68
WHITEFLY TRANSHISSION OF XANTBOMONAS PELARGONII AND BISTOLOGICAL EXAMINATION OF LEAFSPOTS OF PELARGONIUM HORTORUM.
W M Bugbee N A Anderson
Phytopathology 53(2):177-178, BIHL., PL.
Feb 1963 464.8 P56
Aleyrodidae, Geranium, Pelargonium hortorum,
Xanthomonas pelargonii, Aleyrodidae, Pelargonium hortorum,
Xanthomonas pelargonii.

1526-68
SOMATIC RECOMBINATION IN PUCCINIA GRAMINIS VAR. TRITICI. A H Ellinghoe
Phytopathology 51(1):13-15
Jan 1961 464.8 P56
Plant genetics.

1527-68
INFLUENCE OF MOISTURE CONTENT, TEMPERATURE, AND LENGTH OF STORAGE UPON SURVIVAL OF PUNGI IN HARLEY KERNELS.
R W Lutey C M Christensen
Phytopathology 53(6):713-717, HIHL. 716-717
Jun 1963 464.8 P56
Alternaria, Harley, Fusarium, Helminthosporium, Bumidity,
Alternaria, Pusarium, Helminthosporium.

1528-68
RELATION OF NUTRIENTS IN INOCULUM AND INOCULUM CONCENTRATION TO SEVERITY OF SPRING BLACK STEM OF ALFALFA.
E E Hanttari R D Wilcoxson
Phytopathology 54 (9):1048-1052, TABS.
Sep 1964 464.8 P56
Alfalfa, Culture media, Nutrient solutions (plants),
Spring black stem (alfalfa).

USE OF NYLON MESB IN STUDIES OF SOIL FUNGI.

K M Old T B Nicolson
Plant Dis Rep 46 (8):616
15 Aug 1962 1.9 P69P
Fungi, Nylon.

1530-68
MOISTURE CONTENT, MOLD INVASION, AND SEED VIABILITY OF STORED SOYHEANS.
B W Kennedy
Phytopathology 54 (7):771-774, TAHS.
Jul 1964 464.8 P56
Food moisture, Molds, Seed viability, Soybeans.

1531-68
DURATION OF PROTECTIVE ACTIVITY IN WHEAT SEEDLINGS OF VARIOUS COMPOUNDS AGAINST STEM RUST.
A S Anderson J H Rowell
Phytopathology 52(9):909-913, TAHS.
Sep 1962 464.8 P56
Chemical control (plant diseases), Plant protection,
Seedlings, Wheat.

1532-68
PROGRESSION IN VIVO, RATE C: GROWTH IN VITRO, AND RESISTANCE TO STREPTOMYCIN, AS INDICES OF VIRULENCE OF ERWINIA AMYLO-VORA.
WH Shaffer Jr R N Goodman
Phytopathology 52(11):1201-1207
Nov 1962 464.8 P56
Bacterial diseases (plants), Streptomycin.

1533-68
MORPHOLOGICAL EFFECTS OF COLLETOTIN ON TOMATO AND DIGITALIS FOLIAGE.
S Lewis R N Goodman
Phytopathology 52 (12):1273-1276, HIHL. 1276
Dec 1962 464.8 P56
Colletotin, Colletotrichum fuscum, Plant morphology,
Tomatoes, Colletotin, Colletotrichum fuscum.

1534-68
PRELIMINARY OBSERVATIONS ON THE EFFECT OF VIRUS INFECTION ON ONE-YEAR OLD APPLE TREES.
A del Mundo D F Mullikan
Plant Dis Rep 47(5):378-380
15 May 1963 1.9 P69P
Chlorotic leafspot (apples).

1535-68
EPIDEMIOLOGICAL POTENTIALS OF POTATO VARIETIES IN RELATION TO LATE BLIGHT.
J L Weihing R H O Keefe
Phytopathology 52 (12): 1268-1273
Dec 1962 464.8 P56
Epidemiology, Late blight (potatoes), Potatoes.

1536-68
SEROLOGICAL STUDIES OF A VIRUS THAT PRODUCED SPINDLE TUHER IN PCTATOES.
E M Hall W B Allington G E Galvez
Phytopathology 54 (8):887
Aug 1964 464.8 P56
Potatoes, Spindle tuber (potatoes).

1537-68

PRE- AND POSTINOCULATION EFFECTS OF LIGHT QUALITY ON INFECTION INTENSITY OF STEM RUST OF WHEAT.

J M Daly
Phytopathology 54 (11):1342-1345, HIHL. 1344-1345
NOV 1964 464.8 P56

20 1538-68

Light, Stem rust (wheat), Wheat,

1538-68 SOME FACTORS ASSOCIATED WITH MAPLE DECLINE IN NEW HAMPSHIRE. N L Lacasse A E Rich Phytopathology 53 (3):349 Mar 1963 464.8 P56 Acer, Tree injuries.

1539-68

INFLUENCE OF DIFFERENT PLANT NUTRIENTS UPON BROWN TIP OF GLADIOLI. J M Jenkins Jr Plant Dis Rep 47(11):976-977
15 Nov 1963 1.9 P69P
Brown tip (gladiolus), Pertilizers,
Nutrient solutions (plants), Plant diseases.

1540-68 INFLUENCE OF ENVIRONMENTAL FACTORS ON PHOMOPSIS JUNIPERO-VORA. VOKA.

H W Schelo Jr A Kelman
Plant Dis Rep 47(10):932-935
15 Oct 1963 1.9 P69P
Environment, Juniperus virginiana, Phomopsis juniperovora, Juniperus virginiana, Phomopsis juniperovora.

1541-68

HEAT-INDUCED VARIEGATION-A MODEL DISEASE. Phytopathology 52 (12):1307-1308 Dec 1962 464.8 p56 Heat treatment, Variegation, Virus diseases (plants), Heat treatment, Variegation.

THE NECESSARILY BROAD VIEW IN STUDYING TROPICAL PLANT DI-SEASES. J A B Nolla Phytopathology 52(9):946-947 Sep 1962 464.8 P56 Plant diseases, Tropical plants.

1543-68

FUSARIUM WILT OF EUCALYPTUS. H C Arya G L Jain Phytopathology 52(7):638-642 Jul 1962 464.8 p56 Eucalyptus, Fusarium oxysporum.

THE EFFECT OF LIGHT QUALITY AND TEMPERATURE ON SOME CULTURAL CHARACTERISTICS OF FUSARIUM OXYSPORUM F. LYCOPERSICI. A Wallenstein A Mahadevan N E Caroselli Plant Dis Rep 47(6):479-481, TABS.
15 Jun 1963 1.9 P69P

1545-68

A WHOLE-LEAF CLEARING AND STAINING TECHNIQUE TO DEMONSTRATE W A Shipton J F Brown
Phytopathology 52(12):1313
Dec 1962 464-8 p56 Stem rust (wheat).

1546-68

RHIZOCTONIA FRAGARIAE SP. NOV. IN RELATION TO STRAWBERRY DEGENERATION IN SOUTHWESTERN ONTARIO.

S S Husain W E McKeen
Phytopathology 53 (5):532-540, BIBL. 539-540, PL.
May 1963 464-8 P56 Growth factors, Plant temperature, Strawberries.

1547-68

INTERACTIONS BETWEEN STRAWBERRY ROOTS AND RHIZOCTONIA S S Husain W E McKeen Phytopathology 53(5):541-545, BIBL. 544-545, PL. May 1963 464.8 P56 Strawberries.

RELATIONSHIP OF PECTOLYTIC AND CELLULYTIC ENZYME PRODUCTION BY STRAINS OF PELLICULARIA FILAMENTOSA TO THEIR PATHOGENI-CITY. Phytopathology 58(11):1119-1125, BIBL. 1125, TABS. Nov 1962 464.8 p56 Pectolytic enzymes, Pellicularia filamentosa,

Plant biochemistry, Pectolytic enzymes, Pellicularia filamentosa.

1549-68

VARIATION AMONG ISOLATES OF NECROTIC RINGSPOT AND PRUNE DWARF VIRUSES ISOLATED FROM SOUR CHERRY.
H E Waterworth R W Fulton Phytopathology 54 (9):1155-1160, BIBL. 1160 Sep 1964 464.8 P56 Sep 1964 404.0 F36 Mecrotic ring spot (cherries), Prune dwarf (cherries), Sour cherries, Virus diseases (plants).

1550-68

INTERRELATED EFFECTS OF ENVIRONMENT AND AGE OF ALFALFA AND RED CLOVER SEEDLINGS ON SUSCEPTIBILITY TO PYTHIUM DEBARY-ANUM. C C Chi E W Hanson Phytopathology 52(10):985-989
Oct 1962 464.8 P56
Alfalfa, Environment, Plant disease resistance,
Plant senescence, Pythium debaryanum, Red clover,
Pythium debaryanum.

1551-68

RELATIONSHIP BETWEEN TURNIP MOSAIC VIRUS AND THE RADISH P VIRUS OF JAPAN. GS Pound H Tochihara R J Shepherd Phytopathology 52(4):373 Apr 1962 464.8 P56 Japan, Mosaic (turnips), Radishes, Japan.

1552-68

ENVIRONMENT AND DEVELOPMENT OF DUTCH ELM DISEASE. A G Kais E B Smalley A J Riker Phytopathology 52(11):1191-1196, TABS. Nov 1962 464.8 P56 Ceratocystis ulmi, Environment, Ceratocystis ulmi.

COMPARISON OF THREE STEM DISEASES OF MELILOTUS AND THEIR CAUSAL AGENTS.
G C M Latch E W Hanson Phytopathology 52(4):300-315, BIBL. 314-315, TABS. Apr 1962 464.8 P56 Plant diseases, Stems, Sweetclover, Stems, Sweetclover.

1554-68

INTERACTIONS OF TWO PEA FUSARIA IN SOIL AND ASSOCIATED HOST RESPONSES. RESPONSES.

G L Worf D J Hagedorn
Phytopathology 52(11):1126-1132, BIBL. 1132, TABS.
Nov 1962 464.8 P56
Fungus diseases (plants), Fusarium solani f. pisi, Peas,
Plant hosts, Fusarium solani f. pisi, Plant hosts.

EFFECTS OF TEMPERATURE ON COVERED SMUT EXPRESSION IN TWO EFFECTS OF TEMPERATURE ON COVERED SHUT EXPREDANCEY VARIETTES.

J F Schafer J G Dickson H L Shands
Phytopathology 52(11):1161-1163
Nov 1962 464.8 P56
Barley, Covered smut (barley), Temperature.

1556-68

NOLYBDENUM NUTRITION OF NICOTIANA TABACUM IN RELATION TO MULTIPLICATION OF TOBACCO MOSAIC VIRUS.

TP Pirone G S Pound
Phytopathology 52(8):822-827
Aug 1962 464.8 P56
Molybdenum, Mosaic (tobacco), Plant nutrition.

1557-68

PREVENTION OF DUTCH ELM DISEASE BY TREATMENTS WITH 2,3,6-TRICHLORPHENYL ACETIC ACID. TRICHLORPHENTL ACTIVE ACTIVE
E B Smalley
Phytopathology 52(10):1090-1091
Oct 1962 464.8 P56
Chemical control (plant diseases).

1558-68

PENICILLIUM DECAY OF GARLIC. E B Smalley H N Hansen Phytopathology 52(7):666-678, BIBL. 678, TABS. Jul 1962 464.8 P56 Garlic, Plant decay.

DARLEY SEEDLING RESPONSE TO COVERED SMUT INFECTION. J F Schafer J G Dickson H L Shands Phytopathology 52(11):1157-1161, BIBL. 1161, TABS.

PAGE 36 Nov 1962 464.8 P56 Barley, Covered smut (barley), Plant physiology, Seedlings.

1560-68
SPECIAL CONTRIBUTIONS FROM THE TROPICS TO PHYTOPATHOLOGICAL MYCOLOGY.
L Sequeira
Phytopathology 52(9):936-942, BIBL. 941-942
Sep 1962 464.8 P56
Mycology, Phytopathology, Tropical plants.

1561-68
INOCULATION WITH CRONARTIUM RIBICOLA BY BARK-PATCH GRAFT-ING.
R F Patton
Phytopathology 52(11):1149-1153
Nov 1962 464.8 P56
Cronartium ribicola, Immunization, Plant grafting,
Cronartium ribicola, Immunization.

1562-68
HISTOLOGY OF WATERMELON ANTHRACNOSE.
J L Anderson J C Walker
Phytopathology 52(7):650-653
Jul 1962 464.8 P56
Anthracnose (watermelons), Plant disease resistance,
Plant histology, Watermelons.

1563-68
ATTRACTION OF APHANOMYCES EUTICHES ZOOSPORES TO PEA AND CTHER PLANT ROOTS.
J L Cunningham D J Hagadorn
Phytopathology 52(7):616-618
Jul 1962 464.8 P56
Peas, Zoospores.

564-68
RESISTANCE IN RED CLOVER TO FIVE VIRUSES.
D L Stuteville E W Hanson
Phytopathology 54 (8):909
Aug 1964 464-8 P56
Plant disease resistance, Red clover, Viruses.

1565-68

OBSERVANCE OF GIANT STEM ENATIONS ON PISUM SATIVUM INFECTED WITE PEA ENATION MOSAIC VIRUS.

F G Ruppel D J Hagedorn Phytopathology 53 (2):245, BIBL., PL.
Feb 1963 464-8 P56
Enation mosaic (peas).

1566-68
RELATION OF SEED- AND SOIL-BORNE INOCULUM TO EPIDEMIOLOGY
OF ANGULAR LEAF SPOT OF CUCUMBER IN WISCONSIN.
J C Walker J N Chand E K Wade
Plant Dis Rep 47(1):15
15 Jan 1963 1.9 P69P
Epidemiology, Inoculum, Seed-borne plant diseases,
Soil-borne plant diseases, Wisconsin, Inoculum, Wisconsin.

1567-68

PATHOGENICITY, HOST-PARASITE RELATIONSHIPS, AND MORPHOLOGY CF SOME FORAGE LEGUME CERCOSPORAE, AND FACTORS RELATED TO DISEASE DEVELOPMENT.

R D Berger E W Hanson Phytopathology 53(5):500-508, BIBL., PL. May 1963 464.8 P56 Clover, Sweetclover.

568-68
RELATION OF AIR TEMPERATURE AND AGE AND NUTRIFION OF THE
BOST TO THE DEVELOPMENT OF HALO AND COMMON BACTERIAL BLIGHTS
OF BEAN.
F N Patel J C Walker
Phytopathology 53(4):407-411, BIBL., TABS.
Apr 1963 464.8 P56
Air temperature, Bacterial blight (beans),
Halo blight (beans), Plant nutrition, Air temperature.
569-68
IN VITRO NUTRITION OF THE TOMATO BACTERIAL SPOT ORGANISM.

569-68
IN VITRO NUTRITION OF THE TOMATO BACTERIAL SPOT ORGANISM.
M V Nayudu J C Walker
Phytopathology 51(1):32-34, TABS.
Jan 1961 464.8 P56
Bacterial spot (tomatoes), In vitro, Plant nutrition,
In vitro.

1570-68
RACES OF CLUBROOT IN NORTH AMERICA.
P H Williams J C Walker
Plant Dis Rep 47(7):608-611
15 Jul 1963 1.9 P69P
Cabbage, Chinese cabbage, Clubroot (brassica), Radishes.

1571-68
INHERITANCE OF RESISTANCE TO HALO BLIGHT OF BEAN.
J C Walker P N Patel
Phytopathology 54 (8):952-954, TABS.
Aug 1964 464.8 P56
Beans, Halo blight (beans), Plant disease resistance,
Plant genetics.

1572-68

COMPARATIVE PATHOLOGY OF THREE TROPICAL CORN RUSTS.
E Schieber J G Dickson
Phytopathology 53(5):517-521, BIBL., TABS., PL.
May 1963 464.8 P56
Plant genetics, Rust (corn).

1573-68

RED CLOVER: A NEW HOST FOR POTATO VIRUS X.
R W Goth R D Wilcoxson
Phytopathology 51(2):132-133
Feb 1961 464.8 P56
Red clover.

1574-68
ARTIFICIAL INFECTION OF SMALL SPRUCE ROOTS WITH POLYPORUS TOMENTOSUS.
R D Whitney
Phytopathology 53(4):441-443, BIBL., PL.
Apr 1963 464.8 P56
Picea, Polyporus tomentosus, Wood destroying fungi, Picea, Polyporus tomentosus.

575-68
PATHOGENECITY OF HELICOTYLENCHUS NANNUS AND ITS RELATION WITH PYTHIUM GRAMINICOLA ON SUGARCANE IN HAWAII.
W J Apt H Koike
Phytopathology 52(8):798-802
Aug 1962 464.8 P56
Rawaii, Parasitic nematodes, Pathogenesis, Sugarcane,
Hawaii, Parasitic nematodes, Pathogenesis.

1576-68

SOLANUM PENNELLII, A POSSIBLE SOURCE OF TOMATO CURLY-TOP RESISTANCE.

M W Martin
Phytopathology 52(11):1230-1231
Nov 1962 464.8 P56
Plant disease resistance, Tomatoes.

577-68
AN IMPROVED METHOD FOR ASSAYING INFECTIVITY OF TOBACCO MOSA-IC VIRUS.
C A Lamborn
Phytopathology 54(8):898
Aug 1964 464.8 P56
Assay, Mosaic (tobacco), Virology.

1578-68
A STABLE, DENSE, INFECTIVE FORM OF TOBACCO MOSAIC VIRUS.
G W Cochran A S Dhaliwal J H Venekamp J L Chidester
Phytopathology 54(8):890
Aug 1964 464.8 P56
Mosaic (tobacco), Virus diseases (plants).

15/9-68
THE USE OF VERMICULITE COVER AS A POSSIBLE MEANS OF INCREASING DWARF BUNT IN WINTER WHEAT TEST NURSERIES.
W G Dewey
Plant Dis Rep 47 (7):657-661, TABS.
15 Jul 1963 1.9 P69P
Nurseries, Straw, Vermiculite.

1580-68
INHERITANCE OF REACTION TO PUCCINIA HORDEI IN BARLEY. I. GENES FOR RESISTANCE AMONG NORTH AMERICAN RACE DIFFERENTIATING VARIETIES.
C W Roane
Phytopathology 52(12):1288-1295
Dec 1962 464.8 P56
Barley, Heredity, Plant disease resistance, Plant genetics, Puccinia hordei, Puccinia hordei.

20 1581-68

1581-68
EXPRESSION OF BLACK SHANK RESISTANCE IN LEAVES OF FLUE-CURED TOBACCO.
W H Wills J W Crews
Phytopathology 54 (11):1356-1358
NOV 1964 464.8 P56
Black shank (tobacco), Plue-cured tobacco,
Plant disease resistance, Tobacco.

1582-63
WATERMELON MOSAIC VIRUS IN WASHINGTON.
C B Skotland R I Clark R E Webb
Plant Dis Rep 47(8):774-775
15 Aug 1963 1.9 F69P
Mosaic (cucumbers), Mosaic (watermelons), Muskmelons.

1583-68

BEHAVIOR OF PEAR DECLINE DISEASE ON DIFFERENT STOCK-SCION COMEINATIONS.

E C Blodgett H Schneider M D Aichele
Phytopathology 52 (7):679-684, TABS.
Jul 1962 464.8 P56

Decline (pears), Pears, Rootstock, Scion, Rootstock, Scion.

1584-68
EFFECT OF SOURCE HOST ON INFECTIVITY OF TOBACCO MOSAIC VIRUS ISOLATES.
R C Lindner H C Kirkpatrick T E Weeks
Phytopathology 51(1):15-16
Jan 1961 464.8 P56
Host indexing (plants), Tobacco.

1585-68
RESISTANCE TO SNOW MOLD OF WINTER WHEAT.
G W Bruehl W R Fischer M Nagamitsu
Phytopathology 54 (12):1432
Dec 1964 464.8 P56
Plant disease resistance, Snow mold (grasses), Wheat.

1586-68
AN ATTEMPT TO DETECT VIRUS-FREE BUDS IN LATENT VIRUS-INFECTED SWEET CHERRY.
R O Hampton
Phytogathology 53(6):718-719
Jun 1963 464.8 P56
Cherries, Mazzard cherries.

1587-68
RE-EXAMINATION OF VECTOR-SPECIFICITY IN THE BARLEY YELLOW DWARF VIRUS IN WASHINGTON.
G W Bruehl V D Damsteegt
Phytopathology 52 (10):1056-1060, BIBL. 1060
Oct 1962 464.8 P56
Aphididae, Insect vectors, Plant disease transmission, Washington, Yellow dwarf (barley), Aphididae, Washington.

1588-68
SPORANGIAL GERMINATION OF SCLEROSPORIA GRAMINICOLA AND ARTIFICIAL INFECTION OF PENNISETUM GLAUCUM.
K N Safeeulla C G Shaw M J Thirumalachar
Plant Dis Rep 47 (7):679-681, BIBL. 681
15 Jul 1963 1.9 P69P
Green ear (pearlmillet), Immunization, Spore germination,
Immunization, Spore germination.

1589-68
COMPLEMENTARY ISOLATES OF PHYTOPHTHORA PALMIVORA FROM CACAO AND RUBBER, AND THEIR TAXONOMY.
P D Turner
Phytopathology 51(3):161-164, TABS.
Mar 1961 464.8 P56
Cacao, Phytophthora palmivora, Plant taxonomy, Rubber, Phytophthora palmivora.

1590-68
SIMILARITY OF SPECIES OF FUNGI ISOLATED FROM ROOTS OF ALFALFA AND RED CLOVER.
R B Carroll E S Elliott
Phytopathology 54 (7):746
Jul 1964 464.8 P56
Alfalfa, Fungi, Red clover.

1591-68 HENLOCK CANKER. R E Ealdwin E S Elliott Phytopathology 52(4):292-294 Apr 1962 464.8 P56 Tsuga. 1592-68
AN EVALUATION OF SODIUM HYPOCHLORITE SOIL APPLICATIONS FOR CONTROL OF DUTCH ELM DISEASE.
A H Epstein E B Smalley
Plant Dis Rep 46 (4):216-217
15 Apr 1962 1.9 F699
Dieback (ulmus), Sodium hypochlorite, Soils.

1593-68
RESISTANCE OF EXTRATIVE-PREE CONIFEROUS WOODS TO DECAY BY WHITE-ROT FUNGI.
C A Peterson E B Cowling
Phytopathology 53 (3):351
Mar 1963 464.8 P56
Wood decay, Wood durability.

Arthropods

1594-68
FIELD TESTS OF SOME HYDROLIZED PROTEINS AS LURES FOR THE APPLE MAGGOT, RHAGOLETIS POMONELLA (WALSH).
W T A Neilson
Can Entomol 92(6):464-467
Jun 1960 421 C16
Attractants, Protein hydrolysates,
Rhagoletis pomonella (Walsh).

595-68
NATURAL INSECT CONTROL MEASURES ARE GROSSLY INADEQUATE FOR TODAY S PARMING.
G C Decker
Agr Chem 18(3):22-23,112-114
Mar 1963 381 A68
Chemical control (insects), Insecticides,
Natural control (insects).

Nematodes

1596-68
THE INFLUENCE OF TYLENCHULUS SEMIPENETRANS ON GROWTH OF GRAPE CUTTINGS.
S D VanGundy
Phytopathology 51(1):67
Jan 1961 464.8 P56
Grapes, Plant cuttings, Tylenchulus semipenetrans.

OBSERVATIONS ON THE BIOLOGY AND PATHOGENICITY OF DITYLEN-CHUS RADICICOLA.
P D Chiaravalle G J Stessel
Phytopathology 52(9):923
Sep 1962 464.8 P56
Ditylenchus radicicola, Nematodes, Ditylenchus radicicola.

1598-68

FACTORS INFLUENCING STORAGE LIFE OF HEMICYCLIOPHORA ARENARIA, PRATYLENCHUS SCRIBNERI, AND TRICHODORUS CHRISTIEI.

S D Van Gundy I J Thomason
Phytopathology 52 (4):366-367
Apr 1962 464.8 P56
Storage injuries, Trichodorus christiei.

599-68
DISTRIBUTION OF CYSTS OF HETERODERA GLYCINES IN SOIL AT DIFFERENT DEPTHS.
G C Smart Jr
Phytopathology 52(11):1221
Nov 1962 464.8 P56
Cysts, Heterodera glycines, Soil analysis,
Heterodera glycines.

1600-68
HELICOTYLENCHUS NANNUS, A SPIRAL NEMATODE ASSOCIATED WITH DECLINING GARDENIAS.
D E Konicek H J Jensen
Phytopathology 51(1):65
Jan 1961 464.8 P56
Gardenia, Plant nematodes.

1601-68
SOME ASPECTS OF NEMATODE CONTROL IN THE EQUATORIAL KENYA HIGHLANDS.
J P Hollis P H Fox
Phytopathology 52(8):737
Aug 1962 464.8 P56
Nematocides, Nematodes.

1602-68
CITRUS TREE DECLINE CAUSED BY TYLENCHULUS SEMIPENETRANS AND TREE RESPONSE FOLLOWING CHEMICAL TREATMENT.
J H C Bannon H W Reynolds
Phytopathology 52(8):746
Aug 1962 464.8 P56
Chemical control (nematodes), Citrus,
Tylenchulus semipenetrans, Tylenchulus semipenetrans.

1603-68
MIGRATION OF SPERM IN DITYLENCHUS DESTRUCTOR.
R V Anderson H M Darling
Phytopathology 52 (8):722
Aug 1962 464.8 P56
Ditylenchus destructor, Spermatozoa, Ditylenchus destructor.

1604-68

EATHOGENICITY OF A ROOT-KNOT NEMATODE (MELOIDOGYNE INCOGNITA ACRITA) AND A ROOT-LESION NEMATODE (PRATYLENCHUS PENETRANS) ON PEPPER (CAPSICUM FRUTESCENS).

M F Shafiee
Ehytopathology 52(9):927
Sep 1962 464.8 P56
Bush redpeppers (vegetable), Meloidogyne incognita acrita, Pratylenchus penetrans, Redpeppers (vegetable), Root-knot nematodes, Bush redpeppers (vegetable), Leloidogyne incognita acrita, Pratylenchus penetrans, Root-knot nematodes.

05-68
ANATOMICAL STUDIES OF SOYBEAN ROOTS ARTIFICIALLY INOCULATED WITH HETERODERA GLYCINES.
E Y Endo
Phytopathology 52(8):731
Aug 1962 464.8 P56
Glycine, Heterodera, Plant anatomy, Roots, Soybeans, Heterodera.

606-68
PATHOGENICITY OF PRATYLENCHUS SCRIBNERI TO CROP PLANTS.
I J Thomason F C O MELLIA
Phytopathology 52(8):755
Aug 1962 464.8 P56
Crops, Pathogenesis, Pratylenchus scribneri, Pathogenesis,
Pratylenchus scribneri.

1607-68
FEEDING OF DITYLENCHUS DESTRUCTOR ON FUNGI.
R V Anderson H M Darling
Phytopathology 52(8):722
Aug 1962 464.8 P56
Ditylenchus destructor, Feeding, Fungi,
Ditylenchus destructor.

608-68
PATHGENICITY OF PRATYLENCHUS PENETRANS ON STRAWBERRY AND LADINO CLOVER SEEDLINGS.
T-A Chen A E Rich
Phytopathology 52(9):922-923
Sep 1962 464.8 P56
Ladino clover, Pratylenchus penetrans, Seedlings,
Strawberries, Pratylenchus penetrans.

NEW HOSTS AND CROP PLANTS RESISTANT TO THE RENIFORM NEMATORE.

W Birchfield L R Brister
Phytopathology 52(8):725
Aug 1962 464.8 P56
Nematodes, Plant hosts, Plant nematode resistance,
Rotylenchulus reniformis, Plant hosts,
Rotylenchulus reniformis.

1610-68
HORSENETTLE AND OSBORNE S CYST NEMATODES - TWO UNDESCRIBED NEMATODES OCCURRING IN VIRGINIA.
L I Miller M B Harrison A F Schindler Phytopathology 52(8):743
Aug 1962 464.8 P56
Virginia.

1611-68
EFFECT OF PRATYLENCHUS PENETRANS, MELOIDOGYNE INCOGNITA ACRITA, AND MELOIDOGYNE SP. ON FORSYTHIA INTERMEDIA. W W Osborne W R Jenkins
Phytopathology 52(9):926
Sep 1962 464.8 P56
Meloidogyne, Meloidogyne incognita acrita,
Pratylenchus penetrans, Meloidogyne,
Meloidogyne incognita acrita, Pratylenchus penetrans.

INFLUENCE OF SOIL-OXYGEN DIFFUSION RATES AND TEMPERATURE ON THE CITRUS NEMATODE AND SWEET ORANGE SEEDLINGS.

L H Stolzy S D Van Gundy C K Labanauskas T E Szuszkiewicz Phytopathology 52 (8):754
Aug 1962 464.8 P56
Seedlings, Sweet oranges, Temperature,
Tylenchulus semipenetrans, Sweet oranges,
Tylenchulus semipenetrans.

1613-68
EVIDENCE SUGGESTING A GRAPE NEMATODE PROBLEM IN NEW YORK VINEYARDS.
A J Braun J A Keplinger
Phytopathology 52(9):922
Sep 1962 464.8 P56
Grapes, New York, Plant nematodes, New York.

614-68
NEMATORES ASSOCIATED WITH MAPLE DIEBACK AND MAPLE BLIGHT.
J W Riffle
Phytopathology 52(8):749
Aug 1962 464.8 P56
Acer, Blight (acer), Dieback (acer), Parasitic nematodes.

615-68
CONTROL OF HETERODERA ROSTOCHIENSIS BY SODIUM METHYL DITIHIOCARBAMATE.
M. B. Harrison
Phytopathology 52(9):924
Sep 1962 464.8 P56
Chemical control (nematodes), Heterodera rostochiensis.

616-68
ROOT KNOT AND THE SEEDLING DISEASE COMPLEX OF COTTON.
I V White
Plant Dis Rep 46(7):501-504
15 Jul 1962 1.9 P69P
Root knot (cotton), Seedlings.

1617-68
REACTION OF BERMUDA GRASS VARIETIES AND LINES TO ROOT-KNOT NEMATODES.
R D Riggs J L Dale M L Hamblen
Phytopathology 52(6):587-588
Jun 1962 464.8 P56
Cynodon dactylon, Plant nematodes, Cynodon dactylon.

1618-68
RELATION OF PHYSIOLOGICAL AGE OF ROOT-KNOT LARVAE TO INFECTIVITY.
E Balmer E J Cairns
Phytopathology 53 (6):621
Jun 1963 464.8 P56
Plant nematodes.

1619-68
ALFALFA STEM NEMATODE IN ALABAMA.

N E McGlohon N A Minton
Plant Dis Rep 47(6):573
15 Jun 1963 1.9 P69P
Alfalfa, Ditylenchus dipsaci, Ditylenchus dipsaci.

1620-68
AN ECTOPARASITIC ROOT NEMATODE ON LOWBUSH BLUEBERRY (VACCINIUM SPP.).
G T Morgan G W Wood
Plant Dis Rep 46(11):800
15 Nov 1962 1.9 P69P
Blueberries, Parasitism, Plant nematodes.

20 1621-68

1621-68
STYLET-BEARING NEMATODES ASSOCIATED WITH VARIOUS PLANTS IN SOUTH CAROLINA, 1959-1962.
P M Alexander
Plant Dis Rep 47(11):978-982, BIBL. 981-982, TABS.
15 Nov 1963 1.9 P69P
Nematodes, Plant diseases, Soil analysis, Stylets.

1622-68
THE ROLE OF PECTIC SUBSTANCES IN CHEMICALLY INDUCED RESISTANCE TO FUSARIUM WILT OF TOMATO.
L V Edgington M E Corden A E Dimond
Phytopathology 51(3):179-182
Mar 1961 464.8 P56
Fusarium, Pectins, Plant disease resistance, Fusarium.

1623-68
RELATIONSHIP OF PRATYLENCHUS PENETRANS TO ROOTS OF CORN IN NEW YORK.
R E Miller C W Boothroyd W F Mai
Phytopathology 53(3):313-315, BIBL.
Mar 1963 464.8 P56
Flant nematodes, Pratylenchus penetrans,
Pratylenchus penetrans.

1624-68
SUITABILITY OF VARIOUS COVER CROPS AS HOSTS FOR THE LESION NEMATODE, PRATYLENCHUS PENETRANS.
D W MacDonald W F Mai
Phytopathology 53(6):730-731, TABS.
Jun 1963 464-8 P56
Cover crops, Plant hosts, Pratylenchus penetrans,
Plant hosts, Pratylenchus penetrans.

1625-68
PENETRATION OF ROOTS OF POTATO SEEDLINGS BY PRATYLENCHUS PENETRANS.
F Morsink
Phytopathology 53(3):351
Mar 1963 464.8 P56
Pratylenchus penetrans, Pratylenchus penetrans.

626-68
RESISTANCE OF ALFALPA TO TWO SPECIES OF ROOT-KNOT NEMATODES.
J R O Bannon H W Reynolds
Plant Dis Rep 46(8):558-559
15 Aug 1962 1.9 P69P
Alfalfa, Plant disease resistance, Plant nematodes.

627-68

REACTION OF CEREALS AND SUDAN GRASS TO MELOIDOGYNE SPP. AND THE RELATION OF SOIL TEMPERATURE TO M. JAVANICA POPULATIONS.

I J Thomason Phytopathology 52(8):787-791

Aug 1962 464.8 P56

Grain, Host indexing (plants), Meloidogyne, Meloidogyne javanica, Soil temperature, Meloidogyne, Meloidogyne javanica.

1628-68
INFLUENCE OF NONHOST CROPS ALONE OR IN COMBINATION WITH A NEMATOCIDE ON THE LONGEVITY OF THE SOYBEAN CYST NEMATODE IN SOIL.
J N Sasser G Uzzell Jr
Phytopathology 53(6):625
Jun 1963 464:8 P56
Dichloropropane dichloropropene mixture,
Heterodera glycines, Nematocides, Soybeans,
Heterodera glycines.

1629-68
CONTROL OF THE SOYBEAN CYST NEMATODE BY CROP ROTATION.
J N Sasser G Uzzell Jr
Phytopathology 53 (6):625
Jun 1963 464.8 P56
Crop rotation, Heterodera glycines, Plant nematodes,
Soybeans, Heterodera glycines.

1630-68
TREATMENT OF PROPAGATING STOCK WITH CHEMICALS AT DIFFERENT TEMPERATURES FOR ROOT-KNOT CONTROL.
J T Walker J D Wilson
Phytopathology 52 (7):684-688, TABS.
Jul 1962 464-8 P56
Nematocides, Plant nematodes, Temperature.

1631-68
THE GRASS ROOT-GALL NEMATODE FOUND ON ANNUAL BLUEGRASS ROOTS IN OREGON.
H Smithson I B Loring H J Jensen
Plant Dis Rep 47 (5):440-441
15 May 1963 1.9 P69P
Plant galls, Plant nematodes, Poa.

1632-68
USE OF BOOT-KNOT RESISTANT TOBACCOS TO ASSESS INJURY CAUSED BY ROOT-LESION NEMATODES.
T W Graham
Phytopathology 53(6):623
Jun 1963 464.8 P56
Dichloropropane dichloropropene mixture,
Meloidogyne incognita acrita, Plant disease resistance,
Pratylenchus, Soil fumigation, Meloidogyne incognita acrita,
Pratylenchus.

1633-68
NEMATODES IN NURSERY PLANTS IN PENNSYLVANIA.
W I Yount J R Bloom
Plant Dis Rep 47 (5): 405-407
15 May 1963 1.9 P69P
Nematodes, Nursery stock (horticulture), Roots,
Soil analysis.

34-68 LETHAL EPPECT OF TEMPERATURE EXTREMES ON ANGUINA TRITICI. J R Bloom Phytopathology 53(3):347 Mar 1963 464-8 P56 Plant galls, Plant nematodes.

1635-68
A METHOD FOR SEPARATION AND STERILAZATION OF PRATYLENCHUS BRACHVURUS FROM MIXED POPULATIONS OF NEMATODES.
T E Boswell
Phytopathology 53 (6):622
Jun 1963 464.8 P56
Nematocides, Plant nematode resistance, Plant nematodes,
Pratylenchus brachyurus, Pratylenchus brachyurus.

636-68
A REPORT ON THE TESTING OF ONION VARIETIES FOR RESISTANCE TO LESION NEMATODES.
G B Bergeson
Plant Dis Rep 46 (7):535-536
15 Jul 1962 1.9 P69P
Onions, Plant nematodes.

1637-68

NEMATODE CONTROL IN CRANBERRY.
G H Bird W R Jenkins
Phytopathology 53(3):347

Mar 1963 464.8 P56

Cranberries, Cranberry bogs, Zinophos.

638-68
THE EFFECT OF FOUR SPECIES OF PLANT PARASITIC NEMATODES ON HAIRY VETCH.
R B Malek W R Jenkins
Phytopathology 54(7):747
Jul 1964 464.8 P56
Rairy vetch, Nematodes, Parasitism, Phytopathology,
Plant diseases, Plant nematodes.

1639-68
OCCURRENCE OF HETERODERA CYSTS IN ASSOCIATION WITH SUGAR-BEETS IN PASTERN SOUTH DAKOTA.
K D Fisher J M McGuire
Plant Dis Rep 47 (12):1060-1061
15 Dec 1963 1.9 P69P
Cysts, Heterodera, Heterodera schachtii, Sugar beets,
Heterodera, Heterodera schachtii.

640-68
CHEMICAL DIPS FOR ERADICATION OF ROOT-KNOT NEMATODE FROM PLANT ROOTS.
H E Reed
Phytopathology 53(6):625
Jun 1963 464.8 P56
Chemical control (plant diseases), Meloidogyne,
Plant nematodes, 1,2-dibromo-3-chloropropane, Meloidogyne.

641-68

EFFECTIVENESS OF APPLICATION METHODS WITH SEVERAL NEMATOCIDES FOR CONTROL OF ROOT-KNOT NEMATODE.

A Y Chambers H E Reed
Phytopathology 53(6):622

Jun 1963 464.8 P56 Dichloropropane dichloropropene mixture, Meloidogyne incognita acrita, Telone, 1,2-dibromo-3-chloropropane, Meloidogyne incognita acrita.

1642-68
HOST-PARASITE RELATIONS OF ROTYLENCHUS RENIFORMIS ON GOSSYPIUM HIRSUTUM.
W Hirchfield
Phytopathology 52(9):862
Sep 1962 464.8 P56
Flant nematodes, Upland cotton.

1643-68
EFFECTS OF MELOIDOGYNE INCOGNITA ACRITA ON KENAF AND USE OF FHOTOFERIODISM IN SELECTING FOR RESISTANCE.
T E Summers F D Wilson J F Jcyner
Phytopathology 53 (5):613-614, HIHL., PL.
May 1963 464.8 P56
Kenaf, Meloidogyne incognita acrita, Photoperiodism,
Meloidogyne incognita acrita.

1644-68
A SYNERGISTIC FUSARIUM-NEMATODE INTERACTION IN CARNATIONS.
A F Schindler R N Stewart P Semeniuk
Phytopathology 51(3):143-146
Mar 1961 464.8 P56
Fusarium, Nematodes, Parasitism, Fusarium.

645-68
EFFECT OF TEMPERATURE ON GROWTH OF ROOT-KNOT NEMATODES IN SOYHEANS AND TOHACCO.
V H Dropkin
Phytopathology 53(6):663-666, HIHL., TABS.
Jun 1963 464.8 P56
Meloidogyne incognita acrita, Plant nematodes,
Root-knot nematode, Soybeans, Temperature, Tobacco,
Meloidogyne incognita acrita, Root-knot nematode.

546-68
AN INTERMEDIATE REACTION TO VICTORIN.
H H Luke H Wheeler
Phytopathology 54(12):1492-1493
Dec 1964 464.8 P56
Plant disease resistance, Victorin.

647-68
LETHAL TIME-TEMPERATURE RELATION FOR HETERODERA GLYCINES.
B Y Endo
Phytopathology 52(10):992-997, TABS.
Oct 1962 464.8 P56
Reterodera glycines, Pest control, Temperature, Water,
Heterodera glycines.

648-68
PENETRATION, INFECTION, AND DEVELOPMENT OF HETERODERA
GLYCINES IN SOYHEAN ROOTS AND RELATED ANATOMICAL CHANGES.
H Y Endo
Phytopathology 53(6):622-623
Jun 1963 464.8 P56
Reterodera glycines, Soybeans, Reterodera glycines.

1649-68

SEASONAL VARIATION OF LARVAL EMERGENCE FROM CYSTS OF THE SOYHEAN CYST NEMATODE, HETERODERA GLYCINES.

J P Ross
Phytopathology 53(5):608-609, BIBL.

May 1963 464.8 P56
Seasonal variation.

1650-G8
SOMBEAN LEAF AND STEM INFECTIONS BY PHYTOPHTHORA MEGASPER-MA VAR. SOJAE.
F L Morgan
Plant Dis Rep 47 (10):880-882
15 Oct 1963 1.9 P69P
Soybeans.

1651-68
RESPONSE OF NAVEL ORANGE TREES TO A POSTPLANTING APPLICATION OF DHCP FOR CONTROL OF THE CITRUS NEMATODE.
J H O Hanion H W Reynolds
Plant Dis Rep 47(5):401-404, HIHL. 403-404
15 May 1963 1.9 P69P
DHCP, Oranges, DHCP

1652-68 EFFECT OF TEMPERATURE ON RESISTANCE OF ALFALFA TO THE STEM NEMATODE (DITYLENCBUS DIPSACI). F J Grundbacher E B Stanford

Phytopathology 52(8):791-794 Aug 1962 464.8 P56 Alfalfa, Ditylenchus dipsaci, Plant disease resistance, Plant nematodes, Temperature, Ditylenchus dipsaci.

653-68 ATTRACTION OF PARASITIC NEMATODES HY PLANT ROOT EMANATIONS. D R Viglierchio Phytopathology 51(3):136-142 Mar 1961 464.8 P56 Parasitism, Plant nematodes, Roots.

654-68
SURVIVAL OF ROOT-KNOT NEMATODES IN EXCISED GRAPE ROOTS IN MOIST SOIL FUNIGATED WITH ETHYLENE DIHROMIDE.
H Lear D J Raski
Phytopathology 52 (12): 1309-1310
Dec 1962 464.8 P56
Ethylene dibromide, Grapes, Nematodes, Roots,
Soil funigation.

1655-68
YIELDS AND FLAVOR OF POTATOES AND CARROTS ON PLOTS
RECEIVING ANNUAL SOIL TREATMENTS.
B Lear W F Mai M B Harrison H S Cunningham
Plant Dis Rep 46 (9):631-634, TABS
15 Sep 1962 1.9 P69P
Carrots, Potatoes.

1656-68
REACTIONS OF SWEETPOTATO HREEDING LINES TO MELOIDOGYNE SPP. WHEN INOCULATED HY AN IMPROVED METHOD.
A G Gentile K A Kimble G C Hanna
Phytopathology 52(11):1225-1226
Nov 1962 464.8 P56
Meloidogyne, Plant breeding, Plant nematode resistance,
Sweetpotatoes, Meloidogyne.

1657-68
PHYTOPATHOLOGICAL NOTES.
INFESTING CITRUS SEEDLINGS WITH THE CITRUS NEMATODE,
TYLENCHULUS SEMIPENETRANS.
S D Van Gundy P H Tsao
Phytopathology 53(2):228-229, HIBL.
Feb 1963 464.8 P56
Citrus, Nematodes, Plant nematodes,
Tylenchulus semipenetrans.

1658-68
SOIL FUNGISTASIS AND NEMATOPHAGUS FUNGI.
R Mankau
Phytopathology 52(7):611-615
Jul 1962 464.8 P56
Fungicides.

1659-68
INFLUENCE OF TYLENCHULUS SEMIPENETRANS ON THE GROWTH AND CHEMICAL COMPOSITION OF SWEET ORANGE SEEDLINGS IN SOILS OF VARIOUS EXCHANGEABLE CATION RATIOS.

S D VanGundy J P Martin
Phytopathology 51 (3):146-151, HIBL. 151, TAHS.
Mar 1961 464.8 P56
Oranges, Plant nematodes, Seedlings, Soil cation exchange,
Tylenchulus semipenetrans, Tylenchulus semipenetrans.

1660-68
ECOLOGICAL RELATIONSHIPS OF PREDACIOUS FUNGI ASSOCIATED WITH THE CITRUS NEMATODE.
R Mankau
Phytopathology 54 (12):1435
Dec 1964 464.8 P56
Citrus, Ecology, Plant nematodes, Predaceous fungi.

1661-68
LONGEVITY OF RADOPBOLUS SIMILIS UNDER FIELD CONDITIONS.
C I Hannon
Plant Dis Rep 47(9):812-816
15 Sep 1963 1.9 P69P
Citrus, Longevity, Radopholus similis, Radopholus similis.

1662-68
THE STATUS OF BINDWEEDS, MIKANIA SPP. AS POSSIBLE HOSTS OF THE CITRUS-ROOT NEMATODE, TYLENCHULUS SEMIPENETRANS.
C I Hannon J Feldmesser R V Rebois
Plant Dis Rep 47 (9):810-811
15 Sep 1963 1.9 P69P
Convolvulus, Plant nematodes, Tylenchulus semipenetrans,
Convolvulus, Tylenchulus semipenetrans.

20 1663-68

1663-68
PARASITISM AND PATHOGENESIS OF THE CULTIVATED HIGHBUSH BLUEBERRY BY THE STUBBY ROOT NEMATODE.
B M Zuckerman
Phytopathology 52 (10):1017-1019
Oct 1962 464.8 P56
Blueberries, Nematodes, Parasitism, Trichodorus christiei.

1664-68

PATHOGENIC VARIATION AND NUTRITIONAL REQUIREMENTS OF DITYLENCHUS DESTRUCTOR.

G C Smart Jr H M Darling
Phytopathology 56 (4):374-381, BIBL. 380-381, PL.
Apr 1963 464.8 p56
Ditylenchus destructor, Ditylenchus destructor.

1665-68
INFLUENCE OF THE STUBBY-ROOT NEMATODE ON GROWTH OF SUGARCANE IN HAWAII.
W J Apt H Koike
Phytopathology 52(9):963-964
Sep 1962 464.8 P56
Hawaii, Plant nematodes, Plant physiology, Sugarcane,
Hawaii.

1666-68

FATHOGENICITY OF MELOIDOGYNE INCOGNITA ACRITA AND ITS RELATION WITH PYTHIUM GRAMINICOLA ON SUGARCANE IN HAWAII.

W J Apt H Koike
Phytopathology 52(11):1180-1184
Nov 1962 464.8 p56
Hawaii, Meloidogyne incognita acrita, Sugarcane, Hawaii,
Meloidogyne incognita acrita.

1667-68
NEMATODES ASSOCIATED WITH RED CLOVER GROWING ON FAVORABLE AND UNFAVORABLE SITES.
R E Baldwin
Phytopathology 54(7):746
Jul 1964 464.8 P56
Altitude, Nematodes, Plant ecology, Red clover.

HOST RANGE OF TYLENCHORHYNCHUS CLAYTONI ON SOME FORREST
NURSERY SEEDLINGS.
JR Sutherland R E Adams
Phytopathology 54(7):749
Jul 1964 464.8 P56
Host indexing (plants), Nematology, Parasitology, Seedlings,
Tree diseases, Tylenchorhynchus claytoni.

Weeds

1669-68
BIBLIOGRAPHY OF WEFD INVESTIGATIONS - APRIL, MAY, JUNE, 1959.
Weeds 8 (1):141-156, BIBL., 141-156
Jan 1960 79.8 W41
Bibliography, Weeds.

1670-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR JANUARY, FEBRUARY, MARCH 1961.
Weeds 9 (4):693-711
Oct 1961 79.8 W41
Bibliography, Weed control, Weeds.
Prepared by the U. S. Dept. of Agriculture, Agricultural Research Service, Crops Research Division, Crops
Protection Research Branch

1671-68

EFFECT OF NITROGEN FERTILIZERS ON GERMINATION AND STAND OF WILD OATS.

J J Sexsmith U J Pittman
Weeds 11(2):99-101
Apr 1963 79.8 W41
Avena fatua, Fertilizers, Nitrogen, Plant physiology,
Avena fatua.

1672-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR APRIL, MAY, JUNE, 1960.
Weeds 9(1):161-176
Jan 1961 79.8 W41
Bibliography, Weed control, Weeds.
Prepared by the United States Department of Agriculture, Agricultural Research Service, Crops Research Division, Weed Investigations Section

673-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR JANUARY, FEBRUARY, MARCH 1960.
Weeds 8 (4):7710-729
Oct 1960 79.8 W41
Bibliography, Weeds.

1674-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR OCTOBER, NOVEMBER, DECEMBER 1960.
Weeds 9 (3):499-514
Jul 1961 79.8 W41
Bibliography, Weed control, Weeds.
Prepared by the U.S. Dept. of Agriculture, Agricultural Research Service, Crops Research Division, Crops
Protection Research Branch

675-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR OCTOBER, NOVEMBER, DECEMBER 1959.
Weeds 8 (3):523-534
Jul 1960 79-8 W41
Bibliography, Weeds.

1676-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR JULY, AUGUST, SEPTEMBER, 1960.
Weeds 9 (2):336-350
Apr 1961 79.8 W41
Bibliography, Weed control, Weeds.
Prepared by the U.S. Dept. of Agriculture, Agricultural Research Service, Crops Research Division, Crops Protection Research Branch

1677-68
CHEMICAL WEED CONTROL IN YOUNG GRAPES.
C C Doll
Weeds 8(3):368-373, TABS.
Jul 1960 79.8 W41
Grapes, Weed control.

1678-68
REPORT OF THE TERMINOLOGY COMMITTEE, WEED SOCIETY OF AMERICA.
Weeds 8 (3): 487-522
Jul 1960 79.8 W41
Nomenclature, Weeds.

- 1679-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR JULY, AUGUST, SEPTEMBER, 1959.
Weeds 8(2):303-332
Apr 1960 79.8 W41
Bibliography, Weed control.

1680-68
EXPERIMENTS WITH HERBICIDES IN SOILS.
A S Crafts H Drever
Weeds 8(1):12-18, TABS.
Jan 1960 79.8 W41
Chemical control (weeds), Herbicide residues, Herbicides,
Soils.

1681-68
THE BRISTLY THISTLE AND ITS CONTROL.
D E Davis H H Funderburk Jr D R Roberts
Weeds 12(1):22-25, TABS.
Jan 1964 79.8 W41
Weed control.

1682-68
ERADICATION OF KUDZU.
D E Davis H H Funderburk Jr
Weeds 12(1):62-63
Jan 1964 79.8 W41
Kudzu.

1663-68
ENDOTHAL DERIVATIVES AS AQUATIC HERBICIDES IN FISHERY HABITATS.
C R Walker
Weeds 11(3):226-232, BIBL. 231-232, TABS.
Jul 1963 79.8 W41
Aquatic weeds, Endothal, Fisheries, Herbicides.

16 E4-68
MORPHOLOGICAL AND HERBICIDE SUSCEPTIBILITY DIFFERENCES AMONG STRAINS OF HGARY CRESS.
J J Sexsmith
Weeds 12(1):19-22, TABS.
Jan 1964 79.8 W41
Cardaria draba, Plant morphology, Cardaria draba.

1665-68
THE EFFECT OF ENVIRONMENT ON THE COMPARATIVE RESISTANCE OF PETIOLE PARENCHYMA TO PETROLEUM OILS.
WH Minshall Weeds 9(3):356-363
Jul 1961 79.8 W41
Environment, Petroleum, Phytotoxicity.

666-68
PRE-EMERGENCE WEED CONTROL IN SOYBEANS WITH MIXTURES OF TWO HERBICIDES.
JR Hay Weeds 9(1):117-123
Jan 1961 79.8 W41
Chemical control (weeds), Herbicides, Soybeans.

1687-68
A TRACTOR-MOUNTED EXPERIMENTAL FLOT SPRAYER.
K F Best J L Thompson
Weeds 12 (1):62
Jan 1964 79.8 W41
Tractors.

628-68
WEEDS AS CARRIERS OF TWO POTATOE PATHOGENS IN COLORADO.
N Oshima C H Livingston M D Harrison
Flant Dis Rep 47(6):466-469
15 Jun 1963 1.9 P69P
Fungus diseases (plants), Potatoes,
Soil-borne plant diseases, Weeds.

1689-68
DETERMINATION OF 2,4-D RESIDUES IN SOYBEANS.
S S Szabo
Weeds 13(1):76
Jan 1965 79.8 W41
Plant extracts, Soybeans, 2,4-d.

1690-68
THE ROLE OF CHEMICAL RESEARCH IN DEVELOPING SELECTIVE WEED CONTROL PRACTICES.
E Gysin
Weeds 8(4):541-555
Oct 1960 79.8 W41
Chemical control (weeds), Weeds.

HERBICIDES FOR GLADIOLUS.

D S Burgis W E Waters
Weeds 11 (1):53-55
Jan 1963 79.8 W41
Chemical control (weeds), Gladiolus, Herbicides.

1692-68
THE MEDUSAHEAD PROBLEM IN IDAHO.
P J Torrell L C Erickson R H Haas
Weeds 9(1):124-131
Jan 1961 79.8 W41
Elymus caput-medusae, Idaho, Elymus caput-medusae, Idaho.

693-68
RESPONSES OF CORN HYBRIDS TO YELLOW FOXTAIL COMPETITION.
D W Staniforth
Weeds 9(1):132-136
Jan 1961 79.8 W41
Corn, Heterosis.

1694-68
ROLE OF HERBICIDES IN SOYBEAN PRODUCTION.
D W Staniforth W G Lovely C R Weber
Weeds 11(2):96-98
Apr 1963 79.8 W41
Herbicides, Soybeans.

1695-68
SUBSTITUTED UREA HERBICIDES IN THE CONTROL OF UNDESIRABLE HARDWOODS.

B G Merrifield T Hansbrough Weeds 9(1):85-89
Jan 1961 79.8 W41
Diuron, Hardwoods, Monuron, Urea herbicides.

1696-68
SIMAZINE FOR CONTROLLING WEEDS IN FRUIT TREE AND GRAPE PLANTINGS.
R P Larsen S K Ries
Weeds 8(4):671-677, TABS.
Oct 1960 79.8 W41
Chemical control (weeds), Fruit culture, Simazine.

97-68
EFFECTS OF SURFACTANT CONCENTRATION ON JOHNSONGRASS CONTROL
WITH DALAPON.
C G McWhorter
Weeds 11(2):83-86, TABS.
Apr 1963 79.8 W41
Dalapon, Sorghum halepense, Dalapon, Sorghum halepense.

1698-68
AN ECOLOGICAL STUDY OF LENS- AND GLOBE-PODDED HOARY CRESSES
IN SASKATCHEWAN.
G W Selleck
Weeds 13(1):1-5
Jan 1965 79.8 W41
Cardaria draba, Plant ecology, Saskatchewan, Cardaria draba,
Saskatchewan.

1699-68
PENETRATION AND NUTRITION OF STRIGA ASIATICA.
WE ROGERS R R Nelson
Phytopathology 52(10):1064-1070, TABS.
Oct 1962 464.8 P56
Parasitic plants, Plant nutrition, Plant physiology,
Striga asiatica, Weeds, Striga asiatica.

1700-68
GROWTH AND DEVELOPMENT OF YELLOW POXTAIL AND GIANT FOXTAIL.
P W Santelmann J A Meade R A Peters
Weeds 11(2):139-142
Apr 1963 79.8 W41

1701-68
THE EFFECTS OF FOUR HERBICIDES ON MICROORGANISMS IN NINE OREGON SOILS.
P Chandra W R Purtick W B Bollen Weeds 8(4):589-598, BIBL. 597-598
Oct 1960 79.8 W41
Carbon dioxide, Herbicides, Microorganisms, Oregon.

1702-68
A TECHNIQUE FOR CONTROLLED EXPOSURE OF EMERGING GRASS SEED-LINGS TO SOIL-ACTIVE EERBICIDES.
A P Appleby W R Furtick
Weeds 13(2):172-173
Apr 1965 79.8 W41
Grasses, Herbicides, Seedlings, Soil treatment.

1703-68

THE INFLUENCE OF CONCENTRATION OF FUMIGANT AND TIME OF EXPOSURE ON THE KILLING OF DORMANT IMBIBED SEEDS.
S J Pieczarka G F Warren
Weeds 8 (4):612-615, TABS.
Oct 1960 79.8 W41
Chemical control (weeds), Fumigants, Seeds.

704-68
THISTLE CONTROL WITH CULTIVATION, CROPPING, AND CHEMICALS.
DERSCHEID, L A.
R L Nash G A Wicks
Weeds 9(1):90-102
Jan 1961 79.8 W41
Chemical control (weeds), Cirsium arvense, Crop rotation,
Cultural control (weeds), Sonchus arvensis, Cirsium arvense,
Sonchus arvensis.

1705-68
CROPPING, CULTIVATION, AND HERBICIDES TO ELIMINATE LEAFY SPURGE AND PREUENT REINFESTATION.
L A Derscheid G A Wicks W H Wallace Weeds 11(2):105-114
Apr 1963 79.8 W41
Crop rotation, Herbicides.

20 1706-68

1706-68
ANATOMICAL STUDIES OF EUPHORBIA ESULA L.
G A Myers C A Beasley L A Derscheid
Weeds 12 (4):291-295, PLS.
Oct 1964 79.8 Wil
Euphorbia esula, Plant anatomy, Plant histology,
Euphorbia esula, Plant anatomy.

1707-68
CONTROL OF FIELD BINDWEED AND OTHER PERENNIAL WEEDS WITH BENZQIC AND PHENYLACETIC ACIDS.
A F Wiese H E Rea
Weeds 9(3):423-428, BIBL. 428, TABS.
Jul 1961 79.8 W41
Benzoic acid, Perennial plants, Phenylacetic acid,
Benzoic acid,

1708-68

BREAKING WILD OAT DORMANCY WITH GASES AT HIGH PRESSURE.

O L Hoffman
Weeds 9 (3):493
Jul 1961 79.8 W41
Avena fatua, Gases, Seed dormancy, Seed germination,
Avena fatua,

1709-68
HERBICDAL VALUE OF ARSENIC TRIOXIDE IN EASTERN UNITED STATES.
A L Leaf Jr, R E Smith
Weeds 8(3):374-378
Jul 1960 79.8 W41
Arsenic compounds, Herbicides, Toxicology.

1710-68
ABSORPTION, DIFFUSION, AND TRANSLOCATION OF C14-LABELED
TRIAZINE HERBICIDES BY PEANUT LEAVES.
F K Biswas
Weeds 12(1):31-33, BIBL. 32-33
Jan 1964 79.8 W41
C14, Peanuts, Plant biochemistry, Triazine, C14, Triazine.

1711-68
INFLUENCE OF DROPLET SIZE ON EFFECTIVENESS OF LOW-VOLUME HERBICIDAL SPRAYS.
W B Ennis Jr R E Williamson Weeds 11(1):67-72, TABS.
Jan 1963 79.8 W41
Chemical control (weeds), Herbicides, Spraying.

1712-68
CONTROL OF BARNYARDGRASS (ECHINOCHLOA CRUSGALLI) IN WESTERN IRRIGATED COTTON.
J H Miller H M Kempen J A Wilkerson C L Foy Weeds 9(2):273-281, TABS.
Apr 1961 79.8 W41
Chemical control (weeds), Cotton, Irrigation.

1713-68

EVALUATION OF HERBICIDES APPLIED TO SOIL FOR CONTROL OF AQUATIC WEEDS IN IRRIGATION CANALS.

P A Frank R H Hodgson R D Comes
Weeds 11(2):124-128
Apr 1963 79.8 w41
Aquatic weeds, Herbicides, Aquatic weeds.

1714-68
INTERRELATIONS OF CULTIVATIONS, HERBICIDES, AND METHODS OF APPLICATION FOR WEED CONTROL IN SOYBEANS.
E J Peters F S Davis D L Klingman R E Larson Weeds 9 (4):639-645 oct 1961 79.8 W41
Herbicides, Soybeans, Tillage.

1715-68
INTERRELATIONS OF ROW SPACINGS, CULTIVATIONS AND HERBICIDES FOR WEED CONTROL IN SOYBEANS.
E J Peters M R Gebhardt J F Stritzke Weeds 13 (4):285-289, TABS.
Oct 1965 79.8 W41
Herbicides, Planting, Soybeans, Tillage, Weed control.

1716-68
CONTROL OF BLACKJACK OAK BY BASAL SPRAYING WITH 2,4,5-T. .
F A Peevy
Weeds 9(1):50-53
Jan 1961 79.8 W41
Quercus, Spraying, 2,4,5-trichlorophenoxyacetic acid,
2,4,5-trichlorophenoxyacetic acid.

1717-68
COMPETITION OF FORAGE SPECIES WITH CANADA THISTLE, AS AFFECTED BY IRRIGATION AND NITROGEN LEVELS.
F P Thrasher C S Cooper J M Hodgson Weeds 11(2):136-138, PL.
Apr 1963 79.8 W41
Cirsium arvense, Irrigation, Nitrogen, Cirsium arvense.

1718-68
PENETRATION AND PERSISTANCE OF DIURON IN SOIL.
L W Weldon F L Timmons
Weeds 9 (2):195-203
Apr 1961 79.8 W41
Chemical control (weeds), Soil treatment.

1719-68

FAILURE OF WITCHWEED TO PARASITIZE SMOOTH CAYENNE PINE-APPLE.

E L Robinson
Weeds 10(4):334-335
Oct 1962 79.8 W41
Parasitism, Pineapples, Striga asiatica.

1720-68
BIBLIOGRAPHY OF WEED INVESTIGATIONS FOR JULY-DECEMBER 1961,
TABLE OF CONTENTS.
Weeds 10(2):147-166
Apr 1962 79.8 W41
Bibliography, Weed control.

1721-68
EVALUATING HERBICIDES AGAINST AQUATIC WEEDS.
R B Blackburn
Weeds 11(1):21-24, TABS.
Jan 1963 79.8 W41
Aquatic weeds, Herbicides.

1722-68
CONTROL OF BAMBOO IN PUERTO RICO BY HERBICIDES.
H J Cruzado T J Muzik W C Kennard
Weeds 9(1):20-26, TABS.
Jan 1961 79.8 W41
Bamboo, Herbicides, Puerto Rico.

1723-68
EFFECTS OF 2,3,6-TRICHLOROBENZOIC ACID AND CULTURAL TREAT-MENTS ON SUBVIVAL OF DALMATION TOADFLAX AND ESTABLISHENT OF SIBERIAN WHEATGRASS.
W C Robocker D H Gates H D Kerr
Weeds 9(4):620-625
Oct 1961 79.8 W41
Cultural control (weeds).

1724-68
WEED CONTROL IN COTTON OVER A TEN-YEAR PERIOD BY USE OF THE MORE PROMISING MATERIALS AND TECHNIQUES.
V C Harris
Weeds 8(4):616-624, TABS.
Oct 1960 79.8 W41
Chemical control (weeds), Cotton, Weeds.

1725-68

UPTAKE AND DISTRIBUTION OF SIMAZINE BY OAT AND COTTON SEED-LINGS.

T J Sheets
Weeds 9(1):1-13, BIBL. 13, TABS.
Jan 1961 79.8 W41
Cotton, Oats, Plant physiology, Simazine, Weed control, Simazine.

1726-68
DELAYED PREEMERGENCE WEED CONTROL IN SEEDED TOMATOES AND PEPPERS.
R B Taylorson
Weeds 13(4):306-308
Oct 1965 79.8 W41
Redpeppers (vegetable), Tomatoes, Weed control.

1727-68
CHARACTERISTICS AND HERBICIDAL CONTROL OF FLAT PEA.
W C Robocker H D Kerr
Weeds 12(1):40-42
Jan 1964 79-8 W41
Herbicides, Plant morphology.

1728-68
RESEARCH AND ORGANIZATIONAL NEEDS IN THE FIELD OF WEED CONTROL.
M W Parker
Weeds 8(4):556-560

Oct 1960 79.8 W41 Chemical control (weeds), Weeds.

1729-68
EFFECT OF OVERHEAD AND FURROW IRRIGATION ON PERFORMANCE OF FREEMERGENCE HERBICIDES.
R M Menges
Weeds 11(1):72-76
Jan 1963 79.8 W41
Chemical control (weeds), Herbicides, Irrigation.

1730-68
SOIL-INCORPORATED PRE-PLANTING HERBICIDES FOR WITCHWEED CONTROL.
E L Robinson
Weeds 9(3):411-415, TABS.
Jul 1961 79.8 W41
Herbicides, Soil treatment.

1731-68
STATIONARY SPRAYER COMPONENTS.
E N Andersen R Behrens
Weeds 11 (3):243-244
Jul 1963 79.8 W41
Spraying equipment.

1732-68
EFFECTS OF SURFACTANTS ON THE HERBICIDAL ACTIVITY OF SEVERAL HERBICIDES IN AQUEOUS SPRAY SYSTEMS.
L L Jensen W A Gentner W C Shaw Weeds 9(3):381-405, BIBL. 405
Jul 1961 79.8 W41
Chemical control (weeds), Herbicides, Spraying.

TJ 3-68
PHOTOCHEMICAL ALTERATION AND INACTIVATION OF AMIBEN.
T J Sheets
Weeds 11(3):186-190, TABS.
Jul 1963 79.8 W41
Amiben, Photochemistry.

1734-68
HERBICIDES AND HERBICIDE MIXTURES FOR WEED CONTROL IN FEANUTS.
E W Hauser W C Shaw H F Harrison S A Parham Weeds 10 (2):139-144
Apr 1962 79.8 W41
Herbicides, Peanuts, Weed control.

1735-68
EFFECTS OF DIFFERENT DENSITIES OF DOWNY BROME (BROMUS TECTORUM) ON GROWTH AND SURVIVAL OF CRESTED WHEATGRASS (AGROPYRON DESERTORUM) IN THE GREENHOUSE.

R A Evans
Weeds 9(2):216-223
Apr 1962 79.8 W41
Bromus tectorum, Competition, Greenhouse culture,
Plant physiology, Bromus tectorum.

1736-68
CULTIVATION TECHNIQUES IN COMBINATION WITH CHEMICAL WEED CONTROL IN COTTON.
J T Holstun Jr
Weeds 11(3):190-194, TARS.
Jul 1960 79.8 W41
Chemical control (weeds), Cotton, Tillage.

737-68
METHODS OF EVALUATING PRE-EMERGENCE HERBICIDES FOR COTTON.
J T Holstun Jr C G McWhorter
Weeds 9 (4):527-537
Oct 1961 79.8 W41
Cotton, Herbicides, Toxicology.

1738-68
3,4-DICHLOROPEOPIONANILIDE FOR CONTROL OF BARNYARDGRASS IN RICE.
R J Smith Jr
Weeds 9(2):318-322
Apr 1961 79.8 W41
Rice.

1739-68
GROWTH OF IRONWEED AS AFFECTED BY MOWING AND STORAGE ROOT REMOVAL.

M. K. McCarty D. L. Linscott
Weeds 11 (3): 223-225
Jul. 1963 79.8 W41
Mowing, Roots, Vernonia.

1740-68
CONTROL OF MADRONE AND TANOAK STUMP SPROUTING.
B L Kay O A Leonard J E Street
Weeds 9(3):369-373
Jul 1961 79.8 W41
Timber.

1741-68
WEED CONTROL RESEARCH - PAST, PRESENT AND FUTURE.
A S Crafts
Weeds 8(4):535-540
Oct 1960 79.8 W41
Chemical control (weeds), Weeds.

742-68
INFLUENCE OF CDEC ON GROWTH, MATURITY, AND YIELD OF HEAD LETTUCE.
F W Zink H Agamalian
Weeds 13(1):19-22, TABS.
Jan 1965 79.8 W41
Lettuce.

1743-68
FATE OF AMITROLE IN SOIL.
F M Ashton
Weeds 11(3):167-170, TABS.
Jul 1963 79.8 W41
Amitrole, Soils.

1744-68
MOVEMENT OF HERBICIDES IN SOIL WITH SIMULATED FURROW IRRIGATION.
F M Ashton
Weeds 9(4):612-619
Oct 1961 79.8 W41
Herbicides, Irrigation, Soils.

1745-68
SURFACE TENSION LOWERING, WETTABILITY OF PARAFFIN AND CORN LEAF SURFACES, AND HERBICIDAL ENHANCEMENT OF DALAPON BY SEVEN SURFACTANTS.
C L Foy L W Smith Weeds 13(1):15-18
Jan 1965 79.8 W41
Dalapon, Interfacial tension, Paraffins, Surface-active agents, Dalapon.

1746-68
CONTROL OF PENNISETUM CLANDESTINUM, KIKUYUGRASS.
V B Youngner J R Goodin
Weeds 9(2):238-242
Apr 1961 73.8 W41
Chemical control (weeds), Pennisetum clandestinum.

747-68
A PENDULUM SPRAYER FOR POT CULTURES.
B E Day L S Jordan R T Hendrixson
Weeds 11 (3):174-176
Jul 1963 79.8 W41
Herbicides, Spraying equipment.

1748-68
LIQUID VS. GRANULAR PRE-EMERGENCE HERBICIDES.
E L Knabe
Agr Chem 18(5):52-53
May 1963 381 AG8
Herbicide residues.

1749-68
FACTORS INFLUENCING THE TOLERANCE OF PEAS TO MCPA. .
M.L. Weaver R E Nylund
Weeds 11(2):142-148, TABS.
Apr 1963 79.8 W41
MCPA, Peas, MCPA

1750-68
POST-PLANTING WEED CONTROL IN GARDEN CHRYSANTHEMUMS.
R E Widmer R J Stadtherr
Weeds 9(2):204-208
Apr 1961 79.8 W41
Chemical control (weeds), Chrysanthemum,
Chrysanthemum morifolium, Chrysanthemum morifolium.

1751-68
FORAGE CROP ESTABLISHMENT IN SOIL CONTAINING ATRAZINE OR SIMAZINE RESIDUES.
R J Fink O H Fletchall
Weeds 11(2):81-83
Apr 1963 79.8 W41
Atrazine, Grasses, Simazine.

20 1752-68

1752-68
IMACTIVATION OF SIMAZINE AND ATRAZINE IN THE FIELD.
R E Talbert O B Fletchall
Weeds 12(1):33-37, BIBL. 36-37, TABS.
Jan 1964 79.8 W41
Atrazine, Land, Simazine.

1753-68
WEED CONTROL IN CASTORBEANS.
O C Burnside D L Kittock
Weeds 13(2):130-133, TABS.
Apr 1965 79.8 W41
Castorbeans, Weed control.

1754-68
ABRIAL AND GROUND APPLICATIONS OF PREEMERGENCE HERBICIDES IN CORN, SORGHUM, AND SOYPEANS.
R W Bovey O C Burnside
Weeds 13(4):334-336, TABS.
Oct 1965 79.8 W41
Corn, Herbicides, Sorghum, Soybeans, Spraying.

1755-68
STUDIES IN THE LIFE HISTORY OF ARTEMISIA ABSINTHIUM.
G W Selleck R T Coupland
Weeds 9(3):485-490
Jul 1961 79.8 W41
Artemisia absinthium, Artemisia absinthium.

1756-68
RECENT ADVANCES IN THE CHEMICAL CONTROL OF WILD OATS.
G W Selleck
Weeds 9(1):60-71, BIBL. 71, TABS.
Jan 1961 79.8 W41
Chemical control (weeds), Herbicides.

757-68
IDENTIFICATION OF DALAPON IN QUACKGRASS RHIZOME.
TR Planagan T Ming R Davis
Weeds 13 (1): 74-75
Jan 1965 79.8 W41
Agropyron repens, Dalapon, Agropyron repens, Dalapon.

758-68

EFFECTS OF HERBICIDES ON RED PINE NURSERY STOCK.

C H Winget T T Kozlowski J E Kuntz

Weeds 11(2):87-90, TABS.

Apr 1963 79.8 W41

Herbicides, Pinus resinosa.

1759-68
SIMAZINE FOR ANNUAL WEED CONTROL IN CRANBERRIES.
M N Dana
Weeds 8(4):607-611
Oct 1960 79.8 W41
Chemical control (weeds), Cranberries, Simazine.

SOIL-BOISTURE RETENTION AND SNOW-HOLDING CAPACITY AS AFFECT-ED BY TBE CHEMICAL CONTROL OF BIG SAGEBRUSH, (ARTEMISIA TRIDENTATA NUTT.).

I W Sonder H P Alley
Weeds 9(1):27-35, TABS.
Jan 1961 79.8 W41
Chemical control (weeds), Snow, Soil moisture.

1761-68

COMPETITION OF ANNUAL WEEDS AND SUGAR BEETS.
P B Brimhall E W Chamberlain H P Alley
Weeds 13(1):33-35

Jan 1965 79.8 W41

Setaria viridis, Sugar beets, Setaria viridis.

1762-68
PLUTE-FEED APPLICATOR FOR GRANULAR HERBICIDES.
S W Bingham
Weeds 12(1):58-59
Jan 1964 79.8 W41
Berbicides.

30 LIVESTOCK PROTECTION

1763-68
THE DISTRIBUTION OF THE VIRUS OF AUJESZKY S DISEASE IN EXPERIMENTALLY INFECTED SHEEP.
J B McFerran C Dow
Res Vet Sci 5(2):143-148, TABS.
Apr 1964 41.8 R312
Sheep.

1764-68
TRACES OF LEAD IN LIVER AND FECES OF CHICKENS.
M Shifrine F Steck M Kusch
Amer Vet Med Ass J 145(4):380
15 Aug 1964 41.8 AM3
Chickens, Lead.

1765-68
THE PROBLEM OF ADULTERATED MILK AND HOW IT AFFECTS THE VETERINARIAN.
Amer Vet Med Ass J 136(7):295-296
01 Apr 1960 41.8 AM3
Food adulteration, Milk, Veterinary medicine.

1766-68

OXYGEN UPTAKE BY MATURING BOVINE PLACENTA.
E H Baird L E McDonald
Amer Vet Med Ass J 145(1):51
01 Jul 1964 41.8 AM3
Cattle, Placenta.

767-68
OPEN TEAT SINUS SURGERY FOR CORRECTING TEAT OCCLUSIONS PART II...
J H Steere K M Moody J Nealy
Amer Vet Med Ass J 136(3):123-127
O1 Feb 1960 41.8 AM3
Cattle, Surgery, Teats.

1768-68
SENATOR HUMPHREY INTRODUCES BILL TO EXPAND VETERINARY
MEDICAL FACILITIES.
Amer Vet Med Ass J 136 (11):539-541
01 Jun 1960 41.8 AM3
Education, Legislation, Veterinary medicine.

1769-68
NONCELLULAH BACTERICIDAL FACTORS IN INFLAMMATORY EXUDATE FHOM THE UTERINE AND PLEURAL CAVITIES OF ESTROUS AND FSEUDOPREGNANT RABBITS.
H W Hawk G D Turner J F Sykes
Amer J Vet Res 21(83):657-663
Jul 1960 41.8 AM3A
Eactericides, Rabbits, Uterus.

1770-68
A PRELIMINAHY REPORT ON THE SEHUM PROTEIN-BOUND IODINE IN DAIHY CATTLE.
G K Kiesel M J Burns
Amer J Vet Hes 21(81):226-229, BIBL. 228-229, TABS.
Mar 1960 41.8 AM3A
Cattle, Iodine.

771-68
BLOOD LEVELS OF SULFONAMIDES IN SWINE.
B Faustine M A Vaghi
Amer Vet Med Ass J 141(2):377
01 Aug 1962 41.8 AM3
Sulfamethazine, Sulfamethoxypyridazine, Swine.

1772-68
WATURE AND EFFECTS OF RADIOACTIVE FALLOUT ON THE FAHM.
R F Reitemeter
Amer Vet Med Ass J 136(8):394-397
15 Apr 1960 41.8 AM3
Farming, Radioactive contamination, Residues.

773-68
THE USE OF TISSUE CULTURE-PROPAGATED BLUETONGUE VIRUS FOR VACCINE PREPARATION.
L Kemeny L E Drehle
Amer J Vet Hes 22 (90):921-925
Sep 1961 41.8 AM3A
Bluetongue virus, Tissue culture, Vaccines.

1774-68
THE EFFECT OF SODIUM SELENITE ON CATTLE.
D D Maag J S Orsborn J H Clopton
Amer J Vet Res 21(85):1049-1053

Nov 1960 41.8 AM3A Cattle, Sodium selenite.

1775-68

CALCIUM AND PHOSPHORUS ABSORPTION AND ITS RELATIONSHIP TO GROWTH IN THE DOG.

D H Will R H Udall
Amer J Vet Res 21(82):360-363, BIBL. 363
May 1960 41.8 AM3A

Calcium, Dogs, Phosphorus.

776-68
ELECTROCARDIOGRAPHIC AND PHONOCARDIOGRAPHIC PATTERNS OF NORMAL LAMBS.
M I Hilmy N H Booth H V Unfug
Amer J Vet Res 21(85):1001-1005
NOV 1960 41.8 AM3A
Electrocardiograms, Lambs, Phonocardiograms.

777-68
A CHITICAL EVALUATION OF BEPHENIUM HYDROXYNAPHTHOATE AS AN ANTHELMINTIC IN 8 YEARLING HEREFORD CALVES.
A M Eisa R Rubin
Amer J Vet Res 22(89):708-712, TABS.
Jul 1961 41.8 AM3A
Anthelmintics, Bephenium hydroxynaphthoate, Hereford cattle.

1778-68

FOURTH ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF AVIANPATHOLOGISTS.

Avian Dis 6(1):132-134
Feb 1962 41.8 AV5
Industrial relations, Pullorum disease.

1779-68

SAFETY OF INTRAVENOUS PROTEOLYTIC ENZYMES (VARIZYME) IN EQUINE PRACTICE.

E T Braye E J Hinsman W F Riley Jr Amer Vet Med Ass J 136 (2):73-74
15 Jan 1962 41.8 AM3
Horses, Injections, Proteinases.

1780-68
EVALUATION OF THE BROMSULFOPHTALEIN LIVER FUNCTION TEST IN THE DOG.
E J Larson C C Morrill
Amer J Vet Res 21(85):949-957, BIBL. 956-957, TABS.
NOV 1960 41.8 AM3A
Dogs.

1781-68
STUDIES ON BOVINE PORTAL BLOOD. II. BLOOD FLOW DETERMINATIONS WITH OBSERVATIONS ON HEMODILUTION IN THE PORTAL VEIN. G F Fries G H Conner
Amer J Vet Res 22(88):487-491
May 1961 41.8 AM3A
Blood, Blood circulation, Cattle.

1782-68
SOME PHYSIOLOGIC DATA ON GOATS.
S K Jha W V Lumb R F Johnston
Amer J Vet Res 22 (90):912-914, TABS.
Sep 1961 41.8 AM3A
Animal physiology, Goats.

1783-68
THE CALCIUM, PHOSPHOHUS, MAGNESIUM, CAROTENE, AND VITAMIN A CONTENT OF THE BLOOD OF RANGE CATTLE IN EASTERN MONTANA.
H Marsh K F Swingle
Amer J Vet Res 21 (81):212-221, BIBL. 220-221, TABS.
Mar 1960 41.8 AM3A
Blood, Calcium, Cattle, Magnesium, Montana, Phosphorus, Montana.

1784-68
THE PRESENT AND FUTURE OF ARTIFICIAL INSEMINATION.
H A Herman
Amer Vet Med Ass J 136(9):431-432
O1 May 1960 41.8 AM3
Animal breeding, Artificial insemination, Cattle.

1785-68
STUDIES ON THE PHARMACOLOGY OF N-(ETHYLMERCURI)-PTOLUBNESULFONAMIDE.
W T Oliver N Platonow
Amer J Vet Res 21(84):906-915, BIBL. 915, TABS.
Sep 1960 41.8 AM37A
Pharmacology.

BIHLIOGRAPHY

30 1786-68

1786-68
ANTHELMINTICS FOR RUMINANTS. I. STUDIES ON THE TOXICITY
AND EFFICACY OF BAYER 21-199 AS AN ANTHELMINTIC.
I J Galvin R D Turk R R Hell
Amer J Vet Res 21 (85):1054-1057, TAHS.
NOV 1960 41.8 AM3A
Anthelmintics, Ruminants.

17:67-68
ANTHELMINTICS FOR RUMINANTS. II. ANTHELMINTIC ACTIVITY AND TOXICITY OF RUELENE IN SHEEP.
T J Galvin R R Hell R D Turk
Amer J Vet Res 21(85):1058-1060, TAHS.
NOV 1960 41.8 AM3A
Anthelmintics, Ruelene, Ruminants, Sheep, Ruelene.

1768-68
TUBERCULIN REACTION SIZE AS RELATED TO THE NUMBER OF SIMULTANEOUS TUBERCULIN INJECTIONS.
A H Larsen T H Vardaman W R Harvey
Amer J Vet Res 21 (85):1075-1077, TABS.
NOV 1960 41.8 AM3A
Tuberculin.

1789-68
A COMPARISON OF A HEMAGGLUTINATION TEST WITH A MODIFIED HEMOLYTIC TEST ON SERUMS FROM INTRADERMAL BOVINE TUBERCULIN REACTORS AND NONTUBERCULOUS CATTLE.
T H Vardaman
Amer J Vet Res 21(82):574-577, BIHL. 570-577
Jul 1960 41.8 AM3A
Cattle, Hemagglutination, Hemolysis, Tuberculin.

1790-68
ALLERGY STUDIES ON CATTLE VACCINATED WITH KILLED MYCOBACTERIUM PARATUBECULOSIS.
A H Larsen T H Vardaman
Amer J Vet Res 21(84):744-747, HIHL. 745-747
Sep 1960 41.8 AM3A
Allergies, Cattle, Immunization.

1791-68
STAPHYLOCOCCIC ANTITOXINS IN DAIRY CATTLE. I. A REVIEW OF THE LITERATURE.
R W Brown
Amer J Vet Res 21(85):1006-1014, Hihl. 1013-1014, TABS.
Nov 1960 41.8 AM3A
Antitoxins, Cattle.

1792-68
MULTICATHETERIZATION OF HLOOD VESSELS OF SHEEP FOR METABOLIC STUDIES OF INSECTICIDES.
J B Jackson R D Radeleff W H Buck
Amer Vet Med Ass J 136 (9):440-443
01 May 1960 41.8 AM3
Hlood, Catheters, Insecticides, Sheep.

1793-68
PROBLEMS ASSOCIATED WITH THE USE OF THE NEWER INSECTICIDES FOR LIVESTOCK PESTS.
F D Radeleff
Amer Vet Med Ass J 136(11):529-537, HIHL. 536-537
O1 Jun 1960 41.8 AM3
Insecticides, Livestock.

1794-68
ERTHROCYTE SURVIVAL STUDIES IN THE HORSE, USING GLYCINE-2-C14.
C E Cornelius J J Kaneko D C Henson J D Wheat
Amer J Vet Res 21(85):1123-1124, HIHL. 1123-1124
Nov 1960 41.8 AM3A
Glycine, Horses.

1795-68
HOVINE ACHONDROPLASIA. III. STANDARDS OF METACARPAL INDEXES FOR ACHONDROPLASTIC, BRACHYCEPHALIC DWARFS AND CONTROLS. W S Tyler L M Julian P W Gregory
Amer J Vet Res 22(89):693-697, BIBL. 696-697
Jul 1961 41.8 AM3A
Achondroplasia, Cattle, Dwarfism.

1796-68
SERONUCOID LEVELS IN NORMAL AND HOSPITALIZED DOMESTIC AND EXOTIC ANTHAL SPECIES.
C E Cornelius E A Rhode J A Hishop
Amer J Vet Res 21 (85):1095-1100, HIBL. 1099-1100, TABS.
Nov 1960 41.8 AM3A
Livestock, Seromucoid.

1797-68
CLINICAL AND HEMATOLOGIC STUDIES ON PURE DICTYOCAULUS VIVIPARUS (HLOCK) LUNGWORM INFECTIONS IN CALVES.
M I Djafar L E Swanson R H Hecker
Amer Vet Med Ass J 136 (5):200-204
01 Mar 1960 41.8 AM3
Calves, Verminous bronchitis.

1798-68
CHARACTERIZATION OF VIHRIO FETUS ANTIGENS. III. STUDY OF SEROLOGIC AND BIOPHYSICAL PROPERTIES OF A POLYSACCHARIDE FRACTION IN A HEMOLYTIC SYSTEM.
M Ristic J Walker
Amer J Vet Res 21(84):884-889, TAHS.
Sep 1960 41.8 AM3A

1799-68
STUDIES OF THE EFFECTS OF CHLORTETRACYCLINE, VITAMIN E, AND VITAMIN K ON THE NUTRITION OF THE RAT. II. REPRODUCTION. E F Reber H W Norton Amer J Vet Res 21 (84):898-901, HIHL. 900-901, TAHS. Sep 1960 41.8 AM3A Chlortetracycline, Rats, Reproduction.

1800-68

THE EFFECT OF GROWTH FACTORS ON THE GROWTH OF VIHRIO FETUS.
R Zemjanis H H Hoyt
Amer J Vet Res 21(85):1109-1113, BIHL. 1112-1113
NOV 1960 41.8 AM3A
Growth factors, Vibriosis.

1801-68
NEURAL MECHANISMS IN SEXUAL HEHAVIOR. III. PREPUTIAL MUSCLES AND THEIR REPLEXES IN HULL CALVES AND RAMS.
L L Larson R L Kitchell H camphell
Amer J Vet Res 22(86):37-42
Jan 1961 41.8 AM3A
Calves, Neurology, Rams, Sex behavior.

1802-68
HYGROMYCIN H FOR REMOVING THYSANOSOMA ACTINIOIDES, PRINGED TAPEWORMS FROM FEEDLOT LAMBS.
G W Kelley L Harris M A Alexander L S Olsen
Amer Vet Med Ass J 136(10):505-507
15 May 1960 41.8 AM3
Hygromycin H, Lambs, Hygromycin H.

1803-68
A CLINICAL AND PATHOLOGIC STUDY OF 130 NEOPLASMS OF THE MOUTH AND PHARYNX IN THE DOG.
R S Hrodey
Amer J Vet Res 21(84):787-812, BIHL. 811-812, TAHS.
Sep 1960 41.8 AM3A
Dogs, Mouth, Neoplasms, Pharynx.

1804-68
RESPONSE OF HEMOGLOBIN AND CELLULAR ELEMENTS OF BLOOD AFTER HYPERVITAMINOSIS D IN MONKEYS.
G S Melville Q L Hartwig T P Leffingwell R J Young Amer J Vet Res 21 (85):1128-1131, HIHL. 1130-1131
Nov 1960 41.8 AM3A
Hlood, Cells, Hemoglobin, Monkeys.

1805-68
EYE CHANGES IN HEAGLES FOLLOWING INTRAVENOUS INJECTION OF RADIUM 226.
C E Rehfeld B J Stover G N Taylor D R Atherton G Schneebeli Amer Vet Med Ass J 136(11):562-564
O1 Jun 1960 41.8 AM3
Heagle dogs, Eyes, Radium.

806-68
THE EFFECT OF AN INDUCED STATE OF LEUKOPENIA ON THE UTERINE HACTERICIDAL ACTIVITY IN RAHHITS.
A J Winter J Simon S H McNutt L E Casida Amer J Vet Res 21(83):664-667
Jul 1960 41.8 AM3A
Leukopenia, Rabbits, Uterus.

807-68

VARIATIONS IN UTERINE RESPONSE TO EXPERIMENTAL INPECTION DUE
TO THE HORMONAL STATE OF THE OVARIES. I. THE ROLE OF
CERVICAL DRAINAGE, LEUKOCYTE NUMBERS, AND NONCELLULAR
PACTORS IN UTERINE HATERICIDAL ACTIVITY.
A J Winter A W Broome S H McNutt L E Casida
Amer J Vet Res 21(83):668-674, TAHS
Jul 1960 41.8 AMSA
Leukocytes, Ovaries, Uterus.

1808-68
A RAPID METHOD FOR DETERMINING THE VIABILITY OF FASCIOLA HEPATICA METACERCARIAE.
T Wikerhauser
Amer J Vet Res 21(84):895-897
Sep 1960 41.8 AM3A

1809-68
STABLE, STANDARDIZED, SENSITIZED CHICKEN ERYTHROCYTES FOR THE POLYVALENT SALMONELLA INDIRECT HEMAGGLUTINATION TEST.
J M Sieburth
Amer J Vet Res 21 (85):1084-1089, TABS.
Nov 1960 41.8 AM3A
Erythrocytes, Hemagglutination.

|810-68
SALT POISONING IN WISCONSIN WILDLIPE.
D O Trainer I Karstad
Amer Vet Med Ass J 136(1):14-17
01 Jan 1960 41.8 AM3
Sodium chloride, Toxicology.

Diseases

1811-68
EXPERIMENTAL EDEMA DISEASE (HEMOLYTIC ESCHERICHIA COLI TOXEMIA) IN PIGS AND IN MICE.
D W Gregory
Amer J Vet Res 21(80):88-94, BIBL. 94
Jan 1960 41.8 AM3A
Edema disease, Mice, Swine.

INTERNATIONAL SYMPOSIUM ON NEWCASTLE DISEASE VIRUS AS AN EVOLVING PATHOGEN.
Avian Dis 7(2):236
May 1963 41.8 AV5
Conferences, Newcastle disease virus, Symposia.
Sponsored by the University of Wisconsin and the American Association of Avian Pathologists with the support of the USDA and the Natl. Inst. of Health, Jul 15-17, 1963

1813-68
SEROLOGIC FINDINGS AS AN AID IN CANINE DISTEMPER IMMUNIZATION.
R B McClelland F E McClelland Jr
Amer Vet Med Ass J 141(6):722-724, 4 REFS., 4 TABS.
15 Sep 1962 41.8 AM3
Canine distemper, Dogs.

ABSTRACTS OF PAPERS PRESENTED AT THE 9TH ANNUAL WESTERN FOULTRY DISEASE CONFERENCE, FEBRUARY 1, 1960, DAVIS, CALIFORNIA.

Avian Dis 4(3):303-309

May 1960 41.8 AV5

Poultry.

Abstracts: poultry diseases

8.15-68
A PHYSIOLOGICAL DISTURBANCE IN ANIMALS RESULTING FROM INGESTION OF RHIZOCTONIA LEGUMINICOLA INFESTED RED CLOVER FORAGE.
E B Smalley R E Nichols M H Crump J N Henning
Phytopathology 52(8):753
Aug 1962 464.8 p56
Dairy cattle, Forage plants, Red clover.

816-68
THE NEUROPATHOLOGY OF EXPERIMENTAL LOUPING-ILL IN PIGS.
C DOW J B McFerran
Res Vet Sci 5(1):32-38
Jan 1964 41.8 R312
Baby pigs.

1817-68
A MUTTON AND RICE DIET FOR TREATING CHRONIC DIARRHEA IN THE DOG.
H R Michaux
Amer Vet Med Ass J 149(3):296-297, 6 REFS.
01 Aug 1966 41.8 AM3
Diarrhea, Diet, Dogs.

1818-68
A RAPID SEROLOGIC TEST FOR RINDERPEST.
S S Stone W M Moulton
Amer J Vet Res 22(86):18-22, BIBL. 21-22
Jan 1961 41.8 AM3A
Rinderpest, Serological tests.

819-68
THE PROGRAMME FOR THE ERADICATION OF BOVINE TUBERCULOSIS. Brit Vet J 116 (10):361-367
Oct 1960 41.8 V643
Cattle, Livestock diseases, Tuberculin, Tuberculosis. Compiled by the staff of the Animal Health Division of the Ministry of Agriculture, Fisheries and Food.

820-68
AVIAN DISEASES- OFFICIAL ORGAN OF AMERICAN ASSOCIATION OF AVIAN PATHOLOGISTS, INC.
P P Levine
Avian Dis 4(1):97-99
Feb 1960 41.8 AV5
Birds, Periodicals.
News item

1821-68
CLINICAL SIGNS OF RABIES IN CATTLE.
O M Radostits
Amer Vet Med Ass J 145(3):264
O1 Aug 1964 41.8 AM3
Cattle, Rabies.

1822-68
OPEN TEAT SINUS SURGERY FOR CORRECTING TEAT OCCLUSIONS.
J H Steere K M Moody J Nealy
Amer Vet Med Ass J 136(2):75-82
15 Jan 1960 41.8 AM3
Cattle, Surgery, Teats.

823-68
THE TUBERCULIN TEST.
Brit Vet J 116 (10):368-372
Oct 1960 41.8 V643
Cattle, Tuberculin test.
Compiled by the staff of the Animal Health Division of the Ministry of Agriculture, Fisheries and Pood.

1824-68

FARACIN TREATMENT OF GRAY DIARRHEA IN MINK.
J D Palarski
Amer Vet Med Ass J 136 (4):177-179
15 Feb 1960 41.8 AM3
Diarrhea, Minks.

1825-68

OXALATE FORMATION IN MOLDY FEEDSTUFFS AS A POSSIBLE FACTOR IN LIVESTOCK TOXIC DISEASE.

B J Wilson C H Wilson Amer Vet Med Ass J 141(2):259

15 Jul 1962 41.8 AM3 Feed, Livestock diseases, Molds, Oxalates.

1826-68
TREATMENT OF CANINE COCCIDIOSIS USING NITROPURAZONE AND SUL-FONAMIDES.
D Duberman
Amer Vet Med Ass J 136 (1):29-30
01 Jan 1960 41.8 AM3
Coccidiosis, Nitrofurazone, Sulfonamides, Nitrofurazone.

1827-68
TUBERCULOSIS IN DOMESTIC ANIMALS OTHER THAN CATTLE.
Brit Vet J 116 (10):373-379, 31 REFS.
Oct 1960 41.8 V643
Baby pigs, Cats, Cattle, Dogs, Goats, Horses, Sheep,
Tuberculosis.
Compiled by the staff of the Animal Health Division of
the Ministry of Agriculture, Fisheries and Food.

1828-68
TESTING AND MARKETING OF RABIES VACCINE, MODIFIED LIVE VIRUS, CHICKEN-EMBRYO ORIGIN.
Amer Vet Med Ass J 136 (11):538
01 Jun 1960 41.8 AM3
Immunization, Rabies, Rabies virus.

829-68
STREPTOCOCCUS AGALACTIAE IN COLOSTRUM OF FIRST-CALF HEIFERS.
S G Campbell S L Norcross
Amer Vet Med Ass J 145(12):1223
15 Dec 1964 41.8 AM3

BIBLIOGRAPHY

30 1830-68

Antibodies, Cattle, Colostrum.

1830-68
VACCINATION SAFETY IN SMALL DOGS, USING BIVALENT MODIFIED LIVE VIRUS VACCINE.
W J Kelber G J Charlebois
Amer Vet Med Ass J 136(3):122
Ol Feb 1960 41.8 AM3
Dogs, Immunization, Vaccines.

1831-68
THE RARLY CONTROL OF BOVINE TUBERCULOSIS.
Brit Vet J 116(10):254-360
Oct 1960 41.8 V643
Cattle, Livestock diseases, Tuberculin test, Tuberculosis.
Compiled by the staff of the Animal Health Division of the ministry of Agriculture, Fisheries and Food.

1832-68
BILATERAL FELINE EMBRYONAL SARCOMA.
R H Pitts
Amer Vet Med Ass J 136(12):616
15 Jun 1960 41.8 AM3
Cats, Sarcoma.

1833-68
IMMUNIZATION OF SHEEP AGAINST OVINE VIBRIOSIS.
V A Miller R Jensen J E Ogg
Amer Vet Med Ass J 145(5):472
01 Sep 1964 41.8 AM3
Immunization, Pregnancy, Sheep, Vibrio fetus bacterins.

1834-68
HEMOGLOBIN DETERMINATION IN SWINE ANEMIA.
J J Updike
Amer Vet Med Ass J 136(1):23-24
O1 Jan 1960 41.8 AM3
Anomia, Homoglobin, Swine.

1835-68
A 3,800 BIRD TRIAL OF A NEW COCCIDIOSTATS.
Brit Vet J 116(6):238-240
Jun 1960 41.8 V643
Coccidiosis, Nitroturazone, Zoalene, Nitroturazone, Zoalene.

1836-68
CHRONOLOGY RELATING TO USE OF DIETHYLSTILBESTROL IN POULTRY AND MEAT ANIMALS.
Amer Vet Med Ass J 136(4):168-170
15 Feb 1960 41.8 AM3
Diethylstilbestrol, History, Meat, Poultry.

1837-68
FATHOGUNESIS OF RIFT VALLEY FEVER IN LAMES.
E C Fasterday M H McGavran J R Rooney L C Murphy Amer Vet Med Ass J 141(9):1085
O1 Nov 1962 41.8 AM3
Lambs, Rift valley tever.

1838-68
LEUKEMIA AND RELATED NEOPLASMS IN THE CAT. II. MALIGNANCIES OTHER THAN LYMPHOID.
J Holzworth
Amer Vet Med Ass J 136(3):107-121, BIBL. 118-121
O1 Feb 1960 41.8 AM3
Cats, Leukemia.

839-68
MINERAL OIL ADJUVANT VACCINE FOR BACILLARY HEMOGLOBINURIAK D Claus
Amer Vet Med Ass J 145(3):265
01 Aug 1964 41.8 AM3
Cattle, Clostridium hemolyticum bacterins, Formaldehyde,
Immunization, Mineral oil.

1840-68
DETECTION OF BOVINE TUBERCULOSIS BY COMPLEMENT-FIXATION TEST.
T B Vardaman A B Larsen
Amer Vet Med Ass J 145(4):379
15 Aug 1964 41.8 AM3
Cattle, Serum, Tuberculosis.

1841-68
MINK AND RABBET DISEASES IMPORTANT.
Amer Vet Med Ass J 145(3):262
O1 Aug 1964 41.8 AM3
Minks, Rabhits, Respiratory diseases.

1842-68
RINDERPEST IN PIGS OF EUROPEAN ORIGIN.
G R Scott D E DeTray G White
Amor Vet Mod Ass J 141(9):1086
O1 Nov 1962 41.8 AM3
Rinderpest, Swine.

1843-68
EXPERIMENTALLY INDUCED MYCOPLASMOSIS OF ADULT TURKEYS.
K R Rhoades W H Kolton K L Heddleston
Amer Vet Med Ass J 145(3):265
O1 Aug 1964 41.8 AM3
Mycoplasmosis, Turkoys.

1844-68
X-RAY EXPOSURE OF SWINE.
J N Shively H Andrews A R Warner H Miller H Kurtz
Amer Vet Med Ass J 145(12):1223
15 Dec 1964 41.8 AM3
Irradiation, Swine.

1845-68
GRASS SICKNESS IN HORSES.
W C Miller
Amor Vet Med Ass J 145(3):251
O1 Aug 1964 41.8 AM3
Grass sickness, Horses, Neurotropic viruses.

1846-68
DIAGNOSIS AND INCIDENCE OF RABIES IN DOMESTIC CATS.
F E Mitcholl W S Monlux
Amor Vot Med Ass J 141(9):1088
O1 Nov 1962 41.8 AM3
Cats, Domestic short-hair cats, Rabies.

1847-68
CROOKED CALF SYNDROME.
Amor Vot Med ASS J 145(5):461
01 Sep 1964 41.8 AM3
Livestock, Lupine.

1848-68
CUTANEOUS LARVA MIGRANS.
P C Beaver
Amer Vet Med Ass J 145(9):902
O1 Nov 1964 41.8 AM3
Ancylostomatidae, Cats, Dermatitis, Dogs, Larvae, Cats.

1849-68
ZOONOTIC ASPECTS OF VIBRIOSIS.
Amor Vet Med Ass J 145(1):42
O1 Jul 1964 41.8 AM3
Cattle, Chloramphenicol, Oxytotracycline, Sheep,
Tetracycline, Vibrio fetus bacterins.

1850-68
TREATMENT OF CATTLE BLOAT.
Amor Vot Med Ass J 141(9):1092
01 Nov 1962 41.8 AM3
Antibiotics, Bloat, Cattle, Exercise (animals), Fats, Oils.

1851-68
PRESENCE OF BLOOD-SERUM ALBUMIN IN MASTITIC MILK.
P Shah G Cmorse
Amer Vet Med Ass J 145(3):265-266
O1 Aug 1964 41.8 AM3
Albumins, Blood serum, Milk, Whey.

1852-68
ORGANIC PHOSPHORUS COMPOUND POISONING IN LIVESTOCK.
R.I. Younger R.D. Radeloff
Amor Vet Hed Ass. J. 145(12):1223-1224
15 Dec. 1964 41.8 AM3
Atropine, Cattle, Goats, Phosphorus compounds, Poisoning, Sheep.

1853-68
HOG CHOLERA COLOSTRAL ANTIBODY STUDIES.
L Coggins
Amer Vet Med Ass J 145(2):166
15 Jul 1964 41.8 AM3
Baby pigs, Hog cholera.

1854-68
INFECTIOUS CANINE HEPATITIS VIRUS INFECTS MINK.
Amor Vot Med Ass J 141(10):1170
15 Nov 1962 41.8 AM3
Infectious canine hepatitis virus, Minks.

1855-68
HORSES PROTECTED FROM PIROPLASHOSIS BY VECTOR CONTROL.
Amer Vet Med Ass J 145(4):344
15 Aug 1964 41.8 AM3
Corn oil, Horses, Insect vectors, Ixodides, Lindane,
Piroplasmosis, Toxaphene, Ixodides.

1856-68
DISTRIBUTION OF CARBON-14 IN ASCARIDIA GALLI AND THE HOST CHICKEN.
N F Weatherly M F Hansen
Amer Vet Med Ass J 145(8):823
15 Oct 1964 41.8 AM3
Chickens, Nematodes.

85/-68
SUSCEPTIBILITY OF HAEMONCHUS CONTORTUS TO PHENOTHIAZINE.
D G Bennett A C Todd
Amer Vet Med Ass J 145(2):167
15 Jul 1964 41.8 AM3
Lambs, Phenothiazine.

1858-68
STAPHYLOCOCCIC ANTITOXINS IN DAIRY CATTLE. II. .
R W Brown
Amer Vet Med Ass J 141(6):731
15 Sep 1962 41.8 AM3
Antitoxins, Dairy cattle.

EPPECTIVENESS OF THIABENDAZOLE AGAINST HAEMONCHUS CONTORTUS IN SHEEP.

D P Conway
Amer Vet Med Ass J 145(2):165
15 Jul 1964 41.8 AM3
Eggs, Nematodes, Phenothiazine, Sheep.

860-68
AGGLUTINATING ANAPLASHA MARGINALE ANTIGEN.
C J Welter
Amer Vet Hed Ass J 145(12):1224
15 Dec 1964 41.8 AM3
Agglutination test, Anaplasma marginal antigens,
Anaplasmosis, Cattle.

861-68
GALLUS ADENO-LIKE VIRUS IN CHICKENS.
A Kohn
Amer Vet Med Ass J 141(10):1192
15 Nov 1962 41.8 AM3
Chickens, Gallus adeno-like virus.

862-68
DEMODEX FOUND IN VARIETY OF INTERNAL TISSUES.
F E French
Amer Vet Hed Ass J 145(8):805
15 Oct 1964 41.8 AM3
Circulatory system, Lymph nodes, Hites.

1863-68
INTESTINAL MUCORMYCOSIS IN THE MONKEY.
D B Gisler J A Pitcock
Amer Vet Med Ass J 141(8):972
15 Oct 1962 41.8 AM3
Bopkeys, Mucormycosis.

1864-68
WITRITE INTOXICATION IN CATTLE.
A C Asbury E A Rhode
Amer Vet Med Ass J 145(12):1226
15 Dec 1964 41.8 AM3
Calves, Poisoning, Sodium nitrate.

865-68
STUDIES OF DOGS WITH INFECTIOUS CANINE HEPATITIS.
S D Beckett M J Burns C H Clark
Amer Vet Med Ass J 145(7):701
01 Oct 1964 41.8 AM3
Dogs, Hepatitis.

1866-68
CAMARY POX.
J P Cavill
Amer Vet Med Ass J 145(12):1197
15 Dec 1964 41.8 AM3
Canarypox, Oxytetracycline.

1867-68
HYPODERMA AND PARTURITION COMPLICATE SWEET CLOVER POISONING.
E B Heads
Amer Vet Hed Ass J 145 (4):351
15 Aug 1964 41.8 AM3
Cattle, Hypoderma, Larvae, Parturition, Sweetclover,
Hypoderma.

1868-68
MINERAL PORTIPICATION OF FEEDS.
J K Loosli
Amer Vet Hed Ass J 145(12):1212
15 Dec 1964 41.8 AM3
Peed, Minerals, Soil amendments.

869-68
EASTERN AND WESTERN ENCEPHALOMYELITIS FOUND IN PLORIDA HORSES.
Amer Vet Hed Ass J 145(7):693
O1 Oct 1964 41.8 AM3
Equine encephalomyelitis, Florida, Viruses, Plorida.

1870-68
CANINE WHIPWORM IN MAN.
Amer Vet Med Ass J 145(12):1183
15 Dec 1964 41.8 AM3
Dithiazanine iodide, Dogs, Human diseases, Trichuris.

1871-68
EQUINE SPOROTRICHOSIS.
H H Davis W E Worthington
Amer Vet Med Ass J 145(7):692-693
O1 Oct 1964 41.8 AM3
Antibiotics, Griseofulvin, Horses, Iodine, Sporotrichosis.

1872-68
INCIDENCE OF HUMAN BRUCELLOSIS CONTINUES DECLINE.
Amer Vet Hed Ass J 145(11):1111
01 Dec 1964 41.8 AM3
Brucellosis, Human diseases.

1873-68
STREPTOCOCCUS EQUI MAY BE SOLE CAUSE OF STRANGLES.
J T Bryans
Amer Vet Med Ass J 145(7):687
Ol Oct 1964 41.8 AM3
Horses, Streptococcus bacterins.

1874-68
PESTICIDE STORAGE IN HUMAN FAT TISSUE.
W S Hoffman
Amer Vet Hed Ass J 145(11):1103
01 Dec 1964 41.8 AM3
DDT , Fats, Human diseases, Lindane, Pesticides, Storage.

1875-68
SIMIAN GIANT-CELL PNEUMONIA WITH COEXISTENT B VIRUS
INFECTION.
P J Soto G A Deauville
Amer Vet Med Ass J 145(3):266
O1 Aug 1964 41.8 AM3
B virus, Heasles virus, Honkeys.

1876-68
TRANSMISSION OF ORNITHOSIS PROM SHEEP TO TURKEYS.
K R Pierce L H Carroll R W Moore
Amer Vet Med Ass J 145(10):1024
15 Nov 1964 41.8 AM3
Infectious diseases, Ornithosis, Sheep, Turkeys, Viruses.

.877-68
VITAMIN D PREVENTS MILK PEVER BUT MAY BE TOXIC.
R Manston J M Payne
Amer Vet Med Ass J 145(7):676
01 Oct 1964 41.8 AM3
Calcium, Cattle, Milk fever.

878-68
SUBCULTURABLE SWINE BUPPY COAT CELLS WITH HOG CHOLERA VIRUS.
R W Loan D P Gustafson
Amer Vet Hed Ass J 145(10):1022
15 Nov 1964 41.8 AM3
Hog cholera virus, Immunization, Swine.

DNP EFFECTIVE AGAINST CANINE SPIROCERCOSIS.
A Darne J L Webb'
Amer Vet Med Ass J 145(6):575
15 Sep 1964 41.8 AM3
Anthelmintics, Disophenol, Dogs, Disophenol.

BIBLIOGRAPHY

30 1880-68

1880-68
BATYL ALCOHOL FOR BRACKEN POISONING QUESTIONED.
R G Dalton
Amer Vet Med Ass J 145(10):1019
15 Nov 1964 41.8 AM3
Anemia, Batyl alcohol, Cattle, Leukocytes, Pteridium.

1881-68
ESOPHAGEAL NEOPLASMS RELATED TO SPIROCERCA.
R D Horne
Amer Vet Med Ass J 145(6):586
15 Sep 1964 41.8 AM3
Dogs, Fibrosarcoma.

1882-68
BOVINE LYMPHOSARCOMA.
W C Hare
Amer Vet Med Ass J 145(10):1006
15 Nov 1964 41.8 AM3
Cattle, Lymphocytosis, Lymphosarcoma, Viruses.

18 83-68
TOXIN PRODUCTION BY LEPTOSPIRA ICTEROHAEMORRHAGIAE.
V M Arean G Sarasin J H Green
Amer Vet Med Ass J 145 (4):378
15 Aug 1964 41.8 AM3
Extracts, Guinea pigs, Toxins.

1884-68
DIABETES INSIPIDUS ATTRIBUTED TO VISCERAL LARVA MIGRANS IN A DOG.
M A Richards J C Sloper
Amer Vet Med Ass J 145(10):996
15 Nov 1964 41.8 AM3
Brain diseases, Diabetes, Dogs, Larvae, Viscera.

THERAPY OF ATROPHIC RHINITIS.
W P Switzer
Amer Vet Med Ass J 145(6):572
15 Sep 1964 41.8 AM3
Atrophic rhinitis, Bacteria, Pasteurella bacterins,
Sulfonamides, Swine, Viruses.

1886-68
YOUNG CALVES GROW FASTER WITHOUT HAY.
J L Loosli
Amer Vet Med Ass J 145(12):1230
15 Dec 1964 41.8 AM3
Calves, Growth factors, Hay, Milk.

1887-68
STINGING CATERPILLARS.
C W McMillan W R Purcell
Amer Vet Med Ass J 145(12):1267
15 Dec 1964 41.8 AM3
Calcium gluconate, Caterpillars, Hair.

LUNGWORMS ENHANCE SEVERITY OF SWINE INFLUENZA.
D P Nayak
Amer Vet Med Ass J 145(9):920
01 Nov 1964 41.8 AM3
Animal vectors, Influenza, Larvae, Swine,
Verminous bronchitis.

1889-68
BIOLOGICAL HALF-LIFE OF MOLYBDENUM-99 IN COWS.
G A Robinson A McCarter H C Rowsell E B Meads P E Riddell
Amer Vet Med Ass J 145(9) • 929
O1 Nov 1964 41.8 AM3

1890-68

HAEMQNCHOSIS IN ARTIFICIALLY INFECTED LAMBS.
D G Bennett A C Todd
Amer Vet Med Ass J 145(9):930
01 Nov 1964 41.8 AM3
Anthelmintics, Haemonchosis, Lambs, Nematodes, Phenothiazine.

1891-68
BACTERIA AND FUNGI PATHOGENIC TO MAN AND ANIMALS.
M A Soltys
Amer Vet Med Ass J 145(9):931
01 Nov 1964 41.8 AM3
Animal diseases, Bacteria, Epidemiology, Fungi,
Human diseases, Microorganisms.

1892-68
A COMPARISON OF EQUINE PIROPLASMOSIS IN SOUTH AFRICA AND THE UNITED STATES.
G P Retief
Amer Vet Med Ass J 145(9):912-916
O1 Nov 1964 41.8 AM3
Epizootic diseases, Florida, Horses, Insecticides, Ixodides, Piroplasmosis, South Africa, Florida, South Africa.

1893-68
THIRAM SENSITIVITY.
W B Shelley
Amer Vet Med Ass J 145(9):908
O1 Nov 1964 41.8 AM3
Allergies, Bactericides, Dermatitis, Eczema, Fungicides,
Skin, Thiram.

1894-68
SWINE JOWL ABSCESSES INTRODUCED BY THROAT INFECTION.
J R Collier
Amer Vet Med Ass J 145(5):455
01 Sep 1964 41.8 AM3
Jowl abscesses, Streptococcus bacterins, Swine.

895-68
BLOAT PREVENTION.
Amer Vet Med Ass J 141(11):1338
O1 Dec 1962 41.8 AM3
Bloat, Cattle, Detergents, Fats, Feeding, Lecithins,
Legumes, Oils, Silicones.

1896-68
ZOOPHILIC MICROSPORUM.
I. G George
Amer Vet Med Ass J 145 (5):426
O1 Sep 1964 41.8 AM3
Cats, Dogs, Pungi, Human diseases, Ringworm, Cats.

1897-68
THE COMPARATIVE EFFECTS OF CHLORTETRACYCLINE AND OXYTETRACYCLINE IN THE TREATMENT OF TURKEYS WITH ORNITHOSIS.
R W Moore J R Watkins
Amer Vet Med Ass J 136(11):565-568, TABS.
01 Jun 1960 41.8 AM3
Chlortetracycline, Ornithosis, Oxytetracycline, Turkeys.

1898-68
THYROXINE UTILIZATION RATE AND SOME OTHER INDICIES OF PERTPHERAL IODINE METABOLISM IN SUCKING PIGS.
A Slebodzinski
Res Vet Sci 6(3):307-315
Jul 1965 41.8 R312
Baby pigs, Iodine, Thyroxine.

1899-68
SOME OBSERVATIONS ON BOVINE ACETONAEMIA.
E J H Ford J W Boyd
Res Vet Sci 1(3):232-241
Jul 1960 41.8 R312
Ketosis.

1990-68
ACETATE UTILIZATION AND CARBON DIOXIDE PRODUCTION IN NORMAL AND KETOTIC SHEEP PREGNANT WITH TWINS.
E J H Ford D B Lindsay
Res Vet Sci 5(2):161-170, TABS
Apr 1964. 41.8 R312
Carbon dioxide, Ketosis, Sheep.

1901-68
THE RESPONSE OF CHICKENS TO VACCINATION WITH DIFFERENT CONCENTRATIONS OF PIGEON POX AND FOWL POX VIRUSES.
R W Winterfield S B Hitchner
Avian Dis 9(2):237-241
May 1965 41.8 AV5
Chickens, Fowlpox virus, Immunization, Pigeonpox vaccine, Pigeonpox virus.

1902-68
IMMUNITY STUDIES ON AVIAN INFECTIOUS SYNOVITIS.
D R Cassidy L C Grumbles
Avian Dis 3 (2):126-135, BIBL. 134-135
May 1959 41.8 AV5
Immunity, Infectious synovitis.

1903-68
THE BACTERICIDAL PROPERTIES OF UTERI AND UTERINE EXUDATES OF RABBITS WITH REDUCED LEUROCYTIC ACTIVITY.
H W Hawk G D Turner J F Sykes
Amer J Vet Res 21(82):649-656, BIBL. 655-656, TABS.

Jul 1960 41.8 AM3A Leukocytes, Rabbits, Uterus.

EXPERIMENTAL STUDIES ON THE OCCURRENCE OF STAPHYLOCOCCAL ANTITOXIN IN THE WHEY OF COWS. ANTIBOATN IN THE WHEN OF J B Derbyshire Res Vet Sci 1(4):350-354 Oct 1960 41.8 R312 Antitoxins, Cattle, Whey.

PURTHUR EXPERIMENTS ON THE COMPARATIVE POTENCY OF TISSUE FUNCTION EXPERIMENTS ON THE COMPARATIVE PO EXTRACTS FROM MICE INFECTED WITH SCRAPIL. G D Hunter G C Millson Res Vet Sci 5(2):149-153, TABS. Apr 1964 41.8 R312

Scrapie.

1906-68

1910-68

AN ANALYSIS OF AXON NUMBER AND CALIBRE IN SCIATIC NERVES AFFECTED BY FOWL PARALYSIS. P A L Wight Res Vet Sci 5(1):46-55, TABS. Jan 1964 41.8 R312

AVIAN MYCOLOGIC SURVEY IN ALBERTA.

J F Bacle C H Bigland
Amer Vet Med Ass J 141(4):476-480, 22 REFS., 7 TABS., 1 PL.
15 Aug 1962 41.8 AM3
Alberta, Birds, Fungi, Alberta.

USE OF CELL CULTURE-ADAPTED CANINE DISTEMPER VIRUS IN THE COMPLEMENT-FIXATION TEST. D T Karzon J H Gillespie R H Bussell Amer Vet Med Ass J 141(2):259 15 Jul 1962 41.8 AM3 Capine distemper virus, Complement fixation, Dogs.

1909-68 STUDIES ON A SKIN TEST FOR LEPTOSPIROSIS. D C Blenden H S Goldberg P Kuppuswamy Amer Vet Med Ass J 141(1):139-140 01 Jul 1962 41.8 AM3 Leptospirosis, Skin tests.

GENERALIZED STAPHYLOCOCCIC INFECTION IN A MONKEY. J H Vickers Amer Vet Med Ass J 141(2):256-257, 3 REFS, 2 PLS 15 Jul 1962 41.8 AM3 Erythromycin, Monkeys, Neomycin, Penicillin, Tetracycline.

1911-68 LANDMARKS IN AVIAN ENCEPBALOMYELITIS. EL Jungherr Avian Dis 4(3):304 May 1960 41.8 AV5 Avian encephalomyelitis. Historical review

THE EMERGING CLASSIFICATION OF ANIMAL VIRUSES- A REVIEW. V J Cabasso Avian Dis 9(3):471-489, BIBL. 487-489, TABS. Aug 1965 41.8 Av5 Classification, Nomenclature, Taxonomy, Viruses.

CONTRIBUTIONS OF TISSUE CULTURE TO CANINE HEPATITIS AND DISTEMPER VACCINATION. TERLER VACCIBELIA:
V J Cabasso
Amer Vet Med Ass J 136(1):1-8
01 Jan 1960 41.8 AM3
Canine distemper vaccines, Canine hepatitis vaccines, Dogs.

MYCOTOXICOSES. III. ANTIFUNGAL AND ANTIMYCOTOXIC ACTIVITY OF 8-HYDROXYQUINOLINE UNDER LABORATORY AND SIMULATED FIELD CONDITIONS. ONDITIONS.

J Forgacs H Koch R H White-Stevens
Avian Dis 7(1):56-66, TABS.
Feb 1963 41.8 AV5
Fungicides, Hycotoxicosis.

1915-68 ALKALINE BONE PHOSPHATASE ACTIVITY IN CATTLE. ALRALINE BONE PHOSPHATASE ACTIVITY IN CATTLE. G W Miller J I. Shupe Amer Vet Med Ass J 141(4):490 15 Aug 1962 41.8 AM3 Alkaline phosphatase, Bones, Dairy cattle, Fluorides, Sodium fluoride.

M ALIDAGO HARDEN ARTERIOSCLEROSIS IN CATTLE WITH JOHNE S DISEASE.
M ALIDASOGLU H W Dunne S B Guss
Amer Vet Med Ass J 141(4):490
15 Aug 1962 41.8 AM3 Arteriosclerosis, Cattle, Johne s disease.

PERSISTENCE OF NEWCASTLE DISEASE VIRUS. Amer Vet Med Ass J 141(5):614 Chickens, Newcastle disease virus.

718-68
AGAMMAGLOBULINEMIA IN A 3-MONTH-OLD CALF.
K Perk K Lobl
Amer Vet Med Ass J 141(5):614
O1 Sep 1962 41.8 AM3
Antibodies, Calves, Gamma globulins.

REVACCINATION PROCEDURES FOR INFECTIOUS LARYNGOTRACHEITIS. S B Hitchner R W Winterfield Avian Dis 4(3):291-303, TABS. May 1960 41.8 Av5
Immunization, Infectious laryngotracheitis.

1920-68
RINDERPEST.
F D Maurer Amer Vet Med Ass J 141(6):712-716, 12 REFS. 15 Sep 1962 41.8 AM3 Epizootic diseases, Immunization, Rinderpest.

1921-68 RIFT VALLEY FEVER. Amer Vet Med Ass J 141(8):960-961, 11 REFS. 15 Oct 1962 41.8 AM3 Cattle, Rift valley fever, Sheep.

LEUKEMIA AND RELATED NEOPLASMS IN THE CAT. T. LYMPHOTD MALIGNANCIES. J Holzworth Amer Vet Med Ass J 136(2):47-69 15 Jan 1960 41.8 AM3 Cats, Leukemia, Lymph.

1923-68 NITROGENOUS CONSTITUENTS OF SERUM AND URINE IN NORMAL AND SCRAPIE SHEEP. J S Slater Res Vet Sci 6(1):92-99, TABS. Jan 1965 41.8 R312 Scrapie, Serum, Sheep, Urine.

1924-68 EVALUATION OF A METHOD FOR DETERMINING MICROBIAL COUNTS OF HATCHER FLUFF. S E Magwood Avian Dis 6(1):24-32 Feb 1962 41.8 AV5

1925-68 A NOTE ON THE POSSIBLE ASSOCIATION OF MUELLERIUS CAPILLARIS WITH ENTEROTOXAEMIA. M R Gardiner I W Parnell Brit Vet J 116(7):247-251, PL. Jul 1960 41.8 V643 Sheep, Verminous bronchitis.

1926-68 IN VITRO DRUG SENSITIVITY OF BACTERIA ISOLATED FROM SMALL ANTMALS. G Maestrone D L Coffin Amer Vet Med Ass J 136(11):550-554, BIBL. 553-554 01 Jun 1960 41.8 AM3 Bacteria.

BIBLIOGRAPHY

30 1927-68

1927-68
MICROSPORUM INFECTIONS IN CATS.
J D CONFOY
AMER VET MED ASS J 145(2):115-122
15 Jul 1964 41.8 AM3
Antiseptics, Captan, Cats, Dogs, Fungi, Fungicides,
Griseofulvin, Human diseases, Ringworm.

1928-68
EXPERIMENTAL STUDIES ON A NEW FELINE VIRUS.
R A Crandell S H Madin
Amer J Vet Res 21(82):551-556, BIBL. 556
Jul 1960 41.8 AM3A
Virus diseases (animals).

1929-68
COMPARATIVE STUDY OF THREE ISOLATES WITH THE ORIGINAL FELINE VIRAL RHINOTRACHEITIS VIRUS.
R A Crandell J R Ganaway W H Niemann F D Maurer Amer J Vet Res 21(82):504-506
May 1960 41.8 AM3A Feline rhinotracheitis virus.

1930-68
FANCREATIC ATROPHY AND ABSORPTION FAILURE IN A BOXER.
C H Clark
Amer Vet Med Ass J 136(4):174-177
15 Feb 1960 41.8 AM3
Absorption (biological), Boxer dogs, Pancreas.

1931-68
IRON-DEXTRAN AND VITAMIN B COMPLEX FOR THE TREATMENT OF ANEMIA IN ADDLT SHEEF.
G K Kiesel C H Clark
Amer Vet Hed Ass J 145(5):452-455, 19 REFS., 4 TABS.
O1 Sep 1964 41.8 AM3
Anemia, Erythrocytes, Sheep.

1932-68
A MODIFIED STOLL TECHNIQUE FOR DETECTING EGGS OF SPIROCERCA LUPI.
D Cabrera D M Bailey
Amer Vet Med Ass J 145(6):573-575, 2 TABS., 2 FIGS.
15 Sep 1964 41.8 AM3
Eggs, Feces.

933-68
EVALUATION OF A PLATE TEST FOR THE DETECTION OF LEPTOSPIRAL ANTIBODIES IN BOVINE SERUM.
R D Crawford
Amer Vet Hed Ass J 145 (7):683-687, 25 REFS., 5 TABS., 1 FIG. 01 Oct 1964 41.8 AM3
Agglutination test, Antibodies, Cattle, Leptospirosis.

1934-68
UROLITHIASIS. I. INCIDENCE OF BLADDER CALCULI, URINE PROPFRTIES, AND URETHAL DIAMETERS OF FEEDLOT STEERS.
F W Frank W A Meinershagen R R Faron L H Scrivner T B Keith
Amer J Vet Res 22 (90):899-901
Sep 1961 41.8 AM3A
Beef cattle, Calculi, Urine, Urolithiasis.

1935-68
A RELATIONSHIP BETWEEN VITAMIN B12 AND REPRODUCTION, AND METHOD OF DIAGNOSING VITAMIN B12 DEFICIENCY IN INDIVIDUAL SWINE.
G L Frederick
Amer J Vet Res 21(82):478-481, BIBL. 481
May 1960 41.8 AM3A
Avitaminosis, Reproduction, Swine.

1936-68
ENCEPHALOMYELITIS OF SWINE CAUSED BY A HAEMAGGLUTINATING VIRUS. III. SEROLOGICAL STUDIES.
A Girard A S Greig D Mitchell
Res Vet Sci 5(3):294=302, TABS.
Jul 1964 41.8 R312
Hemagglutination, Serological tests, Teschen disease.

1937-68
MORTALITY IN WHITE LEGHORN FEMALES ON A FARM IN SOUTHERN ALBERTA.
C Le Q Darcel L Niilo E V Langford R Connell M Beauregard Avian Dis 4(3):258-272, TABS., PLS.
May 1960 41.8 AV5
Canada, Leghorn chickens, Mortality, Canada.

1938-68
AGAR GEL DIFFUSION STUDIES WITH A MUCOSAL DISEASE OF CATTLE I.-PRELIMINARY RESULTS WITH THE TECHNIQUE.
J H Darbyshire
Res Vet Sci 3(2):118-124, TABS
Apr 1962 41.8 R312
Agar, Mucosal disease.

1939-68
AGAR GEL DIPFUSION STUDIES WITH A MUCOSAL DISEASE OF CATTLE II. A SEROLOGICAL RELATIONSHIP BETWEEN A MUCOSAL DISEASE AND SWINE FEVER.
J H Darbyshire
Res Vet Sci 3(2):125-128
Apr 1962 41.8 R312
Agar, Cattle, Hog cholera, Mucosal disease,
Serological tests.

940-68
THE USE OF TAIL BONE BIOPSY FOR STUDYING SKELETAL DEPOSITION
OF PLUORINE IN CATTLE.
K N BURDS R Allcroft
Res Vet Sci 3(2):215-218
Apr 1962 41.8 R312
Biopsy, Cattle, Fluorine.

1941-68
OBSERVATIONS ON THE EPIDEMIOLOGY OF MASTITIS DUE TO STREPTOCOCCUS MBERIS IN A LABORATORY HERD DURING A COMPLETE LACTATION.
E J Sweeney
Res Vet Sci 5(4):483-487
Oct 1964 41.8 R312
Cattle, Epidemiology, Lactation.

1942-68
THE COCCIDIOSTATIC ACTIVITY OF 3,5-DINITRO-ORTHO-TOLUAMIDE AGAINST EIMERIA TENELLA.
L P Joyner
Res Vet Sci 1(4):363-370, TABS.
Oct 1960 41.8 R312

1943-68
L-PHASE BACTERIAL FORMS ASSOCIATED WITH INFECTIOUS SYNOVITIS IN CHICKENS AND TURKEYS.
D H Roberts
Res Vet Sci 5 (4):441-449
Oct 1964 41.8 R312
Chickens, Infectious synovitis, Turkeys,
Infectious synovitis.

1944-68
VACCINATION AGAINST JOHNE S DISEASE.
T M Doyle
Brit Vet J 116(9):294-301
Sep 1960 41.8 V643
Immunization, Johne s disease, Johnin test, Tuberculin test.

1945-68
THE INFLUENCE OF DIETARY CALCIUM-PHOSPHORUS AND TEREPHTHALIC ACID ON ANTIBIOTIC CONTROL OF EXPERIMENTAL INFECTIOUS SYNOVITIS.
K E Price Z Zolli Jr
Avian Dis 3(2):135-156, BIBL. 155-156, TABS.
May 1959 41.8 AV5
Antibiotics, Calcium, Diet, Infectious synovitis, Phosphorus, Terephthalic acid.

1946-68
THE CANINE DISTEMPER-MEASLES COMPLEX. I. IMMUNE RESPONSE OF DOGS TO CANINE DISTEMPER AND MEASLES VIRUSES.
J Warren M K Nadel E Slater S J Millian
Amer J Vet Res 21(80):111-119, BIBL. 119, TABS.
Jan 1960 41.8 AM3A
Canine distemper virus, Dogs, Immunity, Measles virus.

1947-68
SU-9064, A WATER-SOLUBLE TRANQUILIZER FOR HANDLING BROILERS
AND REPLACEMENT PULLETS.
G B Belloff B Hsu
Avian Dis 7(1):50-55, TABS.
Peb 1963 41.8 AV5
Chickens, Sedatives, Tranquilizers.

1948-68
HEMATOLOGIC FINDINGS ASSOCIATED WITH SOME COMMON DISEASES OF POULTRY.
B W Bierer T H Eleazar D E Roebuck
Amer Vet Med Ass J 145(2):141-143, 1 TAB15 Jul 1964 41.8 AM3

Anticoagulants, Blood tests, Chickens, Erythrocyte sedimentation reaction, Heart, Turkeys.

1949-68
EFFECT OF MYCOSTATIN ON CANDIDIASIS IN CHICKENS ON A HIGH-GLUCOSE DIET.

5 M Sayedain Joeffery S G Kenzy
Avian Dis 6(2):238-247, BIBL.,246-247
May 1962 41.8 Av5
Animal nutrition, Chickens, Moniliasis.

1950-68
PULMONARY HYPERTENSION AND RIGHT VENTRICULAR HYPERTROPHY IN CATTLE AT HIGH ALTITUDE.
A F Alexander D H Will R F Grover J T Reeves
Amer J Vet Res 21(81):199-204, TABS.
Mar 1960 41.8 AM3A
Altitude, Cattle, Hypertension, Hypertrophy.

1951-68

FOOT ROT IN CATTLE.

O B Adams

Amer Vet Med Ass J 136(12):589-599
15 Jun 1960 41.8 AM3

Cattle, Foot rot (animals).

1952-68
THE COMBINED EFFECT OF INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS AND PASTEURELLA HEMOLYTICA ON CATTLE.
JR Collier T L Chow M M Benjamin A W Deem
Amer J Vet Res 21(81):195-199, TABS.
Mar 1960 41.8 AM3A
Cattle.

1953-68
EXPERIMENTAL IMMUNIZATION AGAINST OVINE VIBRIOSIS. I. THE USE OF LIVE AND PORMALIN-KILLED VIBRIO FETUS VACCINES. V A Miller R J Jensen
Amer J Vet Res 22 (86):43-46
Jan 1961 41.8 AM3A
Bacterial vaccines, Immunization, Vibrio fetus bacterins, Vibriosis.

1954-68
DIABETES MELLITUS IN THE HORSE.
J B Tasker C E Whiteman B R Martin
Amer Vet Med Ass J 149(4):393-399, 10 REFS.
15 Aug 1966 41.8 Am3
Diabetes, Horses.

1955-68
OBSERVATIONS ON THE INCIDENCE, PATHOLOGY AND AETIOLOGY OF SPIROCERCA LUPI INFESTATION IN NYASALAND.
W # Pitzsimmons
Brit Vet J 116(8):272-275
Aug 1960 41.8 V643
Lizards, Nyasaland, Parasitism, Poultry, Scarabaeidae, Nyasaland.

1956-68
SALMONELLOSIS IN TURKEYS AND CHICKENS ASSOCIATED WITH CONTAMINATED FEED.
C I Boyer Jr. S. Narotsky Jr B W Bruner
Avian Dis 6 (1):43-50
Feb 1962 41.8 AV5
Chickens, Food contamination, Salmonellosis, Turkeys.

957-68
SERUH ENZYME CHANGES IN LAMBS WITH EXPERIMENTALLY-INDUCED ACUTE MUSCULAR DYSTROPHY.
J W Boyd
Res Vet Sci 5'(4):419-433
Oct 1964 41.8 R312
Enzymes, Lambs, Muscular dystrophy, Serum.

1958-68
RECENT CHANGES IN TUBERCULOSIS INCIDENCE AND MORTALITY IN SCOTLAND.
I M HacGregor
Brit Vet J 116(10):394-402, 8 TABS., PL.
Oct 1960 41.8 V643
Tuberculin test, Tuberculosis.

1959-68
CULTURE AND SEROLOGIC STUDIES ON FOUR DOGS INOCULATED WITH TWO LEPTOSPIRAL SEROTYPES, LEPTOSPIRA POMONA AND LEPTOSPIRA CANICOLA.
R W Henges M M Galton R T Haberman
Amer J Vet Res 21 (82):371-376
Hay 1960 41.8 AM3A

Dogs, Leptospirosis.

960-68
EPTDEMIOLOGY OF LEPTOSPIROSIS IN THE UNITED STATES AND CANADA.
J H Steele
Amer Vet Med Ass J 136 (6):247-252, BIBL. 251-252
15 Mar 1960 41.8 AM3
Canada, Epidemiology, Leptospirosis, United States, Canada, United States.

1961-68
RETINOBLASTONA IN A DOG, A CLINICO-PATHOLOGIC REPORT.
H C Grice J A Hutchison
Amer Vet Med Ass J 136 (9):444-447, BIBL. 446-447
O1 May 1960 41.8 AM3
Dogs.

62-68
OBSERVATIONS ON CALF DISEASES IN KENYA. PART II. CALF
SCOURS:COLI-BACILLOSIS OF CALVES, WITH SPECIAL REFERENCE TO
VACCINATION.
J F Shirlaw
Brit Vet J 116 (2):69-80, 2 TABS.
Feb 1960 41.8 V643
Calves, Colibacillosis, Immunization, Scours.

963-68
THE USE OF TRICALCIUM PHOSPHATE FOR THE ADSORPTION AND CONCENTRATION OF ERYSPELAS BACTERIN.
N K Jungk J P Towey W M Swangard C G Boylan
Amer J Vet Res 21(84):902-905
Sep 1960 41.8 AM3A
Erysipelas bacterins.

1964-68
SALMONELLA INFECTIONS IN WHITE PEKIN DUCK. A SHORT SUMMARY OF THE YEARS 1950-1960.
J I Price E. Dougherty D W Bruner
Avian Dis 6(1):145-147
Feb 1962 41.8 AV5
Ducks, Enteritis, Keel, Salmonellosis.

1965-68
ENDOBRONCHIAL INOCULATION OF CATTLE WITH VARIOUS STRAINS OF MYCOPLASMA MYCOIDES AND THE EFFECTS OF STRESS.
R D Brown
Res Vet Sci 5 (4):393-404, TABS.
Oct 1964 41.8 R312
Cattle.

966-68
ANTIGENICITY OF MYCOPLASMA MYCOIDES. I.-EXAMINATION OF
BODY FLUIDS FROM CASES OF CONTAGIOUS BOVINE PLEUROPNEUMONIA.
R N Gourlay
Res Vet Sci 5(4):473-482, TABS., BIBL.481-482
Oct 1964 41.8 R312
Cattle, Pleuropneumonia.

1967-68
EVALUATION OF A TISSE-CULTURE NEWCASTLE DISEASE VACCINE.
C Gale D I Gard E E Ose R N Berkman
Avian Dis 9(3):348-358, BIBL. 357-358, TABS.
Aug 1965 41.8 AV5
Newcastle disease virus, Tissue culture.

1968-68

NECROSIS OF THE TAIL IN THE BUFFALO. A DEFICIENCY DISEASE.

M Z Barakat A M Wahby A Abdella

Brit Vet J 116 (4):151-155, PL.

Apr 1960 41.8 V643

Buffaloes, Deficiency diseases, Egg yolks, Linseed oil,

Necrosis, Tails.

1969-68
THE SEASONAL VARIATIONS OF STRONGYLE INFESTATIONS IN NIGERIAN ZEBU CATTLE.

R P Lee J Armour J G Ross
Brit Vet J 116(1):34-46, 4 TABS., 26 REFS.
Jan 1960 41.8 V643
Nematodes, Nigeria, Weather, Zebu cattle, Nigeria.

1970-68
THE PRODUCTION AND PROPERTIES OF NEWCASTLE DISEASE VACCINE (KOMAROV STRAIN) IN NIGERIA.
A L C Thorne A J MacLeod
Brit Vet J 116 (11): 427-435, 5 TABS
Nov 1960 41.8 V643
Immunization, Newcastle disease, Newcastle disease vaccines, Nigeria.

30 1971-68

1971-68

PATHQLOGY OF THE CETACEA. A VETERINARY STUDY ON WHALES - FART I.

W R Cockrill
Brit Vet J 116 (4):133-144, 6 PLS.
Apr 1960 41.8 V643
Abscesses, Neoplasms, Parasitism.

1972-68
PATHOLOGY OF THE CETACEA. A VETERINARY STUDY ON WHALES PART II.
W R Cockrill
Brit Vet J 116(5):175-190, 240 REFS.
May 1960 41.8 V643
Abscesses, Neoplasms, Parasitism.

1973-68
MYCOTOXICOSES II. ANTIFUNGAL AND ANTIMYCOTOXIC EFFICACY
OF SELECTED COMPOUNDS.
J Forgacs H Koch R H White-Stevens
Avian Dis 6(4):420-429
Nov 196i 41.8 AV5
Fungi.

1974-68
APPARENT NATURAL INFECTION OF CORTURNIX QUAIL HENS WITH THE VIRUS OF AVIAN ENCEPHALOMYELITIS - CASE REPORT.
R W Hill R G Raymond Avian Dis 6(2):226-227
May 1962 41.8 AV5
Avian encephalomyelitis, Incubation, Virology, Wildlife diseases.

1975-68
SALMONELLOSIS IN PARAKEETS AND CANARIES TREATED WITB NITROFURANS IN THE DRINKING WATER.
D M Burkhart R W Wolfgang P D Harwood
Avian Dis 6 (3):275-283, TABS
Aug 1962 41.8 AV5
Nitrofurans, Salmonellosis.

1976-68
THE EFFECT OF CAPILLARIA OBSIGNATA, MADSEN, 1945, ON THE VITAMIN A AND ASCORBIC ACID METABOLISM IN THE DOMESTIC FOWL.
L G Chubb B M Freeman D Wakelin
Res Vet Sci 5(2):154-160, TABS.
Apr 1964 41.8 R312
Ascorbic acid.

1977-68
A CHEMOPROPHYLACTIC APPROACE TO BABESIASIS.
J F Ryley
Res Vet Sci 5(4):411-418, TAES.
Oct 1964 41.8 R312

1978-68

NODULAR LESIONS IN THE OMENTUM OF GOATS.
A N Tewari P K Ramchandra Tyer
Brit Vet J 116(5):196-197, PL.
May 1960 41.8 V643
Goats, Neoplasms, Omentum.

1979-68
THE PROTOZOAN ETIOLOGY OF BLACKBEAD.
E Goedbloed P H Bool
Avian Dis 6 (3):302-315, BIBL. 314-315, TABS.
Aug 1962 41.8 AV5
Blackhead.

1960-68
THE FIRST CASE OF TOXOPLASMA GONDII IN DOMESTIC DUCKS IN ARGEBTINA.
E G Boehringer O E Pornari I K Boehringer
Avian Dis 6(4):391-396
Nov 1962 41.8 Av5
Argentina, Ducks, Argentina.

1981-68
RABIES OF FARM LIVESTOCK IN AFRICA.
J Libeau
Brit Vet J 116(8):265-271, 29 REFS.
Aug 1960 41.8 V643
Africa, Immunization, Rabies, Africa.

1982-68
ENHANCEMENT OF INFECTIVITY OF HOG CHOLERA VIRUS.
K E Collins
Amer J Vet Res 21(82):472-474
May 1960 41.8 AM3A

May 196

Fowl cholera, Swine.

1983-68
THE PASSAGE OF HOG CHOLERA VIRUS THROUGH CELLULOSE DIALYSIS MEMBRANES.
K E Collins
Amer J Vet Res 21(82):475-477
May 1960 41.8 AM3A
Dialysis, Fowl cholera, Swine.

1984-68
DETECTION OF SWINE NASAL VIRUSES IN CELL CULTURES. W P Switzer C L Ecuyer
Amer J Vet Res 21 (85):967-970, TABS.
Nov 1960 41.8 AM3A
Swine, Virus diseases (animals).

1985-68
EVALUATION OF TYLOSIN IN PREVENTING EGG TRANSMISSION OF MYCOPLASMA GALLISEPTICUM IN CHICKENS.
Jr., H W Yoder M S Hofstad Avian Dis 9(2):291-301
May 1965 41.8 AV5
Pleuropneumonia-like organisms.

1986-68
EPIZOOTIOLOGY OF BOVINE LEUKEMIA.
V Perman
Amer Vet Med Ass J 141 (11):1329
O1 Dec 1962 41.8 AM3
Cattle, Epizootic diseases, Leukemia.

1987-68
NEW CONCEPTS OF LEPTOSPIROSIS IN ANIMALS.
E V Morse
Amer Vet Med Ass J 136 (6):241-246, BIBL. 245-246
15 Mar 1960 41.8 AM3
Leptospirosis.

1988-68
INFECTION OF AN ISOLATED INTESTINAL LOOP BY NEWCASTLE DISEASE VIRUS.
A Kohn P S Ebert
Amer J Vet Res 21(81):281-284
Mar 1960 41.8 AM3A
Intestines, Newcastle disease virus, Poultry.

1989-68
LIMY-BIRD DISEASE IN CHICKS OF THE TASMANIAN MUTTON-BIRD (PUFFINUS TENUIROSTRIS).
R Mykytowycz
Avian Dis 7(1):67-79
Feb 1963 41.8 AV5
Chicks.

1990-68
ANTIBIOTICS TO SOWS AND GILTS IMPROVES LITTERS.
Amer Vet Med Ass J 141(2):257
15 Jul 1962 41.8 AM3
Swine, Tetracycline.

1991-68
COCCIDIOIDOMYCOSIS IN 3 COYOTES.
M Straub R J Trautman J W Greene
Amer J Vet Res 22(89):811-813
Jul 1961 41.8 AM3A
Animal diseases, Coccidioidomycosis, Coyotes.

1992-68
PENICILLIN-RESISTANT STAPHYLOCOCCI COMMON IN DOGS.
Amer Vet Med Ass J 141(4):489
15 Aug 1962 41.8 AM3
Dogs, Erythromycin, Penicillin, Streptomycin, Tetracycline.

1993-68
RUMEN MAGNETS REDUCE HARDWARE DISEASE IN COWS.
Amer Vet Med Ass J 141(5):581
01 Sep 1962 41.8 AM3
Cattle, Foreign bodies, Magnets, Rumen.

1994-68
STUDIES ON TRICHOSTRONGYLUS AXEI COBBOLD, 1879). VI.
TOTAL SERUM PROTEIN, BLOOD AND PLASHA VOLUME, AND
ELECTROPBORETIC SERUM FRACTIONATION IN INFECTED AND
UNINFECTED LAMBS.
S E Leland J H Drudge Z N Wyant
Amer J Vet Res 21 (82):458-463, BIBL. 462-463
May 1960 41.8 AM3A
Electrophoresis, Lambs, Electrophoresis.

1995-68
ANTICENIC RELATIONSHIP BETWEEN CANINE DISTEMPER AND MEASLES VIRUSES, THE EPIDEMIOLOGIC SIGNIFICANCE OF.
J W Skaggs
Amer Vet Med Ass J 136(1):8-11, BIBL. 11
O1 Jan 1960 41.8 AM3
Canine distemper, Dogs, Measles Virus.

1996-68
OXIMES FOR TREATMENT OF COUMAPHOS POISONING IN CATTLE.
J S Palmer
Amer Vet Med Ass J 145(12):1206-1210, 18 REFs., 1 TAB.
15 Dec 1964 41.8 AM3
Cattle, Cholinesterases, Coumaphos, Insecticides, Oximes.

1997-68
TOXICITY OF CARBAMATE, TRIAZINE, DICHLOROPROPIONANILIDE, AND DIALLYACTAMIDE COMPOUNDS TO SHEEP.
J S Palmer
Amer Vet Med Ass J 145(9):917-920, 2 TABS., 1 FIG.
01 Nov 1964 41.8 AM3
Alopecia, Di-allate, Herbicides, Sheep, Toxicity, Triazine.

1998-68
DIETETIC LIVER CIRRHOSIS OF PIGS IN GHANA.
D Zwart H P Harding
Res Vet Sci 5(3):257-267, TABS.
Jul 1964 41.8 R312
Baby pigs, Liver.

999-68
NOTES ON SALMONELLA INFECTIONS IN ANIMALS IN GHANA.
D Zwart
Res Vet Sci 3 (4):460-469, TABS
Oct 1962 41.8 R312
Ghana, Salmonella bacterins, Ghana.

2000-68

THE INFLUENCE OF THE MAGNESIUM CONTENT OF THE BLOOD-SERUM ON THE ELECTROCARDIOGRAM IN MILK COWS.

Th. De Groot
Brit Vet J 116(6):225-236, 5 TABS., 4 FIGS.
Jun 1960 41.8 V643
Dairy cattle, Electrocardiograms, Magnesium, Milk.

OO1-68
IMMUNITY STUDY OF A NEW DILUTED FORMALIN-INACTIVATED
NEWCASTLE DISEASE VACCINE.
R Ferez-Rebelo
Avian Dis 6(3):284-289, BIBL. 288-289
Aug 1962 41.8 AV5
Aluminum hydroxide, Formaldehyde, Immunization,
Newcastle disease vaccines.

002-68
A REPORT ON BROILERS FROM PARENTS FREE OF MYCOPLASMA CALLISEPTICUM.
I M Moulthrop
Avian Dis 6(2):161-164
May 1962 41.8 AV5
Chickens, Livestock diseases,
Mycoplasma gallisepticum antigens,
Pleuropneumonia-like organisms, Chicken types (meat).

003-68
ELECTROPHORETIC STUDIES OF BOVINE SERUM. III. SERUM PROTEIN CHANGES IN ANAPLASMOSIS.
G T Dimopoullos G T Schrader L E Foote Amer J Vet Res 21(81):222-225, BIBL. 225
Mar 1960 41.8 AM3A
Blood proteins, Cattle.

2004-68
ISOLATION AND IDENTIFICATION OF LEPTOSPIRA :ARDJO FROM CATTLE IN LOUISIANA.
E E Roth M M Galton
Amer J Vet Res 21(82):422-427, BIBL. 427, TABS.
May 1960 41.8 AM3A
Cattle, Leptospirosis, Louisiana.

2005-68
A NOTE ON THE PROPHYLACTIC VACCINATION OF WILD ANIMALS.
A M Harthoorn J A Lock
Brit Vet J 116(7):252-254, 6 PLS.
Jul 1960 41.8 V643
Immunization, Rinderpest, Succinylcholine chloride.

2006-68
ACUTE MYELOGENOUS LEUKEMIA WITH HISTOPATHOLOGIC STUDIES, FOLLOWING TOTAL BODY IRRADIATION OF A DOG.
A A ROSCHER R S BOATWRIGHT H G Kupfer R H Egdhal
Amer Vet Med Ass J 136 (10):491-500, BIBL. 500
15 May 1960 41.8 AM3
Dogs, Leukemia, Radiation.

2007-68
STUDIES ON A POX DISEASE OF MONKEYS. II. ISOLATION OF THE ETIOLOGIC AGENT.
J E Prier R M Sauer R G Malsberger J M Sillaman Amer J Vet Res 21 (82):381-384, TABS.
May 1960 41.8 AM3A Monkeys, Pox.

2008-68
EXPERIMENTAL LEPTOSPIROSIS. VII. RE-EXPOSURE OF PREGNANT SOWS WITH LEPTOSPIRA POMONA.
R L Morter E V Morse R F Langham
Amer J Vet Res 21 (80):95-98
Jan 1960 41.8 AM3A
Leptospirosis, Swine.

2009-68
RECENT STUDIES ON THE VIRUS OF INFECTIOUS BRONCHITIS.
C H Cunningham
Amer J Vet Res 21(82):498-503, BIBL. 502-503
May 1960 41.8 AM3A
Infectious bronchitis virus, Virus diseases (animals).

010-68

ERADICATION OF THE TROPICAL RAT MITE ORNITHONYSSUS BACOTI (HIRST, 1913) FROM A COLONY OF MICE.

J M Harris J J Stockton
Amer J Vet Res 21(81):316-318
Mar 1960 41.8 AM3A
Mice, Ornithonyssus bacoti.

2011-68

EFFECTIVE CONCENTRATION AND TIME OF ADMINISTRATION OF DEOXYCORTICOSTERONE TRIMETHYLACETATE IN TREATMENT OF CHRONIC RESPIRATORY DISEASE.

G A Padgett D E Schoenhard Avian Dis 6 (3):258-267, TABS.
Aug 1967 41.8 AV5
Air saculitis, Chronic respiratory disease, Deoxycorticosterone.

2012-68
BOVINE ENDOMETRITIS: A REVIEW.
F L M Dawson
Brit Vet J 116 (12):448-466, 3 TABS, 91 REFS.
Dec 1960 41.8 V643
Cattle, Endometrium, Livestock diseases, Metritis.

2013-68

MAJOR BLOOD ELECTROLYTE CONCENTRATIONS IN CATTLE DURING THE DEVELOPEMENT OF HYPOMACNESAEMIA.

J R Todd R H Thompson
Brit Vet J 116(12): 437-442, 4 TABS.
Dec 1960 41.8 V643

Blood chemistry, Blood serum, Cattle, Hypomagnesemia.

2014-68
AVIAN TUBERCULOSIS.
J E Wilson
Brit Vet J 116 (10):380-393, 70 REFS.
Oct 1960 41.8 V643
Birds, Livestock diseases, Tuberculin test, Tuberculosis.

2015-68
MALIGNANT MELANOMA IN SHEEP.
J T Baxter
Brit Vet J 116 (2):67-68, 3 PL.
Feb 1960 41.8 V643
Melanosis, Sheep, Suffolk sheep.

2016-68
COLOSTRAL ANTIBODY TO RABIES IN CATTLE VACCINATED WITH HEP FLURY STRAIN OF THE VIRUS.
H E Williams
Amer J Vet Res 22(90):902-905, TABS.
Sep 1961 41.8 AM3A
Antibodies, Cattle, Immunization, Rabies, Viruses.

2017-68
SEROLOGIC INVESTIGATION OF PSEUDOTUBERCULOSIS IN SHEEP. I AGGLOTINATION TEST. F I Awad

30 2018-68

Amer J Vet Res 21(81):251-253, TABS. Mar 1960 41.8 AM3A Agglutination test, Pseudotuberculosis, Sheep.

2018-68
BIOLOGICAL ASSAYS OF EXTRACTS OF ALFALFA SAMPLES FROM BLOAT-PRODUCING PASTURES.
H E Dziuk A F Sellers C E Stevens
Amer J Vet Res 22 (87):287-297, BIBL. 296
Mar 1961 41.8 AM3A
Alfalfa, Biological assay, Bloat, Pastures, Plant extracts.

2019-68
OVINE VIRUS ABORTION.
F A TUNNICLIFF
Amer Vet Med Ass J 136(3):132-134
01 Feb 1960 41.8 AM3
Viruses.

2020-68
A VIRUS OF OVINE ABORTION-ISOLATION FROM SHEEP IN THE UNITED STATES AND CHARACTERIZATION OF THE AGENT.
H D Parker
Amer J Vet Res 21(81):243-250, BIBL. 250, TABS.
Mar 1960 41.8 Am3A
Abortion, Sheep, United States, United States.

2021-68
A POSSIBLE LINK IN THE RELATIONSHIP HETWEEN SILAGE FEEDING AND LISTERIOSIS.
M L Gray
Amer Vet Med Ass J 136(5):205-208, BIBL. 207-208
01 Mar 1960 41.8 AM3
Feeding, Listeriosis.

2022-68
NUTRITIONAL MUSCULAR DYSTROPHY IN LAMBS- EFFECT OF ADMINISTERING SELENIUM TO PREGNANT EWES.
S Young W W Hawkins Jr K F Swingle
Amer J Vet Res 22 (88):419-421
May 1961 41.8 AM3A
Lambs, Pregnancy, Selenium, Sheep.

2023-68
NUTRITIONAL MUSCULAR DYSTROPHY IN LAMBS- IMPORTANCE OF THE
EWE S DIET AT CERTAIN STACES OF GESTATION AND LACTATION.
S Young W Hawkins Jr K F Swingle
Amer J Vet Res 22(88):412-415
May 1961 41.8 AM3A
Animal nutrition, Lactation, Lambs, Pregnancy, Sheep,
White muscle disease.

2024-68
FREE AND ESTERIFIED CHOLESTEROL IN THE CEREBROSPINAL FLUID
OF GOATS AFFECTED WITH EXPERIMENTAL SCRAPIE.
D L Mould A M Dawson
Res Vet Sci 6 (3): 274-279
Jul 1965 41.8 R312
Cholesterol, Goats, Scrapie.

2025-68
RESISTANCE TO HAEMONCHOSIS IN SHEEP FOLLOWING PHENOTHIAZINE TREATHENT OF A PREVIOUS INFESTATION.
M G Christie M R Brambell W A G Charleston
Res Vet Sci 5(2):202-212, TABS.
Apr 1964 41.8 R312
Haemonchosis, Phenothiazine, Sheep, Haemonchosis.

2026-68
DUCK HEPATITIS VIRUS IN DUCK EMBRYO FIBROHLAST CULTURES.
J Hwang
Avian Dis 9(2):285-290
May 1965 41.8 AV5
Hepatitis, Tissue culture.

2027-68
EQUINE PIROPLASMOSIS.
F D Roberts L G Morehouse J H Gainer H A McDaniel
Amer Vet Med Ass J
141(11):1323-1329, 10 REFS., 8 FIGS., 1 TAB.
01 Dec 1962 41.8 AM3
Ethylenediaminetetraacetic acid, Formaldehyde, Horses,
Oxalates, Piroplasmosis.

2028-68
MIYAGAWANELLOSIS OF CATTLE IN JAPAN.
T Omori S Ishii M Matumoto
Amer J Vet Res 21(82):504-573, BIBL. 572-573
Jul 1960 41.8 AM3A
Cattle, Japan, Miyagawanella group viruses, Japan.

2029-68
THE CHICKEN-EMBRYO-LETHAL-ORPHAN (CELO) VIRUS AS A TISSUE.
CULTURE CONTAMINANT.
V J Yates D V Ablashi P W Chang D E Fry
Avian Dis 6(4):406-411
Nov 1962 41.8 av5
Tissue culture.

2030-68
CUTANEOUS ASPERGILLOSIS IN A COW.
C L Davis W H Schaefer
Amer Vet Med Ass J 141 (11):1339-1343, 5 REFS., 6 PLS.
01 Dec 1962 41.8 AM3
Aspergillosis, Cattle, Skin diseases.

2031-68
A SIMPLIFIED TECHNIQUE FOR THE SERUM-NEUTRALIZATION TEST IN INFECTIOUS BRONCHITIS.
M P Fontaine D Chabas M Fontaine A S Brion Avian Dis 7(2):203-206, TABS.
May 1963 41.8 AV5
Immunochemistry, Infectious bronchitis,
Serum neutralization test.

2032-68
THE EFFECT OF ATMOSPHERIC ENVOIRMENT UPON THE GROWTH OF MYCOPLASMA GALLISEPTICUM.
C G Fabricant P J Van Demark J Fabricant Avian Dis 6(3):328-332
Aug 1962 41.8 Av5
Carbon dioxide, Growth factors, Oxygen.

2033-68
STUDIES WITH EASTERN ENCEPHALITIS IN WHITE PEKIN DUCKLINGS.
J I Price E Dougherty 3rd
Avian Dis 4 (4):444-449, TABS.
Nov 1960 41.8 Av5
Avian encephalomyelitis, Ducklings,
Eastern equine encephalomyelitis, Pekin ducks.

034-68
THE EFFICACY OF CHEMOTHERAPEUTIC DRUGS IN THE CONTROL OF EXPERIMENTAL ULCERATIVE ENTERITIS IN QUAIL.
M C Peckham R Reynolds
Avian Dis 6(1):111-118, TABS.
Feb 1962 41.8 AV5
Drug therapy, Quail, Ulcerative enteritis.

2035-68
PLEUROPNEUMONIA-LIKE ORGANISMS ASSOCIATED WITH SYNOVITIS IN FOWLS.
R R Chalquest J Fabricant
Avian Dis 4(4):515-539, BIBL. 538-539, PLS.
NOV 1960 41.8 AV5
Pleuropneumonia-like organisms, Poultry, Synovitis.

2036-68
THE DIAGNOSIS OF INFECTIOUS BRONCHITIS OF CHICKENS BY THE AGAR GEL PRECIPITIN TEST.
R L Witter
Avian Dis 6(4):478-492, HIBL. 491-492, TABS
NOV 1962 41.8 AV5
Chickens, Infectious bronchitis, Precipitin test.

2037-68
EFFECT OF DIPPING EGGS IN ANTIBIOTIC SOLUTIONS ON PPLO
TRANSMISSION IN CHICKENS.
P P Levine J Pabricant
Avian Dis 6(1):72-85, TABS
Feb 1962 41.8 AV5
Antibiotics, Chickens, Pleuropneumonia-like organisms.

2038-68
SURVIVAL OF PPLO INJECTED INTO EGGS PREVIOUSLY DIPPED IN ANTIBIOTIC SOLUTIONS.
R R Chalquest J Fabricant
Avian Dis 3(3):257-271, BIBL. 270-271
Aug 1959 41.8 AV5
Antibiotics, Eggs, Pleuropneumonia-like organisms, Virulence.

039-68
PROPAGATION OF HOG CHOLERA VIRUS IN TISSUE CULTURE AND ITS APPLICATION TO VACCINE I. PROPAGATION OF THE VIRUS IN TISSUE CULTURE.
N Nayashi A Kawakubo H Matsuzawa K Tomizawa J Nakamura Amer J Vet Res 21(8B):591-596, BIBL. 595-596, TABS. Jul 1960 41.8 AM3A Culture media, Hog cholera, Poultry, Reproductive organs, Vaccines, Virus diseases (animals).

PAGE 58

2040-68
AN EVALUATION OF PPLO AGGLUTINATION ANTIGENS FOR THE DETECTION OF PPLO AGGLUTININS IN TURKEY SERA, 1957-60.
C W Barber
Avian Dis 6(3):349-358, BIBL. 357-358, TABS
Aug 1962 41.8 AV5
Pleuropneumonia-like organisms, Turkeys.

2041-68
THE LYMPHOFOLLICAR NODULES IN TURKEY TISSUES ASSOCIATED WITH MYCOPLASMA GALLISEPTICUM INFECTION.
C W Barber
Avian Dis 6(3):289-296, TABS.
Aug 1962 41.8 AV5
Fleuropneumonia-like organisms, Turkeys.

2042-68
SEROLOGIC SURVEY FOR INFECTIOUS BOVINE RHINOTRACHEITIS AND BOVINE VIRAL DIARRHEA ANTIBODIES.
R E Smith G W Clark I M Reynolds R A Damon Amer Vet Med Ass J 145(1):40-42
01 Jul 1964 41.8 AM3
Bovine virus diarrhea virus, Cattle, Serological tests.

043-68
XI PNEUMONIA OF PIGS.
Amer Vet Hed Ass J 141(6):750
15 Sep 1962 41.8 AM3
Pneumonia, Swine.

2044-68
LEPTOSPIRES ISOLATED FROM PREPUCE OF BOARS.
Amer Vet Med Ass J 141(4):480
15 Aug 1962 41.8 AM3
Boars, Culture media, Leptospirosis, Prepuce, Swine.

2045-68
THE GROSS AND MICROSCOPIC PATHOLOGY OF AN ORNITHOSIS VIRUS
CF LOW VIRULENCE FOR TURKEYS.
C Gale V L Sanger B S Pomeroy
Amer J Vet Res 21(82):491-497, BIBL. 497
May 1960 41.8 AM3A
Microscopy, Ornithosis, Turkeys.

2046-68
CHARACTERISTICS OF AN ORNITHOSIS VIRUS STRAIN OF LOW VIRULENCE IN TURKEYS.
C Gale
Amer J Vet Res 25(82):486-490, BIBL. 489-490, TABS.
May 1960 41.8 AM3A
Ornithosis, Turkeys.

2047-68
THE EFFECT OF DIETHYLSTILBESTROL AND PROGESTERONE ON THE GROWTH OF FOUR MASTITIS-PRODUCING BACTERIA.
N A Frank W D Pounden
Amer J Vet Res 22 (86):32-36
Jan 1961 41.8 AM3A
Bacteria, Diethylstilbestrol, Mastitis,
Plant growth inhibitors, Progesterone.

2048-68
INCCULATION OF BABY PIGS WITH LAPINIZED HOG CHOLERA VACCINE (1 ML.).
K D Weide V L Sanger A Lagace
Amer Vet Med Ass J 141(4):464-469, 16 REFs., 9 FIGS.
15 Aug 1962 41.8 AM3
Baby pigs, Hog cholera vaccines, Swine.

2049-68
SERUM TRANSAMINASE IN THE BLOOD OF LAMBS GIVEN PREVENTIVE TREATMENTS FOR WHITE MUSCLE DISEASE.
A Lagace D S Bell A L Moxon W D Pounden Amer J Vet Res 22 (89):686-688
Jul 1961 41.8 AM3A
Aminotransferases, Blood, Lambs, Serum, White muscle disease.

2050-68
ISOLATION AND CULTIVATION OF SWINE POX VIRUS IN PRIMARY CELL CULTURES OF SWINE ORIGIN.
L Kasza E B Bohl D O Jones
Amer J Vet Res 21(8.1):269-273
Mar 1960 41.8 AM3A
Swine.

2051-68
INOCULATION OF BABY PIGS WITH LAPINIZED HOG CHOLERA VACCINE (2 AND 4 HL.).
K D Weide V L Sanger

Amer Vet Med Ass J 141(4):470-475, 16 REFS., 3 TABS., 4 FIGS. 15 Aug 1962 41.8 AM3 Baby pigs, Hog cholera vaccines, Swine.

2052-68
PREVALENCE OF LEPTOSPIRAL AGGLUTINATING ANTIBODIES IN
ALLEGHENY COUNTY, PENNSYLVANIA, DOGS.
P R Schnurrenberger F B Clack H E Stegmiller J Vakilzadeh
Amer Vet Med Ass J 141 (6):717-721, 41 REFS., 3 TABS.
15 Sep 1962 41.8 AM3
Antibodies, Cats, Dogs, Leptospirosis, Pennsylvania, Cats,
Dogs, Leptospirosis, Pennsylvania.

2053-68
STUDIES ON FIVE PORCINE ENTEROVIRUSES.
E H Bohl K V Singh B B Hancock L Kasza
Amer J Vet Res 21(80):99-103, TABS.
Jan 1960 41.8 AM3A
Porcine enteroviruses, Virus diseases (animals).

2054-68
PRIMARY PULMONARY TUMORS OF THE DOG A REPORT OF SIXTEEN CASES.
S W Nielsen A Horava
Amer J vet Res 21(84):813-830, BIBL. 829-830
Sep 1960 41.8 AM3A
Dogs, Lungs.

055-68
CUTANEOUS EPITHELIAL NEOPLASMS OF THE DOG-- A REPORT OF 153
CASES.
S W Nielsen C R Cole
Amer J Vet Res 21(85):931-948, BIBL. 947-948, TABS.
Nov 1960 41.8 AM3A
Dogs, Epithelial tumors, Neoplasms.

2056-68
STUDIES ON SOME OF THE VARIABLES ASSOCIATED WITH THE FORMATION OF PLAQUES BY THE ECPO-1 VIRUS.
K V Singh E H Bohl
Amer J Vet Res 21(85):1114-1118, TABS.
Nov 1960 41.8 AM3A
Enteric cytopathogenic porcine orphan virus.

2057-68

NEUROPATHOLOGY OF CANINE TOXOPLASMOSIS.

A Koestner C R Cole

Amer J Vet Res 21 (84):831-844, BIBL. 843-844

Sep 1960 41.8 AM3A

Dogs, Nervous system diseases, Toxoplasmosis.

2058-68
MAST CELL LEUKEMIA IN THREE DOGS.
E H Fowler G P Wilson W J Roenigk A Koestner
Amer Vet Med Ass J 149(3):281-285, 15 REFS.
01 Aug 1966 41.8 AM3
Dogs, Leukemia, Mastocytoma.

2059-68

NEUROPATHOLOGY OF OVINE AND BOVINE TOXOPLASMOSIS.

A Koestner C R Cole

Can Entomol 22 (86):53-66

Jan 1963 421 C16

Cattle, Neurology, Sheep, Toxoplasmosis.

BOVINE PAPULAR STOMATITIS. III. HISTOPATHOLOGY.
R A Griesemer C R Cole
Amer J Vet Res 22 (88):482-486
Hay 1961 41.8 AM3A
Animal diseases, Bovine papular stomatitis virus,
Histopathology.

2061-68

THE EFFECT OF CHLORTETRACYCLINE ON CHICKS INFECTED WITH ASPERGILLU PUNIGATUS.

M L Wright G W Anderson N A Epps J D Mc Iconachie Avian Dis 6(1):118-126, BIBL., UIL Feb 1962 41.8 AV5
Chickens, Chlortetracycline.

062-68
MULTICENTRIC NEUROPIBROSARCOMA IN A CANADA GOOSE, BRANTA
CANADENSIS.
L N Locke
Avian Dis 7(2):196-202
May 1963 41.8 AV5
Pibrosarcoma, Geese, Neoplastic diseases.

30 2063-68

2063-68
BOVINE HEPATITIS ASSOCIATED WITH RUMINAL PROTOZOA.
H Rothenbacher
Amer Vet Med Ass J 145(6):558-563, 15 REFS., 5 FIGS.
15 Sep 1964 41.8 AM3
Cattle, Hepatitis, Protozoa.

2064-68

FOCAL NECROSIS IN THE MUCOSA OF THE GALLBLADDER IN PIGS WITH HOG CHOLERA.

A J Lueke H W Dunne
Amer J Vet Res 22(88):391-395
May 1961 41.8 AM3A
Baby pigs, Gallbladder, Hog cholera, Mucous membrane,
Necrosis.

2065-68
STUDIES OF NEWCASTLE DISEASE VIRUS STRAINS IN VARIOUS CELL CULTURES.
E Gelenczei D Bordt
Amer J Vet Res 21(85):987-991, TABS.
Nov 1960 41.8 AM3A
Culture media, Newcastle disease virus.

2066-68
SEROLOGIC RELATIONSHIP OF NEW FFLINE CYTOPATHOGENIC VIRUS.
J L Bittle C J York J W Newberne M Martin
Amer J Vet Res 21(82):547-550
May 1960 41.8 AM30
Virus diseases (animals).

2067-68

SPONTANEOUS TUMORS IN PRIMATES--A REPORT OF TWO CASES WITH NOTES ON THE APPARENT LOW INCIDENCE OF NEOPLASMS IN SUBHUMAN PRIMATES.

J W Newberne V B Robinson Amer J Vet Res 21 (80) 150-155
Jan 1960 41.8 AM3A Neoplasms.

2068-68
KILLED AND LIVE VACCINES PLUS MANAGEMENT.
R D Olsen
Avian Dis 4(3):307-308
May 1960 41.8 AV5
Poultry, Respiratory diseases, Therapeutics, Vaccines.

2069-68
OBSERVATIONS ON AVIAN APLASTIC ANEMIA IN FLORIDA.
J E Hanley
Avian Dis 6(3):251-257
Aug 1962 41.8 AV5
Anemia, Plorida, Poultry, Florida.

2070-68
SOME FACTORS THAT MAY INFLUENCE HOG CHOLERA TRANSMISSION.
R W Hughes D P Gustafson
Amer J vet Res 21(82):464-471, BIBL. 471
May 1960 41.8 AM3A
Fowl cholera, Swine.

2071-68
CULTIVATION OF HOG CHOLERA VIRUS IN SUBCULTURABLE SWINE BUF-FY COAT CELLS.
R W Loan D P Gustafson
Amer J Vet Res 22 (89):741-745, BIBL. 745
Jul 1961 41.8 AM3A
Hog cholera virus, Swine.

2072-68
A FULLY FORMED AND FUNCTIONAL RIGHT OVIDUCT IN A SINGLE COMB WHITE LEGHORN PULLET.
A A Bickford
Avian Dis 9 (3): 464-470, PL.
Aug 1965 41.8 Av5
Animal anatomy, Oviducts.

2073-68
DRUGS AND CARCASS QUALITY.
E E Stuart
Avian Dis 4(3):306
May 1960 41.8 AV5
Agricultural economics, Agricultural efficiency, Carcasses, Drugs.

2074-68
COCCIDIOSIS VACCINATION.
E E Stuart
Avian Dis 4(3):305
May 1960 41.8 AV5

Coccidiosis, Coccidiosis vaccines, Immunization.

2075-68
IS FEED MEDICATION THE ANSWER TO COCCIDIOSIS IN POULTRY.
R L Kilgore
Amer Vet Med Ass J 136 (4):164-168, TABS.
15 Feb 1960 41.8 AM3
Coccidiosis, Drug therapy, Feed, Poultry.

2076-68
EXPERIMENTS WITH A MODIFIED STRAIN OF THE VIRUS OF FOOT-AND-MOUTH DISEASE.

J B Brooksby A C B Thorp J Davie G N Mowat K J O Reilly Res Vet Sci 3(3):315-325, TABS
Jul 1962 41.8 R312
Foot-and-mouth disease.

OBSERVATIONS IN EAST AFRICAN CATTLE OF THE INNOCUITY AND IMMUNOGENICITY OF A MODIFIED STRAIN OF FOOT-AND-MOUTH DISFASE VIRUS TYPE S.A.T.2..
G N Mowat J Prydie Res Vet Sci 3 (4):368-381, TABS. Oct 1962 41.8 R312 Cattle, East africa, Foot-and-mouth disease, East africa.

2078-68
THE IMMUNIZATION OF CATTLE WITH A MOUSE-ADAPTED STRAIN OF TYPE S.A.T.2 OF THE VIRUS OF POOT-AND-MOUTH DISEASE.
W B Martin E B Davies I M Smith
Res Vet Sci 3(4):357-367, TABS
Oct 1962 41.8 R312
Cattle, Foot-and-mouth disease, Immunization.

079-68
THE DIFFERENTIATION OF SUBTYPES (VARIANTS) OF FOOT-AND-MOUTH DISEASE VIRUS BY SEROLOGIC METHODS I. COMPLEMENT FIXATION TEST.
J H Graves
Amer J Vet Res 21(83):687-690
Jul 1960 41.8 AM3A
Complement fixation, Foot-and-mouth disease virus.

2080-68
DIFFERENTIATION OF SUBTYPES (VARIANTS) OF FOOT-AND-MOUTH
DISEASE VIRUS BY SEROLOGIC METHODS II. PRECIPITIN TEST IN
AGAR GEL.
J H Graves
Amer J Vet Res 21(83):691-693
Jul 1960 41.8 AM3A
Foot-and-mouth disease virus, Precipitin test.

2081-68
APPLICATION OF THE CONGLUTINATION COMPLEMENT ABSORPTION TEST
TO DETECT HOG CHOLERA ANTIBODIES. I. THE TECHNIQUE.
S J Millan W E Englehard
Amer J Vet Res 22(88):396-400, BIBL. 399-400, TABS.
May 1961 41.8 AM3A
Antibodies, Conglutinant complement absorption test,
Hog cholera.

2082-68
THE INTERRELATIONSHIP OF DIABETES MELLITUS, OBESITY, AND PYOMETRA IN THE DOG.
L Krook S Larsson J R Rooney
Amer J vet Res 21(80):120-124, TABS.
Jan 1960 41.8 AM3A
Diabetes, Dogs, Metritis, Obesity.

2083-68
THERAPEUTICAL EXPERIMENTS WITH A NEW NITROPURAN COMPOUND (TIAPUR) IN SALMONELLOSIS OF CHICKS.
N Lannek N O Lindgren T Nilsson
Avian Dis 6(2):228-238, BIBL., 237-238
May 1962 41.8 AV5
Chickens, Nitrofurans, Salmonellosis.

2084-68
A REVIEW OF PIPERAZINE AND PIPERAZINE COMPOUNDS AS POULTRY ASCARACIDES.
D C Tudor
Avian Dis 6(4):493-499, BIBL. 498-499
Nov 1962 41.8 Av5
Anthelmintics, Piperazine, Poultry farm management.

2085-68
THE CONTROL OF PARACOLON AND PARATYPHOID INFECTIONS IN TURKEY POULTS.
M E Goetz
Avian Dis 6(1):93-99

PAGE 60

Feb 1962 41.8 AV5 Turkeys.

CLINICAL AND PATHOLOGICAL FEATURES OF SOME TUMOURS OF THE CENTRAL NERVOUS SYSTEM IN DOGS.
A C Palmer
Bes Vet Sci 1(1):36-46, BIBL. 45-46
Jan 1960 41.8 R312
Dogs, Neoplasms, Nervous system diseases.

2087-68
A NEW LOOK AT TUBERCULOSIS ERADICATION IN MICHIGAN.
A Winter
Amer Vet Med Ass J 136(9):428-430
01 May 1960 41.8 AM3
Michigan, Tuberculosis, Michigan.

088-68
IDIOPATHIC THROMBOCYTOPENIC PURPURA IN THE DOG.
G N Gowing
Amer Vet Med Ass J 145(10):987-990, 2 TABS.
15 Nov 1964 41.8 AM3
Dogs.

2089-68
CBEMOTHERAPY OF HISTOMONIASIS OF TURKEYS. II. THE VALUE OF 5-NITRO-2-FURALDEBYDE ACETYLBYDRAZONE AND 4,7-PHENANTHRO-LINE-5,6 QUINONE IN PREVENTION AND TREATMENT.
C F Hall A I Flowers I C Grumbles
Avian Dis 9 (3):400-406, TABS.
Aug 1965 41.8 AV5
Blackhead, Drug therapy, Turkeys.

2090-68
BILATERAL HYDRONEPBBOSIS RESULTING FROM A TRANSITIONAL PPITHELIAL CARCINOMA IN A DOG.
L Borov E W Ellett P J O Bara
Amer Vet Med Ass J 149 (4):412-417, 15 REFS.
15 Aug 1966 41.8 Am3
Carcinoma, Dogs, Hydronephrosis.

091-68
TOXICITY OF HELENIUM MICROCEPBALUM (SMALLHEAD SNEEZEWEED).
J W Dollahite W T Hardy J B Henson
Amer Vet Med Ass J 145(7):694-696, 2 TABS., 1 FIG.
01 Oct 1964 41.8 AM3
Livestock, Moving, Poisonous plants.

2092-68
INFECTIOUS BOVINE KERATOCONJUNCTIVITIS. I. ETIOLOGY.
J B Benson L C Grumbles
Amer J Vet Res 21 (84):761-766, BIBL. 765-766
Sep 1960 41.8 AM3A
Cattle, Etiology, Keratoconjunctivitis.

993-68
DIPPING OF HATCHING EGGS FOR CONTROL OF MYCOPLASMA GALLISEPTICUM.
C F Hall A I Flowers L C Grumbles
Avian Dis 7 (2):178-183
May 1963 41.8 AV5
Lipping, Eggs, Pleuropneumonia-like organisms.

2094-68
MYCOPLASMA GALLISEPTICUM ANTIGEN PRODUCTION.
C F Ball
Avian Dis 6 (3):359-362
Aug 1962 41.8 AV5
Antigens.

2095-68
THE RELATIONSHIP BETWEEN QUAIL BRONCBITIS VIRUS AND CBICKEN FMBBYO LETBAL ORPBAN VIRUS.
B T Du Bose L C Grumbles
Avian Dis 3(3):321-344, BIBL. 343-344, TABS.
Aug 1959 41.8 AV5
Chicken embryo lethal orphan virus, Quail bronchitis virus.

2096-68

CAGE LAYER FATIGUE (CAGE PARALYSIS).

L C Grumbles
Avian Dis 3(2):122-125
May 1959 41.8 AV5
Fatigue (physiological), Paralysis, Poultry.

097-68
THE KINETICS OF MAGNESIUM DISTRIBUTION WITBIN THE SHEEP.
A D Care
Res Vet Sci 1(4):338-349
Oct 1960 41.8 R312
Magnesium, Sheep.

THE SENSITIVITY TO CHEMOTHERAPEUTIC AGENTS OF SALMONELLAE ISOLATE FROM PIGS.

B W Smith
Bes Vet Sci 1) 2):182-183
Apr 1960 41.8 R312

Drug therapy, Salmonella bacterins, Swine.

2099-68
SERUM PROTEIN-BOUND IODINE CONCENTRATIONS IN COWS, WITH PARTICULAR REFERENCE TO HYPOMAGNESAEMIA.
JR Todd R H Thompson
Res Vet Sci 3(4):449-454
Oct 1962 41.8 R312
Cattle, Hypomagnesemia, Iodine, Serum.

2100-68
THE EXCRETION OF AUJESZKY S DISEASE VIRUS BY EXPERIMENTALLY
-INFECTED PIGS.
J B McFerran C Dow
Res Vet Sci 5(4):405-410
Oct 1964 41.8 B312
Baby pigs.

2101-68
THE NEUROPATBOLOGY OF AUJESZKY S DISEASE IN THE PIG.
C DOW J B McFerran
Res Vet Sci 3 (4):436-442
Oct 1962 41.8 B312
Baby pigs.

102-68
THE IMMUNOGENICITY OF A COMMERCIAL COCCIDIOSIS VACCINE IN CONJUNCTION WITH TRITHIADOL AND ZOALENE.
E E Stuart B W Bruins R D Keenum Avian Dis 7 (1):12-18, TABS.
Feb 1963 41.8 AV5
Coccidiosis, Coccidiosis vaccines, Immunization, Zoalene.

2103-68
STDDIES OF THE DENTION OF SHEEP, IV.-RADIOLOGICAL STUDIES
FROM INVESTIGATIONS INTO THE SHEDDING OF PERMANENT INCISOR
TEETH BY BILL SHEEP.
D Benzie E Cresswell
Res Vet Sci 3(4):416-428, TABS.
Oct 1962 41.8 B312
Radiology, Sheep.

2104-68
THE EFFECT OF NUTRITION ON MORTALITY FROM LEUKOSIS IN CBICKENS INOCULATED WITH STRAIN BPL-12 AVIAN LEUKOSIS VIRUS.
J Biely B E March
Avian Dis 9(1):119-127, BIBL. 126-127
Feb 1965 41.8 AV5
Animal nutrition, Avian leukosis complex viruses, Mortality.

2105-68
EVIDENCE OF GENETIC SUSCEPTIBILIY TO HJARRE,S DISEASE.
J Biely B E March
Avian Dis 7(1):1-5
Feb 1963 41.8 AV5
Coligranuloma, Leghorn chickens, Liver diseases.

106-68
THE VAGINAL TAMPON TEST IN THE DIAGNOSIS OF BRUCELLOSIS
AND SOME COMPABISONS WITH TWO VAGINAL MUCOUS TESTS.
R M Roberts J R Philip
Res Vet Sci 1(4):328-337, TABS.
Oct 1960 41.8 R312
Brucellosis.

2107-68

THE NEMATODE GENUS STRONGYLOIDES GRASSI, 1879 IN INDIAN LIVESTOCK. I. OBSERVATIONS ON NATURAL INFECTIONS IN THE DONKEY (EQUUS ASINUS).

B P Pande P Rai
Brit Vet J 116(8):281-283, PL.
Aug 1960 41.8 V643
Asses, India, Nematodes, Strongyloides, India, Strongyloides.

30 2108-68

2108-68
GHICK MORTALITY AND THE CONTAMINATION OF YOLKS BY MEMBERS OF THE ENTEROBACTERTACIAE.
R C Pathak C M Singh R P Tangri
Brit Vet J 116(2):81-84, 16 REFS
Feb 1960 41.8 V643
Chickens, Eggs, Omphalitis, Pullorum disease, Yolk sac.

2109-68
INCIDENCE OF INTESTINAL PARASITES IN GERMAN SHEPHERD DOGS.
R E Thomas
Amer Vet Med Ass J 136(1):25-26
01 Jan 1960 41.8 AM3
German shepherd dogs, Intestines, Parasitism.

2110-68
EFFECTS OF CERTAIN ANTIBIOTICS IN THE TREATMENT OF VIBRIOSIS
IN SHEEP.
C V Hulet S K Ercanbrack D A Price R D Humphrey F W Prank
Amer J Vet Res 21(82):441-444
May 1960 41.8 AM3A
Antibiotics, Sheep, Vibriosis.

2111-68
BOVINE TUBERCULOSIS- STUDIES OF COMPLEMENT FIXATION ANTIGENS.
T H Vardaman A B Larsen
Amer J Vet Res 22 (86):204-208, TABS.
Mar 1961 41.8 AM3A
Antigens, Cattle, Complement fixation, Tuberculosis.

21.12-68

HEMADSORPTION AND CYTOPATHIC EFFECT PRODUCED BY AFRICAN SWINE FEVER VIRUS IN SWINE BONE MARROW AND BUFFY COAT CULTURES.

W A Malmquist D Hay
Amer J Vet Res 21(80):104-108, BIBL. 108
Jan 1960 41.8 AM3A
Bone marrow, Swine.

2113-68
INFLUENCE OF HEAT TREATMENT ON THE NUMBER OF ECTOPIC LYMPHOID FOCI IN CHICKENS.
E M Denington A M Lucas
Amer J Vet Res 21 (84):734-738, BIBL. 738
Sep 1960 41.8 AM3A
Beat treatment, Poultry.

2114-68
GROWTH OF FOOT-AND-MOUTH DISEASE VIRUS IN BOVINE KIDNEY CELL SUSPENSIONS.
R E Patty H L Bachrach W R Hess Amer J Vet Res 21 (80):144-149
Jan 1960 41.8 AM3A
Foot-and-mouth disease virus, Kidneys.

2115-68

FAT NECROSIS IN MAN AND ANIMALS.

W E Ribelin F DeEds
Amer Vet Med Ass J 136(3):135-139, BIBL. 138-139
01 Feb 1960 41.8 AM3
Animal diseases, Fats, Human diseases, Necrosis.

2116-68
THE EFFECT OF GREEN FEED AND ASCORBIC ACID UPON SINGLE EXPERIMENTAL INFECTIONS OF TRICHOSTRONGYLUS AXEI (COBBOLD, 1879) IN THE LABORATORY RABBIT.
G H Rohrbacher
Amer J Vet Res 21 (80):138-143, BIBL- 142-143, TABS.
Jan 1960 41.8 AM3A
Ascorbic acid, Feed, Rabbits.

2117-68
THE ACTIVITY OF NIHYDRAZONE IN EIMERIA TENELLA INFECTIONS-LABORATORY TRIALS.
D K McLoughlin J L Gardiner
Avian Dis 9(1):21-23
Feb 1965 41.8 AV5
Coccidiosis, Nitrofurans.

2118-68
THE ACTIVITY OF AMPROLIUM IN EIMERIA TENELLA INFECTIONS-LABORATORY TRIALS.
D K Mc Loughlin J L Gardner
Avian Dis 6(2):185-190
May 1962 41.8 AV5
Coccidiosis.

2119-68

VESICULAR STOMATITIS- PATTERNS OF COMPLEMENT-FIXING AND SER-UM-NEUTRALIZING ANTIBODIES IN SERUM OF CONVALESCENT CATTLE AND HORSES.

J N Geleta A A Holbrook
Amer J Vet Res 22 (89):713-719
Jul 1961 41.8 AM3A
Cattle, Horses, Vesicular stomatitis virus.

2120-68

EXPERIMENTAL STRONGYLOIDIASIS IN SHEEP AND GOATS. IV.
MIGRATION OF STRONGYLOIDES PAPILLOSUS IN LAMBS AND
ACCOMPANYING PATHOLOGIC CHANGES FOLLOWING PERCUTANEOUS
INFECTION.
JH Turner W T Shalkop G I Wilson
Amer J Vet Res 21(82):536-546, BIBL. 545-546
May 1960 41.8 AM3A
Goats, Lamps, Sheep, Strongyloidiasis.

2121-68
STUDIES ON LEUCOCYTOZOONOSIS OF TURKEYS, WITH NOTES ON SCHIZOGONY TRANSMISSION, AND CONTROL OF LEUCOCYTOZOON SMITHI.

E E Wehr
Avian Dis 6(2):195-210, BIBL., 209-210
May 1962 41.8 AV5
Leucocytozoon disease, Turkeys.

2122-68
THE EFFECT OF OVARIAN HORMONES ON THE UTERINE DEFENSE MECHANISM DURING THE EARLY STAGES OF INDUCED INFECTION. H W Hawk G D Turner J F Sykes
Amer J Vet Res 21(82):644-648
Jul 1960 41.8 AM3A
HOTMONES, Uterus.

2123-68
STUDIES OF NEWCASTLE DISEASE. II. EVALUATION OF TWO
KILLED NEWCASTLE DISEASE VACCINES.
D H Legenhausen R J Sinkiewicz
Avian Dis 3 (1):3-11
Feb 1959 41.8 AV5
Immunology, Newcastle disease vaccines, Viral vaccines.

2124-68
STUDIES ON PASTEURELLOSIS V. TWO IMMUNOGENIC TYPES OF PASTEURELLA MULTOCIDA ASSOCIATED WITH FOWL CHOLERA. K L Heddleston Avian Dis 6(3):315-321
Aug 1962 41.8 AV5
Fowl cholera, Pasteurella bacterins, Pasteurellosis.

2125-68
CARTILAGENOUS TUMORS (CHONDROMA AND CHONDROSARCOMA) IN ANIMALS.
D J Sullivan
Amer J vet Res 21(82):531-535, BIBL. 534-535
May 1960 41.8 AM3A
Cartilage.

2126-68
FURTHER STUDIES ON THE SURVIVAL OF FOOT-AND-MOUTH DISEASE VIRUS IN MEAT.
B F Cox G E Cottral D E Bladwin Amer J Vet Res 22(87):224-226
Mar 1961 41.8 AM3A
Foot-and-mouth disease virus, Meat.

2127-68
A REVISED CONCEPT OF THE PATHOLOGIC CHANGES OF THE TONGUE IN CATTLE WITH VESICULAR STOMATITIS.
H R Seibold J B Sharp Jr
Amer J Vet Res 21 (80):35-51, BIBL. 51
Jan 1960 41.8 AM3A
Cattle, Tongue, Vesicular stomatitis virus.

2128-68
PERSISTENCE OF FOOT-AND-MOUTH DISEASE VIRUS IN BOVINE KIDNEY AND BLOOD AS RELATED TO THE OCCURRENCE OF ANTIBODIES.
WR Hess H L Bachrach J J Callis
Amer J Vet Res 21 (85):1104-1108, BIBL. 1107-1108, TABS.
Nov 1960 41.8 AM3A
Antibodies, Blood, Cattle, Foot-and-mouth disease virus.

129-68
THE INACTIVATION OF FOOT-AND-MOUTH DISEASE VIRUS WITH LIQUID ETHYLENE OXIDE.
J Tessler T L Barber O N Fellowes
Amer J Vet Res 21(83):683-686
Jul 1960 41.8 AM3A

Ethylene oxide, Foot-and-mouth disease virus.

2130-68

DETERMINATION OF THE OPTIMAL AGE RANGE OF MICE FOR USE IN EXPERIMENTAL STUDIES WITH FOOT-AND-MOUTH DISEASE VIRUS.

J A Graves G C Poppensiek
Amer J Vet Res 21(83):694-696
Jul 1960 41.8 AM3A
Age, Mice, Age.

2131-68
THE HISTOPATHOLOGY OF FOOT-AND-MOUTH DISEASE IN PREGNANT AND LACTATING MICE.
H R Seibold
Amer J Vet Res 21(84):870-877, BIBL. 877
Sep 1960 41.8 AM3A
Histology, Mice.

2132-68
TRANSFER OF IMMUNITY TO FOOT-AND-MOUTH DISEASE VIRUS FROM MATERNAL MICF TO OFFSPRING.
C H Campbell
Amer J Vet Res 21(83):697-700, TABS.
Jul 1960 41.8 AM3A
Foot-and-mouth disease virus, Immunity, Mice.

THE EFFECT OF GASEOUS ETHYLENE OXIDE ON DRIED FOOT-AND-MOUTH DISEASE VIRUS.

J Tesseler O N Fellows
Amer J Vet Res 22(89):779-782, TABS.
Jul 1961 41.8 AM3A
Ethylene oxide, Foot-and-mouth disease virus.

2134-68
ACTION BY POULTRY INSPECTION TO HELP REDUCE CONDEMNATION LOSSES.
D Decamp
Avian Dis 4(4):542-543
Nov 1960 41.8 AV5
Agricultural economics, Livestock diseases, poultry industry.

2135-66

ROUS SARCOMA AND ITS HELPER VIRUSES. (A REVIEW).
H G Purchase
Avian Dis 9(1):127-145, BIBL. 143-145
Feb 1965 41.8 AV5
Rous sarcoma, Rous sarcoma virus.

2136-68
USE OF CHICKS FOR DETECTING WESTERN EQUINE AND ST. LOUIS ENCEPHALITIS VIRUSES IN MOSQUITOES.
P. Holden G C Solomon J S Blackmore
Amer J Vet Res 21 (85): 1078-1082, BIBL. 1082, TABS.
Nov 1960 41.8 AM3A
Chicks, Culicidae, Encephalitis.

2137-68
EXPERIMENTAL BOVINE COCCIDIOIDOMYCOSIS.
K T Maddy R E Reed R J Trautman V N Snell
Amer J Vet Res 21(84):748-752, BIBL. 751-752
Sep 1960 41.8 AM3A
Cattle, Coccidioidomycosis.

2138-68
RECOVERY OF WESTERN EQUINE ENCEPHALOMYELITIS VIRUS FROM CROP WASHINGS OF EXPERIMENTALLY INPECTED PIGEIONS.
J F Winn D F Palmer
Amer J Vet Res 22 (86):139-141
Jan 1961 41.8 AM3A
Crop (poultry), Pigeons,
Western equine encephalomyelitis virus.

2139-68
ISOLATION OF LISTERIA MONOCYTOGENES PROM FOXES SUSPECTED OF HAVING RABLES.
R G Scholtens A Brim
Amer Vet Med Ass J 145(5):466-469, 1 TAB., 1 FIG.
01 Sep 1964 41.8 AM3
Encephalitis, Foxes, Rabies.

140-66
SPORIDESMIN POISONING IN THE RAT. I.-CHEMICAL CHANGES.
T F Slater U D Strauli B Sawyer
Res Vet Sci 5 (4):450-472
Oct 1964 41.8 R312
Poisons, Rats, Sporidesmin, Sporidesmin.

2141-68

VESICAL SCHISTOSOMIASIS IN THE DOMESTIC PIG.
D H Hill S D Onabamiro
Brit Vet J 116 (4):145-150, PL.
Apr 1960 41.8 V643
Parasitism, Schistosoma, Schistosomiasis, Swine,
Schistosoma.

2142-68
THE USE OF MICE FOR THE ASSAY OF ERYTHROPOIETIN IN SHEEP PLASMAS.
R H C Penny A I Wright C S Grunsell
Res Vet Sci 5 (1):89-99
Jan 1964 41.8 R312
Mice, Sheep.

2143-68
DISC PROTRUSION IN THE CAT: VENTRAL PROTRUSIONS AND RADIAL SPLITS.
A S King R N Smith
Res Vet Sci 1(4):301-307
Jul 1960 41.8 R312
Cats.

144-68
LIVER GLYCOGEN IN NORMAL AND KETOTIC COWS.
D S Kronfeld M G Simesen D L Dungworth
Res Vet Sci 1(3):242-247, BIBL 246-247
Jul 1960 41.8 R312
Ketosis, Liver glycogen.

2145-68

HABMOPHILUS INFECTIONS IN CHICKENS. III. FACTORS IN INTRAPLOCK TRANSMISSION OF INFECTIOUS CORYZA AND ITS CHEMICAL
AND ANTIBIOTIC THERAPEUSIS.

L A Page
Avian Dis 6 (2):211-225, TABS.
May 1962 41.8 AV5
Chickens, Coryza, Erythromycin, Therapeutics.

2146-68
SUSCEPTIBILITY OF JAPANESE QUAIL (COTURNIX COTURNIX JAPONICA) TO EXPERIMENTAL INFECTION WITH HAEMOPHILUS GALLINARUM.

K R Cundy
Avian Dis 9 (2):272-284, BIBL. 283-284, TABS.
May 1965 41.8 AV5
Immunization, Quail.

2147-68
HYPOCALCEMIA IN EWES - A CASE REPORT.
A C Asbury
Amer Vet Med Ass J 141(6):703-705, 4 REFS., 1 TAB.
15 Sep 1962 41.8 AM3
Calcium, Deficiency diseases, Sheep.

2148-68
INTERPRETATION OF THE CALIFORNIA MASTIS TEST RESULTS ON MILK FROM INDIVIDUAL MAMMARY QUARTERS, BUCKET MILK, AND BULK HERD MILK.

D M Gray O W Schalm
Amer Vet Med Ass J 136(5):195-198
01 Mar 1960 41.8 AM3
California mastitis test, Milk.

2149-68
INFECTIOUS MENINGO-ENCEPHALITIS IN CATTLE, CAUSED BY A HARMOPHILUS-LIKE ORGANISM.
P C Kennedy E L Biberstein J A Howarth L M Frazier Amer J Vet Res 21(82):403-409
May 1960 41.8 AM3A
Cattle, Meningo-encephalitis.

2150-68
THE PATHOLOGY OF CHICKS FED HISTAMINE.
M Shifrine H E Adler L E Ousterhout
Avian Dis 4(1):12-21, PLS.
Feb 1960 41.8 AV5
Chickens, Diet, Feed toxicity, Histamine, Poisoning.

2151-68

KERATOCONJUNCTIVITIS ASSOCIATED WITH INFECTIOUS BOVINE RHINOTRACHEITIS.

J P Hughes H J Olander M Wada
Amer Vet Med Ass J 145(1):32-39, 12 REFS., 1 TAB.

01 Jul 1964 41.8 AM3
Cattle, Infectious bovine rhinotracheitis virus,
Keratoconjunctivitis.

BIBLIOGRAPHY

30 2152-68

2152-68

HARMOPHILUS INFECTIONS IN CHICKENS. II. THE PATHOLOGY OF THE RESPIRATORY TRACT.

H E Adler L A Page
Avian Dis 6 (1):1-6
Feb 1962 41.8 AV5
Chickens, Respiratory diseases, Respiratory system.

2153-68
ISOLATION OF THE VIRUS OF ENZOOTIC ABORTION OF EWES FROM CALIFORNIA AND OBEGON SHEEP.
D G McKercher B McCowan E M Wada D R Harrold M J Studdert D Amer Vet Med Ass J 145(6):564-569, 13 REFS., 2 TABS., 1 FIG. 15 Sep 1964 41.8 AM3 Abortion, California, Miyagawanella group viruses, Oregon, Sheep, California, Oregon.

2154-68
ECOLOGIC CONSIDERATIONS IN TURKEY ORNITHOSIS.
L A Page
Amer J Vet Res 21(82):618-623, BIBL. 621-623, TABS
Jul 1960 41.8 AM3A
Ecology, Ornithosis, Turkeys.

2155-68

THE EFFECT OF INFECTIOUS BRONCHITIS VIRUS ON CHICKENS INFECTED WITH MYCOPLASMA GALLISEPTICUM.

H E Adler D A McMartin H Ortmayer
Avian Dis 6(3):267-274
Aug 1962 41.8 AV5

Chickens, Infectious bronchitis.

2156-68
IMMUNIZATION AGAINST MYCOPLASMA INFECTIONS OF PQULTRY.
B E Adler D McMartin M Shifrine
Amer J Vet Res 21(82):482-485
May 1960 41.8 AM3A
Immunization, Poultry.

2157-68

NATURE OF IMMUNITY TO NEWCASTLE DISEASE IN VACCINATED CHICKENS. Z. INFLUENCE OF RESIDUAL RESISTANCE UPON THE LEVEL AND DURATION OF IMMUNITY FOLLOWING REVACCINATION. R A Bankowski R E Corstvet Avian Dis 6(3):333-348, TABS.
Aug 1962 41.8 AV5
Chickens, Immunity, Immunization, Newcastle disease.

2158-68
A SIMPLE AND RAPID METHOD FOR STAINING BLOOD FILMS WITH NEW METHYLENE BLUE.
O W Schalm
Amer Vet Med Ass J 145(12):1184-1888, 8 FIGS.
15 Dec 1964 41.8 AM3
Blood, Blood parasites, Methylene blue, Sodium chloride.

2159-68
RESEARCH NOTE- A RAPID MACROSCOPIC PLATE AGGLUTINATION TEST FOR NEWCASTLE DISEASE- A PRELIMINARY REPORT.
L G Raggi
Avian Dis 4(3):320-323
May 1960 41.8 AV5
Agglutination test, Newcastle disease, Serodiagnosis.

2160-68
EXPERIMENTAL ORNITHOSIS IN TURKEYS.
L A Page
Avian Dis 3(1):51-66, PLS.
Feb 1959 41.8 AV5
Ornithosis, Turkeys, Virus diseases (animals).

2161-68
THERMAL INACTIVATION STUDIES ON A TURKEY ORNITHOSIS VIRUS.
L A Page
Avian Dis 3 (1):67-79
Feb 1959 41.8 AV5
Ornithosis, Turkeys, Virucides.

2162-68
THE USE OF THE HAEMAGGLUTINATION TECHNIQUE FOR THE DETECTION OF ANTIBODIES IN GASTRO-INTESTINAL NEMATODE INFECTIONS IN SHEEP.
E J L Soulsby
Brit Vet J 116(9):302-321, 6 TABS., 5 PL.
Sep 1960 41.8 V643
Antibodies, Complement fixation, Hemagglutination, Nematodes, Sheep.

2163-68
STUDIES ON ENTEROVIRUSES OF THE PIG-I.
A O Betts
Res Vet Sci 1(1):57-64
Jan 1960 41.8 R312
Baby pigs, Enteroviruses.

2164-68
ABNORMAL PIGMENTATION AND FLUORESCENCE IN CANINE TEETH.
L N Owen D E Stevenson J Keilin
Res Vet Sci 3 (2): 139-146
Apr 1962 41.8 R312
Fluorescence, Pigmentation, Teeth.

165-68
STUDIES ON ENTEROVIRUSES OF THE PIG-VI
THE RELATIONSHIP OF THE T80 STRAIN OF A SWINE POLIOENCEPHALOMYELITIS VIRUS TO SOME OTHER VIRUSES AS SHOWN BY
NEUTRALIZATION TESTS IN TISSUE CULTURES.
A O Betts
Res Vet Sci 1 (4):296-300
Oct 1960 41.8 R312
Baby pigs, Enteroviruses.

THE STRUCTURE OF CANINE DISTEMPER VIRUS.

J G Cruickshank & P Waterson & D Kanarek D M Berry
Res Vet Sci 3(4):485-486
Oct 1962 41.8 R312
Canine distemper virus.

2167-68

THE HAEMAGGLUTINATION-INHIBITION (HI) TEST AND A STUDY OF ITS USE IN EXPERIMENTAL AVIAN RESPIRATORY MYCOPLASMOSIS. A G Newnham Res Vet Sci 5(2):245-255, BIBL. 254-255 Apr 1964 41.8 R312

2168-68
INCIDENCE OF SALMONELLA IN THE HOG COLON AS AFFECTED BY HANDLING PRACTICES PRIOR TO SLAUGHTER.
R Hansen R Rogers S Emge N Jacobs
Amer Vet Med Ass J 145(2):139-140, 2 TABS.
15 Jul 1964 41.8 AM3
Colon, Salmonella bacterins, Sanitation, Swine.

2169-68
MELANOBLASTIC TUMORS IN THE DOG.
R M Mulligan
Amer J Vet Res 22(88):345-351
May 1961 41.8 AM3A
Dogs, Melanoblastoma, Neoplasms.

2170-68
A STUDY OF INFECTIOUS LARYNGOTRACHEITIS VIRUS. I. COMPARISON OF SEROLOGIC AND IMMUNGENIC PROPERTIES.
G P Shibley R E Luginbuhl C F Helmboldt
Avian Dis 6(1):59-71, TABS
Feb 1962 41.8 AV5
Serological tests.

2171-68
A STUDY OF INFECTIOUS LARYNGOTRACHEITIS VIRUS. II. THE DURATION AND DEGREE OF IMMUNITY INDUCED BY CONJUNCTIVAL VACCINATION.
G B Shibley R E Luginbuhl C F Helmboldt Avian Dis 7 (2):184-192, BIBL. 191-192, TABS. May 1963 41.8 AV5
Immunization, Infectious laryngotracheitis virus.

2172-68
ISOLATION AND SEROLOGIC TYPING OF AVIAN PLEUROPNEUMONIA-LIKE ORGANISMS (PPLO). .

M E Tourtellotte J G Aftosmis E Bacon R E Luginbuhl Avian Dis 4 (4):545
Nov 1960 41.8 AV5
Culture media, Microbiology, Pleuropneumonia-like organisms, Serodiagnosis.

173-68
THE ISOLATION OF A LATENT ADENO-LIKE VIRUS FROM CHICKEN KIDNEY CELL CULTURES.
C N Burke R E Luginbuhl C F Helmboldt
Avian Dis 9(1):31-43, BIBL. 43, TABS.
Feb 1965 41.8 AV5
Adenoviruses, Dna viruses, Tissue culture.

2174-68
AN IN VITRO NEUTRALIZATION TEST WITH AVIAN ENCEPHALOMYBLITIS VIRUS (AEV)...
J Hwang R E Luginbuhl C P Helmboldt
Avian Dis 4 (3):232-235, BIBL. 234-235
May 1964 41.8 AV5
Avian encephalomyelitis, Serum neutralization test, Viruses.

2175-68
EXPERIMENTAL BOVINE UTERINE MYCOPLASMOSIS.

B A Hartman M E Tourtellotte S W Nielsen W N Plastridge
Res Vet Sci 5(3):303-310, TABS
Jul 1964 41.8 R312

176-68
A SENSITIVE WHOLE BLOOD TEST FOR MYCOPLASMA GALLISEPTICUM.
J G Aftosmis M E Tourtellote R E Jacobs
Avian Dis 4(4):485-491, TABS.
Nov 1960 41.8 AV5
Blood tests, Diagnosis, Mycoplasma gallisepticum antigens.

177-68

FLAQUE FORMATION OF AVIAN ENCEPHALOMYELITIS VIRUS IN A CHICKEN EMBRYO KIDNEY CELL CULTURE SYSTEM.

J Hwang R E Luginbuhl E L Jungherr
Avian Dis 3 (4):484
Nov 1959 41.8 Av5
Avian encephalomyelitis, Culture media, Kidneys.

1178-68

NEUROFIEROMATOSIS IN A TURKEY.

C P Helmboldt M N Frazier

Amer Vet Med Ass J 141(9):1073-1076, 13 REFS., 8 PLS.
01 Nov 1962 41.8 AM3

Neurofibromatosis, Turkeys.

2179-68

RED SPOT IN POULTRY.
M S Cover
Amer Vet Med Ass J 136(12):626-627
15 Jun 1960 41.8 AM3
Poultry.

2180-68
STUDIES ON PARENTAL IMMUNITY TO INFECTIOUS LARYNGOTRACHEITIS
OF CHICKENS.
W J Benton M S Cover W C Krauss
Avian Dis 4(4):491-499, TABS.
Nov 1960 41.8 AV5
Chickens, Immunity, Infectious laryngotracheitis.

2181-68
THE INCIDENCE OF AVIAN LEUKOSIS IN BROILERS AT PROCESSING.
W J Benton M S Cover W C Krauss
Avian Dis 6(4):430-435, TABS
Nov 1962 41.8 AV5
Avian leukosis complex, Chicken types (meat).

2182-68
STUDIES OF STAPHYLOCOCCI OF CANINE ORIGEN WITH PARTICULAR
REFERENCE TO THE NATURE AND DISTRIBUTION OF THEIR
HABMOLYSINS.
G Fraser
Res Vet Sci 5(3):365-375, TABS
Jul 1964 41.8 R312
Hemolysins.

2183-68
THE EFFECT OF CENTRALLY ACTING DRUGS ON THE CONCENTRATION OF GLUCOSE AND EOSINOPHILS IN HORSE BLOOD.
P Alexander
Res Vet Sci 1(4):355-362
Oct 1960 41.8 R312
Drug therapy, Eosinophils, Glucose, Horses, Eosinophils.

2184-68
ADENOMYOEPITHELIOMA IN THE DOG.
J Simon L Albert
Amer Vet Med Ass J 136(2):71-72
15 Jan 1960 41.8 AM3
Dogs.

185-68
STUDIES OF ANAPLASMOSIS. I. PILTRATION OF THE CAUSATIVE AGENT.
M Ristic
Amer J Vet Res 21(84):890-894
Sep 1960 41.8 AM3A
Anaplasmosis, Etiology.

2186-68
STRUCTURAL CHARACTERIZATION OF ANAPLASMA MARGINALE IN ALUTE AND CARRIER INFECTIONS.
M Ristic
Amer Vet Med Ass J 136(9):417-425, BIBL. 425
01 May 1960 41.8 AM3
Microorganisms.

2187-68
SEROTYPES OF AVIAN PLEUROPNEUMONIA-LIKE ORGANISMS.
A L Kleckner
Amer J Vet Res 21(81):274-280, BIBL. 280, TABS.
Mar 1960 41.8 AM3A
Pleuropneumonia.

188-68
EVALUATION OF CYANACETHYDRAZIDE FOR REMOVAL OF LUNGWORMS FROM NATURALLY INFECTED SHEEP.
H E Jordan
Amer Vet Med Ass J 136 (10):508-510
15 May 1960 41.8 AM3
Sheep, Verminous bronchitis.

2189-68
A TANNIC ACID MODIFIED HEMAGGLUTINATION TEST FOR INFECTIOUS BRONCHITIS OF CHICKENS.
W E Brown S C Schmittle J W Foster
Avian Dis 6(1):99-106, TABS.
Feb 1962 41.8 AV5
Chickens, Hemagglutination, Infectious bronchitis, Tannic acids.

2190-68
THE INFLUENCE OF COCCIDIOSIS ON FEED AND WATER INTAKE OF CHICKENS.
W M Reid M Pitois
Avian Dis 9(3):343-348
Aug 1965 41.8 AV5
Animal nutrition.

2191-68
LOUPING-ILL: THE RED DEER (CERVUS ELAPHUS) AS AN ALTERNATIVE HOST OF THE VIRUS IN SCOTLAND.
A M Dunn
Brit Vet J 116(8):284-287
Aug 1960 41.8 V643
Ixodes ricinus, Louping ill virus, Virus diseases (animals),
Ixodes ricinus.

2192-68
A KILLED VACCINE AGAINST PARATUBERCULOSIS (JOHNE S DISEASE)
IN SHEEP.
B Sigurdsson
Amer J Vet Res 21(80):54-67, TABS.
Jan 1960 41.8 AM3A
Immunization, Johne s disease, Sheep.

193-68
OVINE VIRAL ABORTION - INCIDENCE AND DISTRIBUTION IN IDAHO.
F W Frank W A Meinershagen R R Baron A K Kuttler C V Hulet
Amer Vet Med Ass J 141(1):135-138, 7 REFS., 2 TABS., 4 FIGS.
01 Jul 1962 41.8 AM3
Abortion, Miyagawanella group viruses, Sheep.

2194-68
RHINOSPORIDIOSIS IN A HORSE.
D D Myers D V Simon M T Case
Amer Vet Med Ass J 145(4):345-347, 3 PIGS.
15 Aug 1964 41.8 AM3
Cattle, Fungi, Horses, Human diseases, Mules,
Rhinosporidiosis.

2195-68
RESISTANCE OF THE OPOSSUM TO RABIES VIRUS.
P D Beamer C O Mohr T R B Barr
Amer J Vet Res 21(82):507-510
May 1960 41.8 AM3A
Opossums, Rabies virus.

2196-68
CANINE HISTOPLASMOSIS WITH INTESTINAL INVOLVEMENTS.
H E Rhoades L C Helper T E Pritz
Amer Vet Med Ass J 136(4):171-173
15 Feb 1960 41.8 AM3
Dogs, Histoplasmosis, Intestines.

2197-68
FOWLPOX VIRUS NEUTRALIZATION ANTIBODY AND VIREMIA IN
TURKEYS.
E I Pilchard L E Hanson Jr J O Alberts

30 2198-68

Avian Dis 6(4):396-402, BIBL.,401-402, TABS Nov 1962 41.8 AV5 Antibodies, Fowlpox vaccines, Fowlpox virus, Turkeys, Viremia-

STUDIES IN ANAPLASMOSIS. II. ELECTRON MICROSCOPY OF ANA-PLASMA MARGINALE IN DEER.
M Ristic A M Watrach Amer J Vet Res 22 (86):109-116, BIBL. 115 Jan 1961 41.8 AM3A Anaplasma marginal antigens, Anaplasmosis, Deer, Electron microscopy.

2199-68

199-68
TBE STRUCTURE OF ANIMAL VIRUSES.
A M Watrach L E Hanson
Avian Dis 9(1):193-201, BIBL. 201, PL.
Feb 1965 41.8 AV5
Nucleic acids, Virology, Viruses.

ENTEROVIRUSES OF SHINE. III. STUDIES ON EXPERIMENTAL INFECTION IN PIGS.

G W Beran H A Wenner A A Werder N R Underdahl Amer J Vet Res 21 (84):723-733, BIBL. 732-733, TABS. Sep 1960 41.8 AM3A Enteroviruses, Swine.

2201-68

COI-68
ENTEROVIRUSES OF SWINE. II. STUDIES ON THE NATURAL HISTORY
OF INFECTION AND IMMUNITY.
B A Wenner G W Beran A A Werder
Amer J Vet Res 21(85):958-966, TABS.
Nov 1960 41.8 AM3A
Enteroviruses Immunity Infections discours. Shine Enteroviruses, Immunity, Infectious diseases, Swine.

2202-68

BIOCHEMICAL AND NEUROPATHOLOGICAL CHANGES IN SWAYBACK. JG Bowell A N Davison J Oxberry Res Vet Sci 5(3):376-384, TABS. Jul 1964 41.8 R312 Biochemistry, Swayback.

2203-68

A COMPARISON OF EXPERIMENTAL ANAPHYLACTIC SHOCK IN GUINEA-PIGS WITH NATURALLY-OCCURRING OEDEMA DISEASE AND HAEHORRHAGIC GASTRO-ENTERITIS IN PIGS. J R Thomlipson A Buxton Res Vet Sci 3(2):186-202 Apr 1962 41.8 R312 Anaphylaxis, Baby pigs, Guinea pigs.

2204-68
THE DISTRIBUTION OF HISTAMINE IN THE SHEEP STOMACH. Res Vet Sci 3(4):382-389, BIBL. 388-389 Oct 1962 41.8 R312 Bistamine, Sheep.

2205-68

THE RENAL CLEARANCE OF URIC ACID AND P-AMINO-HIPPURATE IN THE FOWL. Res Vet Sci 1(4):308-314, TABS. Oct 1960 41.8 R312 Uric acid.

2206-68

TBE BLOOD CELLS OF THE TURKEY.
A Venkataratnam M J Clarkson
Res Vet Sci 3 (4):455-459
oct 1962 41.8 R312
Blood cells, Turkeys.

2207-68

REPORT OF THE COMMITTEE ON NOMENCLATURE AND REPORTING OF DISEASES NORTHEASTERN CONFERENCE ON AVIAN DISEASES JUNE H L-Chute M S Cover G H Snoeyenbos C I Angstrom Avian Dis 4(4):549-554 Nov 1960 41.8 AV5 Animal diseases, Birds, Epizootic diseases, Nomenclature, Poultry.

2208-68

THE LABORATORY APPLICATION OF ANHYDROUS SALMONELLA PULLORUM ANTIGEN. M Gershman B L Chute R F Cuozzo Avian Dis 6(1):107-111

PAGE 66

Feb 1962 41.8 AV5

THE PATHOLOGY OF MYCOTOXICOSIS OF CERTAIN FUNGI IN CHICKENS. H L Chute S L Hollander E S Barden D C O Meara Avian Dis 9(1):57-66, TABS. Feb 1965 41.8 AV5

Mycotoxicosis.

2210-68

NEUROTROPISM OF EQUINE INFLUENZA-ABORTION VIRUS IN INFANT EXPERIMENTAL ANIMALS.

B C Hatziolos R L Reagan Amer J Vet Res 21(84):856-861 Sep 1960 41.8 AM3A Equine influenza viruses, Laboratory animals.

2211-68

A CASE REPORT -- LYMPHOBLASTIC LYMPBOMA N A BOVINE FETUS. B C Hatziolos Amer Vet Med Ass J 136(8):369-375, BIBL. 374-375 15 Apr 1960 41.8 AM3 Cattle, Lymphoma.

MORPHOLOGIC AND HISTOCHEMICAL STUDIES OF SKELETAL LESIONS IN RATS FED SWEET PEA (LATHYRUS ODORATUS) SEEDS. A F Gardner Amer J Vet Res 1(81):298-305, BIBL. 304-305 Mar 1960 41.8 AM3A Animal morphology, Histochemistry.

2213-68

CONTROL OF EXPERIMENTAL MYCOPLASMA GALLISEPTICUM INFECTION IN YOUNG CHICKENS WITH TYLOSIN AND OTHER ANTIBIOTICS.

O M Olesiuk H Van Roekel N K Chandiramani Avian Dis 9 (1):67-77, TABS.
Feb 1965 41.8 AV5
Chlortetracycline, Erythromycin, Mycoplasma gallisepticum antigens.

2214-68 ISOLATION AND CLASSIFICATION OF AVIAN ENTERIC CYTOPATHOGENIC AGENTS.
P J Taylor B W Calner Avian Dis 6(1):51-58, TABS. Feb 1962 41.8 AV5

2215-68

LEPTOSPIROSIS IN HAMSTERS ON DIETS CONTAINING VARIOUS LEVELS OF RIBOFLAVIN. R E Smith I M Reynolds Amer J Vet Res 22(89):800-806 Amer 0 vet 41.8 AM3A Animal nutrition, Hamsters, Leptospirosis, Riboflavin.

2216-68

210-08
ARTICULAR GOUT IN TURKEYS: A CASE REPORT.
G H Snoeyenbos I M Reynolds T Teianabos
Avian Dis 6(1):32-36
Feb 1962 41.8 AV5 Gout, Turkeys.

TT-68
THE IMMUNOLOGICAL ANTIGENICITY OF RAPID HEAT INACTIVATED VIRUSES. I. NEWCASTLE DISEASE VIRUS.
R M Dutcher R B Read Jr W Litsky
Avian Dis 4(3):205-217, TABS.
May 1960 41.8 AV5
Antigens, Immunology, Newcastle disease vaccines,
Newcastle disease virus, Viruses.

2218-68

STUDIES ON AVIAN ENCEPHALOMYELITIS. IV EPIZOOTIOLOGY. Avian Dis 4(4):325-347
Nov 1960 41.8 AV5 Avian encephalomyelitis, Epizootic diseases.

2219-68

SOME PHYSICOCHEMICAL PROPERTIES OF TURKEY HEPATITIS VIRUS. T Tzianabos G B Snoeyenbos Avian Dis 9(1):152-156, TABS. Feb 1965 41.8 AV5 Turkeys, Virus hepatitis.

2220-68

FURTHER STUDIES OF VIRUS HEPATITIS OF TURKEYS.
G H Snoeyenbos H I Basch
Avian Dis 4(4):477-485, TABS.

Nov 1960 41.8 AV5 Turkeys, Virus hepatitis.

2221-68
CLINICAL MANIPESTATIONS OF EASTERN EQUINE ENCEPHALOMYELITIS
IN PHEASANTS.
G P Faddoul G W Pellows
Avian Dis 9(4):530-535, BIBL. 534-535
Nov 1965 41.8 AV5
Arboviruses, Eastern equine encephalomyelitis, Pheasants.

2222-68
APOCRINE CYSTIC CALCINOSIS: THE SWEAT GIAND ORIGIN OF CALCINOSIS CIRCUMSCRIPTA IN THE DOG.
G S Christie A G Jabara
Res Vet Sci 5(3):317-322
Jul 1964 41.8 R312

2223-68

NEW WATERPOWL HOST RECORDS FOR SARCOCYSTIS RILEYI AND A REVIEW OF SARCOSPORIDIOSIS IN BIRDS.
G Cornwell

Avian Dis 7(2):212-216, BIBL. 215-216

Hay 1963 41.8 AV5

Aquatic birds, Epizootic diseases, Sarcosporidiosis.

2224-68
A COMPARISON OF THE EFFECTS OF FOUR STRAINS OF NEWCASTLE DISEASE VIRUS ON A STRAIN OF BUMAN EPITHELIAL-LIKE CELLS (MABEN) AND STRAIN L MOUSE FIBROBLASTS.
P Subramanyam B S Pomeroy
Amer J Vet Res 21 (80):133-137, BIBL. 137
Jan 1960 41.8 AM3A
Epithelium, Newcastle disease virus.

2225-68
THE TRANSENTERAL ENTRANCE OF THE VIRUS IN HOG CHOLERA.
E C H Kernkamp
Amer Vet Med Ass J 136(4):149-155
15 Feb 1960 41.8 AM3
Hog cholera.

226-68
THE EXPERIMENTAL REPLACEMENT OF SEGMENTAL DEFECTS IN BONE WITH A PLASTER OF PARIS-EPOXY RESIN MIXTURE.
I M G Gourley J P Arnold
Amer J Vet Res 21(85):1119-1122
NOV 1960 41.8 AM3A
Bones, Epoxy resins, Plaster of paris.

227-68

FACTORS INFLUENCING IMMUNITY IN BOG CHOLERA VACCINATION.
D E Rodabaugh H B Wright C Elder
Amer Vet Med Ass J 136(12):617-621, BIBL. 620-621, TABS.
15 Jun 1960 41.8 AM3
Fowl cholera, Swine.

228-68
THE EFFECT OF SALMONELLA CHOLERAESIUS INFECTION ON IMMUNITY TO HOG CHOLERA.
D E Rodabaugh H B Wright C Elder
Amer Vet Med Ass J 145(3):252-257, 2 TABS., 6 PIGS.
01 Aug 1964 41.8 AM3
Bog cholera vaccines, Hog chclera virus, Immunity, Swine.

2229-68
FURTHER OBSERVATIONS ON IMMUNITY TO BOVINE CUTANEOUS PAPILLOMATOSIS.
C Olson D Segre L V Skidmore
Amer J Vet Res 21 (81):233-242, BIBL. 241-242
Mar 1960 41.8 AM3A
Bovine papilloma virus, Cattle, Immunity.

230-68
BLOOD ENZYME INTERRELATIONSHIPS IN WHITE MUSCLE DISEASE.
C Blincoe D W Marble
Amer J Vet Res 21(84):866-869, TABS.
Sep 1960 41.8 AM3A
Blood, Enzymes, White muscle disease.

2231-68
PREVENTION OF WHITE MUSCLE DISEASE IN LAMBS BY ORAL AND SUBCUTANEOUS ADMINISTRATION OF SELENIUM.
K L Kuttler D W Marble
Amer J Vet Res 20 (82):437-440
May 1960 41.8 AM3A
Lambs, Selenium, White muscle disease.

2232-68

CULTURAL CBARACTERS OF SCRAPIE MOUSE BRAIN.
E J Field G D Windsor
Res Vet Sci 6(1):130-132
Jan 1965 41.8 E312
Mice, Scrapie.

2233-68

RBABDITIC DERMATITIS IN THE DOG.

R M Schwartzman

Amer Vet Med Ass J 145(1):25-28
01 Jul 1964 41.8 AM3

Chlordane, Dermatitis, Dogs.

2234-68
OBSERVATIONS ON A CASE OF PRIMARY ADRENOCORTICAL
INSUFFICIENCY IN A DOG.
R R Marshak G D Webster J F Skelley
Amer Vet Med Ass J 136(6):275-280, BIBL. 280, TABS.
15 Mar 1960 41.8 AM3
Adrenal cortex, Dogs.

2235-68
STUDIES ON A POX DISEASE OF MONKEYS. I. PATBOLOGY.
R M Sauer J E Prier R S Buchanan A A Creamer
Amer J Vet Res 21(82):377-380
May 1960 41.8 AM3A
Monkeys, Pox.

236-68
SURVEY OF CARDIOVASCULAR DISEASE IN DOGS--PRELIMINARY REPORT
ON THE FIRST 1,000 DOGS SCREENED.
D K Detweiler K Bubben D F Patterson
Amer J Vet Res 21(82):329-359, BIBL. 358-359, TABS.
May 1960 41.8 AM3A
DOGS.

2237-68
CUTANEOUS CANDIDIASIS IN A DOG.
F Kral J P Uscavage
Amer Vet Med Ass J 136 (12):612-615
15 Jun 1960 41.8 AM3
Dogs, Moniliasis.

2238-68
DESICCATED CHICKEN SARCOMA VIABLE FOR TWENTY YEARS.
E L Stubbs F G Sperling
Amer Vet Med Ass J 136(8):376-377
15 Apr 1960 41.8 AM3
Poultry, Sarcoma.

2239-68
HYPOCALCEMIA WITBOUT PARESIS IN COWS.
G P Mayer C F Ramberg D S Kronfeld
Amer Vet Med Ass J 149 (4):402-405, 11 REFS.
15 Aug 1966 41.8 AM3
Cattle, Ethylenediaminetetraacetic acid, Paresis.

2240-68
METABOLIC ASPECTS OF RUMINANT KETOSIS.
D S Kronfield
Amer J Vet Res 22(88):496-501, BIBL. 500-501
May 1961 41.8 AM3A
Animal metabolism, Ketosis, Ruminants.

2241-68
THE DISTRIBUTION OF COPPER IN BOVINE AND OVINE FOETUSES, WITH REFERENCE TO THEIR AGE AND MATERNAL LIVER COPPER CONCENTRATIONS.
W J Pryor
Res Vet Sci 5(2):123-137, TABS.
Apr 1964 41.8 R312
Cattle, Copper, Liver, Sheep.

2242-68
A STUDY IN THE EPIZOOTIOLOGY OF CELO VIRUS.
V J Yates P W Chang A B Dardiri D E Fry
Avian Dis 4 (4):500-505
Nov 1960 41.8 AV5
Chicken embryo lethal orphan virus, Epizootic diseases.

2243-68
SOME OBSERVATIONS OF THE PROPAGATION OF INFECTIOUS
LARYNGOTRACHEITIS VIRUS IN TISSUE CULTURE.
P W Chang V J Yates A H Dardiri D E Fry
Avian Dis 4(4):384-390
Nov 1960 41.8 AV5 (
Infectious laryngotracheitis virus, Reproduction,
Tissue culture.

BIBL TOGRAPHY

30 2244-68

2244-68 A PREVIOUSLY UNREPORTED SEROTYPE OF AVIAN MYCOPLASMA-H W Yoder M S Hofstad Avian Dis 6(1):147-160, TABS. Feb 1962 41.8 AV5 Hemagglutination-inhibition test, Pleurcpneumonia-like organisms.

2245-68 FIELD TRIAL WITH THE COMPLEMENT-FIXATION TEST FOR ANAPLASMOSIS IN A HERD FREE OF CLINICAL EVIDENCE OF G M Merriman C Buckner C S Hobbs o m detriman c buckner C 5 Hoods Amer Vet Med Ass J 141(11):1335-1338, 13 REFS., 2 TABS. 01 Dec 1962 41.8 AM3

Anaplasmosis, Cattle, Complement fixation, Serodiagnosis.

PENDULOUS CROPS IN TURKEYS -- AN ANATOMIC AND PATHOLOGIC FH Rigdon T M Ferguson J R Couch Amer J Vet Res 21(85):979-986 Nov 1960 41.8 AM3A Pendulous crop, Turkeys.

AGGLUTININS FOR 11 TYPES OF LEPTOSPIRES IN SERUM FROM CAT-TLE IN NORTHEASTERN TEXAS. R M Pike I M Paton M L Schulze Amer J Vet Res 22(90):906-911, BIBL. 911, TABS. Sep 1961 41.8 AM3A Antibodies, Cattle, Leptospirosis, Serum, Texas.

2248-68 FENDULOUS CROP IN THE CHICKEN- A PATHOLOGIC STUDY. F H Rigdon Amer J Vet Res 22(88):379-381 May 1961 41.8 AM3A Animal diseases, Chickens, Pendulous crop.

SEQUENTIAL CHANGES IN THE TITER OF NEWCASTLE DISEASE VIRUS IN TISSUES--A MEASURE OF THE DEPENSE MECHANISM OF THE M K Asdell R P Hanson Amer J Vet Res 21(80):128-132 Jan 1960 41.8 AM3A Newcastle disease virus, Poultry.

EPIZOOTIQLOGY, THE BASIS FOR RATIONAL DISEASE CONTROL FROGRAMS. R P Hanson Amer Vet Med Ass J 136(3):97-103, BIBL. 102-103 01 Feb 1960 41.8 AM3 Epizootic diseases.

2251-68 AN IN VITRO METHOD FOR THE IDENTIFICATION OF STRAINS OF NEWCASTLE DISEASE VIRUS. F P Piraino R P Hanson Amer J Vet Res 21(80):125-127 Jan 1960 41.8 AM3A Newcastle disease virus.

TWO CASES OF NEUROBLASTOMAS IN DOGS. J Simon L T Albert Amer Vet Med Ass J 136(5):210-214 01 Mar 1960 41.8 AM3 Dogs, Neuroblastomas.

223-68
CHRONIC COPPER TOXICOSIS IN SHEEP FED DRY FEED.
T Kowalczyk & L Pope K C Berger B & Muggenburg
Amer Vet Med Ass J 145(4):352-357. 30 REFS., 2 TABS.
15 Aug 1964 41.8 &M3
Feed, Sheep.

2254-68 STUDIES ON THE PATHOLOGY OF JOHNE S DISEASE IN SHEEP. III. PATHOLOGIC CHANGES IN SHEEP WITH NATURALLY OCCURING INFEC-B S Rajya C M Singh Amer J Vet Res 22(87):189-203, BIBL. 202, TABS. Mar 1961 41.8 AM3A Animal diseases, Johne s disease, Sheep.

PERSISTENCE OF CHLORAMPHENICOL LEVELS IN FARM ANIMALS. Amer Vet Med Ass J 141(2):242
15 Jul 1962 41.8 AM3
Chloramphenicol, Drug therapy, Livestock.

SQUAMOUS-CELL CARCINOMA OF THE VULVA OF CATTLE IN KENYA. M L Burdin Res Vet Sci 5(4):497-505 Oct 1964 41.8 R312 Cattle, Vulva.

2257-68 277-68
STUDIES ON AN ADJUVANT NEWCASTLE DISEASE VACCINE.
D A Haig D Danskin A J Winmill
Res Vet Sci 3(3):236-244, TABS
Jul 1962 41.8 R312 Newcastle disease.

2258-68 THE ARTIFICIAL ORAL INFECTION OF CATTLE WITH TAENIA SAGINATA EGGS. Res Vet Sci 5(4):434-440 Oct 1964 41.8 R312 Cattle.

2259-68 THE AETIOLOGY OF BOVINE PETECHIAL FEVER (ONDIRT DISEASE) -D A Haig D Danskin Res Vet Sci 3(2):129-138 Apr 1962 41-8 R312 Etiology, Purpura hemorrhagica.

2260-68 RICKETTSIAL INFECTION (HEARTWATER) IN SHEEP AND GOATS IN THE SHDAN. G Karrar Brit Vet J 116(3):105-114, 5 TABS., 4 PLS. Mar 1960 41.8 V643 Goats, Heartwater disease, Rickettsial diseases, Sheep, Sudan.

2261-68 DIFFERENTIATION OF QUAIL BRONCHITIS VIRUS AND INFECTIOUS BRONCHITIS VIRUS BY HEAT STABILITY.

R T Dubose L C Grumbles A I Flowers
Amer J Vet Res 21(84):740-743, BIBL, 742-743 Sep 1960 41.8 AM3A Heat, Quail, Quail bronchitis virus.

2262-68 SPORADIC OVINE VIBRIOSIS IN VIRGINIA. R M Smibert R N SMIDERT Amer Vet Med Ass J 145(6):570-572 15 Sep 1964 41.8 AM3 Abortion, Sheep, Vibrio fetus bacterins, Vibriosis, Virginia.

2263-68 MORPHOLOGICAL STUDIES OF AVIAN PPLO IN SEMI-SOLID MEDIA. C H Domermuth W B Gross Avian Dis 3(4):452-456 1959 41.8 AV5 Culture media, Morphology, Pleuropneumonia-like organisms.

2264-68 EXPERIMENTAL PRODUCTION OF BREAST BLISTERS) BY S-6 TYPE MYCOPLASMA. C H Domermuth Avian Dis 6(2):135-140 May 1962 41.8 AV5

2265-68 SEROLOGIC RELATIONSHIP BETWEEN BOVINE ENTEROVIRUSES AND SENDLOGIC RELATIONSHIP BETWEEN BOVINE EN INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS. T Moll A D Davis
Amer J Vet Res 21 (85): 1131-1132
Nov 1960 41.8 AM3A
Bovine enteroviruses.

2266-68 PROBLEMS IN TREATMENT AND CONTROL OF LEPTOSPIROSIS. S G Kenzy R W H Gillespie L M Ringen Amer Vet Med Ass J 136(6):253-255, BIBL. 255 Leptospirosis.

PAGE 68

2267-68
CULTIVATION OF THE INFECTIOUS-SYNOVITIS-TYPE PLEUROPNEUMONIA
-LIKE OBGANISMS.
R Chalquest
Avian Dis 6(1):36-43
Feb 1962 41.8 AV5
Infectious synovitis, Pleuropneumonia-like organisms.

2268-68
THE UTERINE BIOPSY TECRNIQUE FOR FOLLOWING TRE HISTOLOGIC CRANGES CAUSED BY VIBRIO FETTS IN THE UTERINE MUCOSA.
L Dozsa N O Olson A Campbell
Amer J Vet Res 21(84):878-883, BIBL. 882-883
Sep 1960 41.8 AM3A
Biopsy, Ristology, Uterus.

2269-68
CONTROL OF CRRONIC RESPIRATORY DISEASE. IV. TRE EFFECT OF A LOW-CALCIUM DIET AND RIGH CONCENTRATIONS OF CRLOROTETRACYCLINE ON TRE ISOLATION OF MYCOPLASMA FROM EXPERIMENTALLY INFECTED CHICKS.

J O Reishman N O Olson C J Cunningham D C Shelton Avian Dis 6(2):165-170
May 1962 41.8 AV5
Animal nutrition, Animal respiration, Calcium, Chlortetracycline, Livestock diseases, Respiratory diseases.

270-68
DIPPING OF RATCRING EGGS IN ERYTROMYCIN FOR THE CONTROL OF MYCOPLASMA.
N O QISON T R Rash J O Heishman A Campbell Avian Dis 6 (2):191-194
May 1962 41.8 Av5
Erythromycin, Poultry hatcheries.

271-68
CONTROL OF INFECTIOUS SYNOVITIS. 8. DEGREE OF INFECTION AS INFLUENCED BY MEDICATION WITH PURAZOLIDONE AND CHLOFTETRACYCLINE.
N O Olson D C Shelton Avian Dis 3 (3):312-321, BIBL. 320-321, TABS.
Aug 1959 41.8 AV5
Chlortetracycline, Furazolidone, Infectious synovitis, Therapeutics, Purazolidone.

272-68
CONTROL OF CREONIC RESPIRATORY DISEASE. V. ARTIFICIAL EXPOSURE OF YOUNG CHICKS TO MYCOPLASMA GALLISEPTICUM. N O Olson J O Heishman D C Shelton Avian Dis 6(2):171-177
May 1962 41.8 AV5
Chickens, Chlortetracycline, Chronic respiratory disease.

2273-68
COMPARISON OF THE PATHOGENESIS OF NEWCASTLE DISEASE VIRUS AND INFLUENZA B IN CHICKEN EMBRYOS.
L Murchelano R P Hanson
Amer J Vet Res 21 (8.1):285-287
Mar 1960 41.8 AM3A
Newcastle disease virus, Poultry.

2274-68
EXPERIMENTAL PRODUCTION OF PROTHINESS OF RETICULORUMINAL CONTENTS--ITS SIGNIFICANCE AS A POSSIBLE CAUSE OF BLOAT.
J Gupta M Crump K Penn R E Nichols
Amer Vet Med Ass J 136 (9): 438-439
O1 May 1960 41.8 AM3
Bloat, Reticulum.

275-68
PROPAGATION AND TITRATION OF VACCINA VIRUS IN BOVINE FPIDERMAL CELLS.
P Bartell E Rosanoff G H Warren
Amer J Vet Res 21(85):1062-1065, BIBL. 1004-1005, TABS.
NOV 1960 41.8 AM3A
Cattle, Vaccinia virus.

2276-68
CONTROL OF ANAPLASMOSIS UNDER WYOMING CONDITIONS.
J F Ryff R Breen G M Thomas
Amer Vet Med Ass J 14K(1):43-46, 2 TABS.
O1 Jul 1964 41.8 AM3
Anaplasmosis, Cattle, Chlortetracycline, Wyoming.

2277-68
EPIDEEMOID CARCINOMA OF THE ESOPHAGUS OF AN ANTELOPE.
W B Heuschele W C Herrick
Amer Vet Med Ass J 141(4):486-487, 5 PLS.
15 Aug 1962 41.8 AM3
Carcinoma, Esophagus, Wildlife.

Arthropods

2278-68
SURVEY OF INSECTS AFFECTING LIVESTOCK IN SOUTHWESTERN ONTARIO.

R J Teskey
Can Entomol 92(7):531-544
Jul 1960 421 C16
Insect ecology, Insect pests, Insect population, Livestock,
Ontario.

2279-68
THE SUBCUTANEOUS MITE OF CHICKENS: AN INCIDENCE REPORT.
D R Cassidy W E Ketter
Avian Dis 9(1):78-81, BIBL. 81
Feb 1965 41.8 AV5

2280-68
CATTLE SCABLES AND MANGE REPORTED AT 1961 LIVESTOCK SROWS.
Amer Vet Med Ass J 141(6):705
15 Sep 1962 41.8 AM3
Cattle, Mange, Mites, Scabies.

Parasites

2281-68

PULMONARY ARTERIOTOMY FOR REMOVAL OF DIROFILARIA IMMITIS IN THE DOG.

R S Wilcox

Amer Vet Med Ass J 136(7):328-338, BIBL. 337-338

01 Apr 1960 41.8 AM3

Arteries, Dirofilaria immitis, Dogs, Dirofilaria immitis.

2282-68
TRICHINOSIS OCCURS IN FOXES.
Amer Vet Med Ass J 141(7):844
01 Oct 1962 41.8 AM3
Foxes, Swine, Trichinosis, Wildlife.

2283-68
TRE EFFECT OF DIMETROATE ON DERMATOBIA ROMINIS IN CATTLE. W P Johnson
Amer J Vet Res 21(85):1046-1048, BIBL. 1047-1048
Nov 1960 41.8 AM3A
Cattle, Dimethoate, Oestridae.

2284-68
PROPHYLACTIC THERAPY AGAINST DIROFILARIASIS IN DOGS.
S Kume I Ohishi S Kobayashi
Amer Vet Med Ass J 141(5):613
O1 Sep 1962 41.8 AM3
Diethylcarbamazine, Dirofilariasis, Dogs,
Preventive medicine.

2285-68
EFFECT OF GRAZING INTENSITY ON PARASITISM OF BEEF CATTLE.
R Ciordia W E Bizzell R H Vegors D M Baird H C McCampbell
Amer Vet Med Ass J 141(2):377
O1 Aug 1962 41.8 AM3
Beef cattle, Grazing, Parasitism.

2286-68
CONTROL OF EXPERIMENTAL BOVINE VERMINOUS PNEUMONIA.
R Rubin A J Tillotson
Amer Vet Med Ass J 141(2):377
O1 Aug 1962 41.8 AH3
Cattle, Diethylcarbamazine.

2287-68
ANGIOCARDIOGRAPRY IN CANINE DIROFILARIASIS II. UTILIZATION OF A RAPID FILM CHANGE TECHNIQUE.
A W Rahn

30 2288-68

Cattle.

Amer Vet Med Ass J 136(8):355-358 15 Apr 1960 41.8 AM3 Angiocardiography, Dirofilaria immitis, Dirofilaria immitis.

2288-68
IN VITRO STUDIES ON THE EFFECT CF SOME ANTIMALARIAL DRUGS ON FASCIOLA WORMS IN BUFFALOES, CATTLE, AND SHEEP.
A Sharaf M H Haiba I M Shihata
Amer J Vet Res 21(81):308-309
Mar 1960 41.8 AM3A
Buffaloes, Cattle, Fasciola, Fascioliasis, Malaria control,
Sheep, Fasciola.

THE EFFECT OF BEPHENIUM EMBONATE ON EGG PRODUCTION IN NEMTODIRUS HELVETIANUS AND OTHER GASTROINTESTINAL NEMATODES IN CATTLE.

R Rubin
Amer J Vet Res 21(81):178-180
Mar 1960 41.8 AM3A

2290-68
CYANACETHYDRAZIDE AS A CHEMOTHERAPEUTIC AGENT IN THE CONTROL
CF EXPERIMENTAL BOVINE VERMINOUS PNEUMONIA.
R Rubin A J Tillotson
Amer J Vet Res 21(85):1040-1044
Nov 1960 41.8 AM3A
Drug therapy.

2291-68
TOXICITY OF HALOXON.
J C Malone
Res Vet Sci 5(1):17-31, TABS.
Jan 1964 41.8 R312
Toxicology.

2292-68
HEPATIC LESIONS IN DOGS WITH DIROFILARIASIS.
F von Lichtenberg R F Jackson G F Otto
Amer Vet Med Ass J 141(1):121-128, 5 REFS., 16 PLS.
01 Jul 1962 41.8 AM3
Dirofilariasis, Dogs.

2293-68
CHEMOTHERAPEUTIC STUDIES OF GASTROINTESTINAL PARASITES OF BEEF CATTLE AND BISON IN KANSAS.
D E Worley M F Hansen
Amer J Vet Bes 21(82):416-421, BIBL. 420-421
May 1960 41.8 AM3A
Buffaloes, Cattle, Drug therapy, Gastrointestinal diseases, Kansas.

2294-68
STUDIES ON TRICHOSTRONGYLUS AXEI (COBBOLD, 1879). V.
SOME QUANTITATIVE AND PATHOLOGIC ASPECTS OF EXPERIMENTAL
INFECTIONS WITH A HORSE STRAIN IN SHEEP.
S E Leland J H Drudge Z N Wyant G W Elam
Amer J Vet Res 21(82):449-457, BIBL. 456-457
May 1960 41.8 AM3A
Sheep.

2295-68
FIELD STUDIES COMPARING PIPERAZINE-CARBON DISULFIDE COMPLEX
WITH CARBON DISULFIDE FOR PARASITE CONTROL IN THE HORSE.
J H Drudge S E Leland Z N Wyant G W Elam L B Hutzler
Amer J Vet Res 21(82):397-402, TABS.
May 1960 41.8 AM3A
Carbon disulfide, Horses, Piperazine.

INCIDENCE AND TREATMENT OF PARASITES IN A ZOOLOGICAL GARDEN.
B J Jaskoski W Krzeminski
Amer J Vet Res 21 (82):631-634, TABS.
Jul 1960 41.8 AM3A
Parasitism, Zoological gardens.

2297-68
INTRAVENOUS TREATMENT OF WHIPWORM INFECTION IN DOGS.
E R Carlos A C Directo
Amer Vet Med Ass J 141(4):481-483, 5 REFS.
15 Aug-1962 41.8 AM3
Dogs, Phthalofyne, Trichuris.

2298-68
OCCURRENCE OF THE NEMATODE, ANATRICHOSOMA CUTANEUM, IN THE NASAL MUCOSAE OF MACACA MULATTA MONKEYS.
A M Allen
Amer J Vet Res 21(82):389-392
May 1960 41.8 AM3A

2299-68
OBSERVATIONS ON THE LIFE CYCLE AND PATHOGENICITY OF THE SWINE KIDNEY WORM (STEPHANDRUS DENTATUS).
E G Batte R Harkema J C Osborne
Amer Vet Med Ass J 136(12):622-625, BIBL. 625
15 Jun 1960 41.8 AM3
Stephanurus dentatus, Swine, Stephanurus dentatus.

2300-68
A PRELIMINARY REPORT ON THE VARIATION IN NUMBERS OF NEMATODE EGGS DEMONSTRATED IN INDIVIDUAL PECAL PELLETS OF SHEEP.
E D Besch R D Morrison D L Weeks
Amer J Vet Res 21(84):917-918
Sep 1960 41.8 AM3A
Sheep.

2301-68
SURVIVAL ON PASTURE OF INFECTIVE LARVAE OF COOPERIA PECTIVATA AND OSTERTAGIA OSTERAGI.
B R Bell T J Galvin R D Turk
Amer J Vet Res 21(85):1101-1103
Nov 1960 41.8 AM3A
Larvae.

2302-68
STUDIES ON EXPERIMENTAL CONCURRENT INFECTIONS OF DAIRY
CALVES WITH COCCIDIA AND NEMATODES. IV. EIMERIA SPP. AND
THE SMALL HAIRWORM, TRICHOSTRONGYLUS COLUBRIFORMIS.
L R Davis H Herlich G W Bowman
Amer J Vet Res 21 (81): 188-194
Mar 1960 41.8 AM3A
Cattle.

2303-68
EXPERIMENTAL TRICHOSTRONGYLOSIS (AXEI) IN LAMBS, WITH A DISCUSSION OF RECENT RESEARCH ON THIS DISEASE IN RUMINANTS. K C Kates J H Turner Amer J Vet Res 21(81):254-261, BIBL. 261
Mar 1960 41.8 AM3A
Lambs, Ruminants.

2304-68
BOVINE CYSTICERCOSIS, WITH SPECIAL REFERENCE TO THE EARLY DEVELOPMENTAL STAGES OF TAENIA SAGINATA.
A McIntosh D Miller
Amer J Vet Res 21(81):169-177
Mar 1960 41.8 AM3A
Cattle, Cestoda.

2305-68

PRELIMINARY TRIALS WITH BITHIONAL AGAINST TAPEWORM INFECTION IN CATS, DOGS, SHEEP, AND CHICKENS.
P D Enzie M L Colglazier
Amer J Vet Res 21(82):628-630
Jul 1960 41.8 AM3A
Cats, Cestoda, Dogs, Poultry, Sheep, Cestoda.

2306-68
TREATMENT OF OPOSSUMS WITH PHYSALOPTERA INFECTIONS.
J H Krupp
Amer Vet Med Ass J 141(2):369-370, 3 REFS., 1 PL.
01 Aug 1962 41.8 AM3
Carbon disulfide.

2307-68
STUDIES ON INFECTION AND IMMUNITY WITH THE CATTLE LUNGWORM,
DICTYOCAULUS VIVIPARUS (BLOCH). I. INFECTION IN
LABORATORY ANIMALS.
A E Wade L E Fox L E Swanson
Amer J Vet Res 21(84):753-757, BIBL. 756-757, TABS.
Sep 1960 41.8 AM3A
Cattle, Immunity, Verminous bronchitis.

2308-68
INCIDENCE OF PARASITES IN CALVES IN HAWAII AND THE TREATMENT OF COOPERIA PUNCTATA, WITH SPECIAL REFERENCE TO THE EFFICACY OF RUELENE.

J E Alicata
Amer J Vet Res 21(82):410-415, BIBL. 415, TABS.
May 1960 41.8 AM3A
Cattle, Hawaii, Ruelene, Hawaii, Ruelene.

2309-68
THE EFFECT OF CADMIUM COMPOUNDS ON STRONGYLOIDES PAPILLOSUS IN SHEEP.
N D Levine J Szanto
Amer J Vet Res 21 (80):84-85
Jan 1960 41.8 AM3A
Cadmium, Sheep.

PAGE 70

2310-68
A COMPARISON OF NEMATODE EGG COUNTING TECHNIQUES FOR CATTLE AND SHEEF FECES.
N D Levine K N Mehra D T Clark I J Aves
Amer J Vet Res 21(82):511-515, BIBL. 515
May 1960 41.8 AM3A
Cattle, Sheep.

2311-68
EFFICACY OF CYANACETHYDRAZIDE AGAINST METASTRONGYLUS SPP. (LUNGWORMS) IN SWINE.
E G Sen G W Kelley I S Olsen
Amer Vet Med Ass J 136(8):366-368
15 Apr 1960 41.8 AM3
Swine.

2312-68
LACK OF LARVACIDAL ACTION OF RONNEL AND BAYER 21-199
AGAINST MIGRATING ASCARIC SUUM IN BABY PIGS.
G W Kelley C L Marsh
Amer J Vet Res 21(80):109-110
Jan 1960 41.8 AM3A
Baby pigs, Coumaphos, Ronnel.

2313-68
SERUM PROTEIN CHANGES IN LAMBS WITH NATURALLY ACQUIRED NEMATODE INFECTIONS.
K L Kuttler D W Marble
Amer J Vet Res 21 (82):445-448, TABS.
May 1960 41.8 AM3A
Elood proteins, Lambs, Nematodes.

2314-68
EXPERIMENTAL INFECTIONS OF SWINE WITH TRICHURIS SUIS.
K G FOWERS A C Todd S H McNutt
Amer J Vet Res 21(81):262-268
Mar 1960 41.8 AM3A
Swine.

40 COMMODITY PROTECTION

2315-68
MEAT INSPECTION A LOCAL NECESSITY.
A W Combs E H Ellinwood M P Hines
Amer Vet Med Ass J 136 (9):433-436
01 May 1960 41.8 AM3
Meat inspection.

2316-68
IONIZING RADIATION AND FOOD HYGIENE.
R K Somers R H Philbeck
Amer Vet Med Ass J 136 (9):436-437
01 May 1960 41.8 AM3
Food sanitation, Radiation.

Storage Diseases

2317-68
CONTROL OF POST-HARVEST FRUIT DECAY WITH 2-AMINOBUTANE SALT SOLUTIONS.
J W Eckert M J Kolbezen R L Slusher Phytopathology 52(8):730
Aug 1962 464.8 P56
Fruit decay, Fruit decay.

2318-68

THE INFLUENCE OF STORAGE CONDITIONS ON THE LONGEVITY OF UREDIOSPORES OF PUCCINIA POLYSORA UNDERW. AND PUCCINIA SORGI SCHW.

W C von Heyer Plant Dis Rep 47 (7):614-616, TABS.
15 Jul 1963 1.9 P69P
Rust (corn), Storage, Uredospores.

2319-68
STERILIZATION OF WHEAT SEED BY ETHYLENE OXIDE.
J F Schoen
Plant Dis Rep 46 (7):540
15 Jul 1962 1.9 P69P
Ethylene oxide, Sterilization, Wheat.

Microbial Contamination

2320-68
STUDIES ON SALMONELLA CONTAMINATION OF ENVIRONMENT AND PRODUCT OF RENDERING PLANTS.
SE Magwood J Fung J L Byrne
Avian Dis 9(2):302-308, BIBL. 307-308
May 1965 41.8 AV5
Food contamination, Salmonellosis.

2321-68

SALMONELLA SPECIES CONTAMINANTS IN THREE ANIMAL BY-PRODUCTS.

W E Burr C F Helmboldt

Avian Dis 6(4):441-443

NOV 1962 41.8 AV5
Salmonellosis.

2322-68
THE CATALASE, CALIFORNIA, AND CELL COUNT TESTS FOR DETECTING ABNORMALITIES IN MILK.
G R Spencer J Simon
Amer J Vet Res 21(82):578-584, TABS.
Jul 1960 41.8 AM3A

50 2323-68

California, Catalase, Cells, Milk, California.

50 ENVIRONMENTAL CONTAMINATION

2323-68

HERBICIDES ON FLUE-CURED TOBACCO.

A A De Hertough J W Hooks G C Klingman Weeds 10 (2):115-118, TABS.

Apr 1962 79-8 W41

Herbicides, Tobacco.

2324-68
OZONE INJURY TO VEGETATION IN THE NORTHEASTERN U.S. .
R H Daines E Brennan I Leone
Phytopathology 53 (3):348
Mar 1963 464.8 P56
Air pollution, Ozone, Plant injuries.

2325-68

EFFECTS OF SOIL ACIDITY ON THE ADSORPTION, PENETRATION, AND PERSISTENCE OF SIMAZINE.

D C Nearpass
Weeds 13(4):341-346, BIBL. 346, TABS.
Oct 1965 79.8 W41
Hydrogen-ion concentration, Simazine, Soil adsorption, Simazine.

2326-68
THE EFFECT OF APPLIED WATER ON PREEMERGENCE APPLICATIONS OF AMIBEN.
O C Burnside W G Lipke
Weeds 10(2):100-103, TABS.
Apr 1962 79.8 W41
Amiben, Water treatment.

2327-68
DISSIPATION OF AMIBEN.
K A Schliebe O C Burnside T L Lavy
Weeds 13(4):321-325, TABS.
Oct 1965 79.8 W41
Amiben, Soils.

55 RESIDUES

2328-68
THE ANALYSIS OF 2-AMINOBUTANE HESIDUES IN CITRUS AND APPLES.
M J Kolbezen J W Eckert J Hara
Fhytopathology 52(8):738
Aug 1962 464-8 P56
Apples, Citrus, Fungicide residues, Fungicide residues.

2329-68

METABOLISM OF ATRAZINE BY SUSCEPTIBLE AND RESISTANT PLANTS.

N S Negi H H Funderburk Jr D E Davis
Weeds 12(1):53-57, BIBL. 57, TABS.
Jan 1964 79.8 W41

Atrazine, Metabolism.

330-66

MODE OF ACTION OF ATRAZINE AND SIMAZINE IN SUSCEPTIBLE AND RESISTANT LINES OF COHN.

F F Eastin R D Palmer C O Grogan
Weeds 12(1):49-53, TABS
Jan 1964 79.8 W41
Atrazine, Corn, Simazine.

331-68
RELATIVE IMPORTANCE OF PERSISTENCE, THANSFER, AND MILKING TECRNIQUE TO ANTIBIOTIC RESIDUE CONTAMINATION OF MILK.
M G Fincher F V Kosikowski R S Guthrie H G Rodges Amer Vet Hed Ass J 141(2):223-228, 11 REFS., 6 TABS.
15 Jul 1962 41.8 AM3
Chlortetracycline, Milk, Penicillin.

2332-68

EFFECTS OF WATEH EVAPORATION, TEMPERATURE AND RATES OF APPLICATION ON THE RETENTION OF ETHYL-N,N-DI-N-PHOPYL-THIOL CARBAMATE IN VARIOUS SOILS.

S C Fang P Theisen V H Freed Weeds 9(4):569-574
Oct 1961 79.8 W41

Evaporation, Soils, Temperature.

333-68
A CORN MUTANT DEFICIENT IN 2,4-DIHYDROXY-7-METHOXY-1,4-BENZOXAZIN-3-ONE WITH AN ALTEHED TOLEHANCE OF ATHAZINE. R H Hamilton
Weeds 12(1):27-30, TABS.
Jan 1964 79.8 W41
Atrazine, Corn.

334-68
CONTHOL OF CHEMICAL, DHUG, AND BIOLOGICAL RESIDUES IN MEATS.
K E Taylor
Amer Vet Hed Ass J 141(10):1177-1182
15 Nov 1962 41.8 AM3
Antibiotics, Chemicals, Drugs, Feed additives, Insecticides,
Meat, Meat inspection, Medicine, Pesticide residues.

2335-68

RESPONSE OF COTTON SEEDLINGS TO COMBINATIONS OF PREEMERGENCE HERBICIDES AND SYSTEMIC INSECTICIDES.
J Hacskaylo J K Walker Jr E G Pires Weeds 12 (4):288-291, PLS.
Oct 1964 79.8 W41
Cotton, Crop losses, Disulfoton, Diuron, Herbicides, Insecticides, Monuron, Phorate, Seedlings.

336-68
PERSISTANCE OF SOIL-INCORPORATED EPTC AND OTHER CARBAMATES.
L L Danielson W A Genter L L Jansen
Weeds 9 (3):463-476, TABS.
Jul 1961 79.8 W41
Carbamates, Herbicide residues, Soil treatment.

337-68
SPRAY RETENTION BY BEHMUDAGRASS.
B E Day L S Jordan
Weeds 9(3):351-355
Jul 1963 79-8 W41
Berbicide residues, Spraying.

2338-68
DISSIPATION OF SIMAZINE FROM THE SOIL.
O C Burnside E L Schmidt H Behrens
Weeds 9 (3):477-484
Jul 1961 79.8 W41
Herbicide residues, Simazine, Soil chemistry, Simazine.

RESIDUES IN SOIL ONE YEAR AFTER HEHBICIDES WERE APPLIED TO SORGHUM.
G A Wicks O C Burnside Weeds 13(2):173-174
Apr 1965 79.8 W41
Herbicide residues, Herbicides, Sorghum.

2340-68
CYCLOREXIMIDE BEHAVIOH IN BEAN AND CHERRY TISSUE.
M J Starzyk J E Mitchell
Phytopathology 53(3):309-312, BIBL., TABS.
Mar 1963 464.8 P56
Beans, Cycloheximide, Sour cherries.

60 TOXICOLOGY

2341-68

FFFECTS OF 2,6-DICHLORO-4-NITROANILINE ON RHIZOPUS AND BROWN ROT OF PEACHES.

R A Cappellini A W Stretch
Phytopathology 52(9):922
Sep 1962 464.8 P56
Rhizopus nigricans, 2,6-dichloro-4-nitroaniline,
Rhizopus nigricans,

2342-68
STÜDLES ON THE CHEMISTRY OF THE FUNGITOXICITY OF FOLCIDR J Lukens
Phytopathology 52(8):740
Aug 1962 464.8 P56
Chemistry, Pungicides, Toxicology-

343-68
TOXICITY OF SOME HALOGENATED HYDROCARBON MIXTURES TO THE CITRUS AND ROOT-KNOT NEMATODE.
W Moje I J Thomason
Phytopathology 52(8):744
Aug 1962 464.8 P56
Aug 1962 464.8 P56
Root-knot nematode, Toxicology,
Root-knot nematode.

2344-68
INPLUENCE OF DIELDRIN AND METHYL BROMIDE SOIL TREATMENTS ON SUBSEQUENT POPULATIONS OF STYLET-BEARING NEMATODES ASSOCIATED WITH ROOTS OF LADINO CLOVER.
T-A Chen R A Kilpatrick A E Rich Phytopathology 52(9):922
Sep 1962 464.8 P56
Dieldrin, Ladino clover, Methyl bromide, Plant nematodes, Roots, Soil treatment.

2345-68
THE TOXICITY OF CITROXININE.
R P Scheffer R B Pringle
Phytopathology 52(8):750-751
Aug 1962 464.8 P56
Helminthosporium victoriae, Toxicology, Victoxinine,
Helminthosporium victoriae, Victoxinine.

2346-68
ASSAYS OF VOLATILE FUNGITOXIC EFFLUENTS FROM SOIL TREATED WITH FUNGICIDES SUCH AS MYLONE.
D E Munnecke
Phytopathology 52(8):745
Aug 1962 464.8 P56
Assay, Fungicides, Soil treatment, Toxicology,
Soil treatment.

2347-68

PARTIAL REACTIVATION OF FORMALIN-INACTIVATED CLOSTRIDIUM BOTULINUM TYPE C TOXIN.

E W Marty Jr

Amer Vet Med Ass J 141(2):260
15 Jul 1962 41.8 AM3
Botulism, Toxins.

2348-68
A SIMPLE LABORATORY TECHNIQUE FOR DETERMINING THE DIFFUSION RATES AND PATTERNS OF NEMATOCIDES IN SOIL.
N J Turner
Phytopathology 54(8):910
Aug 1964 464.8 P56
Nematocides, Soil permeability, Soil testing.

2349-68

REACTION OF LESION NEMATODES, PRATYLENCHUS PENETRANS, TO CYCLOHEXIMIDE AND DUAZONYCIN A.

J T Walker R M Bentley
Phytopathology 53 (3):352
Mar 1963 464.8 P56

Cycloheximide, Pratylenchus penetrans.

2350-68
A LABORATORY METHOD FOR TESTING THE FUNGICIDAL EFFECT OF CHEMICALS ON FUNGAL SPORES IN SOIL.
S H F Chinn R J Ledingham
Phytopathology 52(10):1041-1044
Oct 1962 464.8 P56
Fungicides, Soil fungi, Spores.

2351-68

LABORATORY EVALUATION OF DDT AND PHOSPHAMIDON ON THE WEST-ERN HEMLOCK LOOPER, LAMBDINA FISCELLARIA LUGUBROSA (HULST).

A P Randall C Jackson
Can Entomol 95 (4):365-371
Apr 1963 421 C16
Insecticide application, DDT , Phosphamidon, Toxicology.

2352-68

COMPARISON OF THE TOXIC EFFECTS OF CROTALARIA SPECTABILIS AND CROTALARIA GIANT STRIATA AS COMPLETE FEED CONTAMINANTS. B W Bierer C L Vickers W H Rhodes J B Thomas Amer Vet Med Ass J 136(7):318-322, BIBL. 321-322 01 Apr 1960 41.8 AM3 Food contamination, Toxicology.

2353-68
EVALUATION OF APPLIED SOIL FUMIGANTS WITH THE SOIL MICROBIO-LOGICAL SAMPLING TUBE.
C L Maurer R Baker D J Phillips L Danielson
Phytopathology 52 (9):957-959
Sep 1962 464.8 P56
Equipment, Fungicides, Soil fumigation, Soil microbiology,
Soil sampling.

354-68
TOXICITY AND TRANSLOCATION CHARACTERISTICS OF SIX FUNGICIDAL COMPOUNDS IN PLUM AND PRUNE TREES.
A W Helton W J French
Phytopathology 52(10):1050-1056, TABS.
oct 1962 464.8 P56
Fungicides, Plums, Prunes, Toxicology.

2355-68
BETA-AMINOPROPIONITRILE TOXICITY IN THE WHITE PEKIN DUCK.
W W Carlton
Avian Dis 9(3):423-441, BIBL. 440-441, PL.
Aug 1965 41.8 AV5
Pekin ducks.

2356-68

EFFECT OF SPRAY GALLONAGE AND LEAF CHARACTER ON DEPOSITION AND RETENTION OF COPPER-CONTAINING FUNGICIDES.

J D Wilson O K Hedden
Phytopathology 54 (8):912-913
Aug 1964 464.8 P56

Copper, Fungicides, Leaves, Pesticide residues, Spraying.

2357-68
CARBON TETRACHLORIDE POISONING OF EWES ON A LOW SELENIUM RATION.
O H Muth
Amer J Vet Res 21(80):86-87
Jan 1960 41.8 AM3A
Carbon tetrachloride, Selenium, Sheep.

2358-68
INFLUENCE OF SOIL TYPE ON THE FUNGICIDAL ACTIVITY OF SOIL FUNIGANTS AGAINST VERTICILLUM DAHLIAE.
R C Carlstrom R L Powelson
Phytopathology 54(12):1432
Dec 1964 464.8 P56
Fungicides, Soil funigation, Soil series,
Verticillium dahliae.

359-68
AN ASSAY METHOD FOR SOIL FUNGISTASIS AND RESPONSE OF SELECT-ED FUNGI TO THE PRINCIPLE.
H Schuepp R J Green Jr
Phytopathology 54(8):906
Aug 1964 464.8 P56
Assay, Fungi, Fungicides, Soil chemistry.

2360-68

EFFECTS OF ENVIRONMENT UPON HERBICIDES APPLIED PREEMERGENCE.

W E Splittstoesser L A Derscheid
Weeds 10(4):304-307
Oct 1962 79.8 W41
Environment, Herbicides.

2361-68
AN EARLY REPORT ON CROTALARIA POISONING.
F W Bierer J H Thomas
Amer Vet Med Ass J 136(7):322
01 Apr 1960 41.8 AM3
Food contamination, Toxicology.

2362-68
A MECHANISM FOR MERCURY TOLERANCE IN FUNGI.
I J Ashworth Jr J V Amin
Phytopathology 54 (12):1459-1463, BIBL. 1463
Dec 1964 464.8 P56
Fungi, Fungicides, Mercury.

2363-68
ACETYLENIC DERIVATIVES AS HERHICIDES.
J K Leasure M J Josephs
Weeds 9(1):103-105
Jan 1961 79.8 W41
Herbicides.

364-68
PESTICIDES: THEIR PROPERTIES, USES AND DISADVANTAGES. II. FUNGICIDES AND HERHICIDES. PESTICIDES IN RELATION TO ANIMALS.

K A Hassall
Hrit Vet J 121(5):199-211, BIBL. 210-211
May 1965 41.8 V643
Fungicides, Herbicides, Pesticides, Toxicology.

365-68
PHYTOTOXICITY OF S-TRIAZINE HERBICIDES TO CORN AND WEEDS AS RELATED TO STRUCTURAL DIFFERENCES.
C G McWhorter J T Holstun Jr
Weeds 9(4):592-599
Oct 1961 79.8 W41
Corn, Herbicides, Plant anatomy, Weeds.

2366-68
INSECTICIDE TESTS ON THE DOUGLAS-FIR CONE MIDGE, CONTARINIA OREGONENIS FOOTE.
T W Koerber
Can Entomol 95(6):640-646
Jun 1963 421 C16
Chemical control (insects), Insecticide application,
Toxicology.

2367-68
TOXICITY OF SIMAZINE TO SEEDLING OAT PLANTS.
T J Sheets
Weeds 9 (2):331-333
Apr 1961 79.8 W41
Cats, Phytotoxicity, Seedlings, Simazine, Phytotoxicity, Simazine.

2368-68
FUNGICIDAL ACTIVITY OF AIR PASSED THROUGH COLUMNS OF SOIL TREATED WITH FUNGICIDES.
D E Munnecke K H Domsch J W Eckert
Phytopathology 52(12):1298-1306, BIBL. 1306
Dec 1962 464-8 P56
Air, Chemical control (plant diseases), Fungicides,
Soil treatment.

369-68
TOXICITY OF MIXTURES OF 1,2-DIHROMO-3-CHLOROPROPANE AND 1,2-DIBROMOETHANE TO THE ROOT-KNOT NEMATODE, MELOIDOGYNE JAVANICA.

M Moje I J Thomason
Phytopathology 56 (4):428-431, BIBL. 430-431, TABS.
Apr 1963 464.8 P56
Meloidogyne javanica, Nematocides,
1,2-dibromo-3-chloropropane, Meloidogyne javanica,
Nematocides.

2370-68
FUNGISTATIC AND PHYTOTOXIC PROPERTIES OF SOME DERIVATIVES OF HITROBENZENE.
J W Eckert
Phytopathology 52(7*:642-649, BIBL. 649
Jul 1962 464.8 P56
Fungicides, Nitrobenzene, Phytotoxicity, Phytotoxicity.

2371-68
TOXICITY OF SOME HALOGENATED HYDROCARBON MIXTURES TO LARVAE OF THE CITRUS NEMATODE, TYLENCHULUS SEMIPENETRANS.
W Moje
Phytopathology 53 (4):423-427, BIBL. 426-427, TABS.
Apr 1963 464.8 P56
Chemical control (nematodes), Halogen compounds,

Nematocides, Toxicology, Tylenchulus semipenetrans.

2372-68
PHYTOTOXICITY OF SIMAZINE.
O C Hurnside R Behrens
Weeds 9 (1): 145-157
Jan 1961 79.8 W41
Simazine, Simazine.

1373-68
TOXIMETRIC STUDIES OF FUNGICIDES AGAINST THE HROWN ROT ORG-ANTSMS, SCLEROTINIA FRUCTICOLA AND S. LAXA.
R K Grover J D Moore
Phytopathology 52 (9):876
Sep 1962 464.8 P56
Hrown rot (cherries), Fungicides, Sclerotinia fructicola, Sclerotinia laxa, Sclerotinia fructicola, Sclerotinia laxa.

2374-68
THE USE OF CHICKS IN EVALUATING KILLED POLIOMYELITIS VACCINE.
C C Mascoli
Avian Dis 6(1):86-92
Feb 1962 41.8 AV5

65 2375-68

65 PLANT PHYSIOLOGY AND BIOCHEMISTRY 2385-68

Pectolytic enzymes, Plant biochemistry, Cellulolytic enzymes, Erwinia carotovora, Pectolytic enzymes.

2375-68

THE EFFECT OF PH AND FHOSPHATE ON VIRUS INFECTION.
C I Kado
Phytopathology 52(4):362
Apr 1962 464.8 P56
Phosphates, Virus diseases (plants).

2376-68

PRODUCTION OF EXTRACELLULAR ENZYMES BY FOUR PATHOGENS OF APPLE FRUIT.
J Wallace J Kuc E B Williams
Phytopathology 52(10):1004-1009, BIBL. 1009, TABS.
Oct 1962 464.8 P56
Apples, Enzymes, Extracellular substances, Fungi, Plant biochemistry.

2377-68

FENETRATION AND TRANSLOCATION OF ROGOR APPLIED TO PLANTS. P de Pietri-Tonelli
Advances Pest Contr Res 6:31-84, BIBL. 76-84, TABS., PL. 10 Nov 1965 421 AD9
Dimethoate, Toxicology, Dimethoate.

2378-68

MEASUREMENT OF MICROBIOLOGICAL EFFECTS OF HERBICIDES.
J S Whiteside M Alexander
Weeds 8(2):204-213
Apr 1960 79.8 W41
Herbicides, Microbiology, Soils.

2379-68
INDUCTION OF PERITHECIAL PRIMORDIA IN HYPOMYCES SOLANI F. CUCURBITAE.

R Baker B Ware
Phytopathology 52(4):359
Apr 1962 464.8 P56
Hypomyces solani f. cucurbitae, Plant disease control,
Hypomyces solani f. cucurbitae.

2380-68

BERRODUCTIVE POTENTIAL OF YELLOW NUTSEDGE BY SEED.
E R Hill W H Lachman D N Maynard
Weeds 11(2):160-161
Apr 1963 79.8 W41

2381-68
MODIFICATION OF IMMUNITY OF PONCIRUS TRIFOLIATA TO YELLOWVERN VIRUS BY THE ADDITION OF VEIN-ENATION VIRUS AND
SUSCEPTIBLE TISSUE.

L G Weathers A O Paulus M K Harjung
Phytopathology 52 (4):367
Apr 1962 464.8 P56
Immunity, Popcirus trifoliata, Vein enation (citrus),
Foncirus trifoliata.

2382-68
UTILIZATION OF INORGANIC NIROGEN SOURCES BY SPECIES OF PHYTOPHTORA.

R W Roncadori
Phytopathology 52(11):1220
Nov 1962 464.8 P56
Nitrogen, Phytophthora, Plant nutrition, Plant physiology,
Phytophthora.

2383-68
AN INHIBITOR OF THV INFECTION PRODUCED BY TOBACCO LEAF CELLS.
M Zaitlin & Siegel
Phytopathology 52(4):367
Apr 1962 464.8 P56
Mosaic (tobacco), Tobacco.

2384-68

PECTOLYTIC AND CELLULOLYTIC ENZYMES PRODUCED BY ERWINIA CAROTOVORA.

G S Walton R A Cappelini
Phytopathology 52(9):927
Sep 1962 464.8 P56
Cellulolytic enzymes, Erwinia carotovora,

THE RESPONSE OF NORWAY SPRUCE TO SOIL FUMIGATION FOR THE CONTROL OF NEMATODES.

R E Adams R P True
Phytopathology 52 (11):1216
Nov 1962 464.8 P56
Nematocides, Nematode control, Picea abies,
Plant physiology, Soil fumigation, Nematode control,
Picea abies.

2386-68
THE INFLUENCE OF CONIDIAL MATRIX ON THE BEHAVIOR OF COLLETOTRICHOM GLOEOSPORIOIDES AND STILBELLA SP.
P V B Allison
Phytopathology 52(8):721
Aug 1962 464.8 P56
Colletotrichum gloeosporioides.

2387-68
THE EFFECT OF LIGHT ON SEXUAL AND ASEXUAL SPORULATION OF SPECIES OF PHYTOPHTHORA.
W N Harnish H L Barnett
Phytopathology 52(11):1218-1219
Nov 1962 464-8 P56
Light, Phytophthora, Plant reproduction, Sporulation, Phytophthora, Sporulation.

2388-68
HISTOPATHOLOGICAL CHANGES ASSOCIATED WITH EXTERNAL LEAF SYMPTOMS ON PEA ENATION MOSAIC VIRUS (PEMV).
P W Tsao D J Hagedorn
Phytopathology 52 (8):755-756
Aug 1962 464.8 P56
Enation mosaic (peas), Leaves, Peas, Plant histology.

2389-68
DIFFERENTIATION OF THREE .ATROPELLIS SPECIES, BASED ON GROSS CULTURAL CHARACTERISTICS.
J D Diller
Phytopathology 52(11):1217-1218
Nov 1962 464.8 P56
Fundi.

2390-68
BASAL MINERAL REQUIREMENTS FOR THE GROWTH AND SPORULATION OF ALTERNARIA TOMATO.
M Aragaki
Phytopathology 52(8):722
Aug 1962 464.8 P56
Minerals, Plant physiology, Sporulation, Tomatoes,
Sporulation.

2391-68
STODIES ON THE GERMINATION AND METABOLISM OF TELIOSPORES OF USTILAGO MAYDIS.
P G Caltrider D Gottlieb
Phytopathology 52(11):1217
Nov 1962 464.8 P56
Germination (spores), Plant metabolism, Plant physiology, Teliospores, Germination (spores), Teliospores.

2392-68

EFFECT OF TOBACCO MOSAIC VIRUS ON THE MINERAL CONTENT OF TOMATO LEAVES.

E L Bergman J S Boyle
Phytopathology 52(9):956-957
Sep 1962 464.8 P56
Leaves, Mosaic (tobacco), Tomatoes.

2393-68
CHANGES IN THE DNA CONTENT OF LEAVES COLLECTED FROM HEALTHY AND VIRUS-INFECTED CHERRY.
B Zawadzka D F Millikan
Phytopathology 52(8):758
Aug 1962 464.8 P56
Cherries, Deoxyribonucleic acid, Leaves,
Virus diseases (plants).

2394-68

EFFECT OF HIGH CONCENTRATIONS OF CYCLOHEXIMIDE ON BUD DIFFERENTIATION IN MONTHORENCY SOUR CHERRY.
J D Moore J E Mitchell
Phytopathology 52(8):744
Aug 1962 464.8 P56
Cycloheximide, Plant physiology, Sour cherries.

PAGE 76

2395-68
ANATOMICAL CHANGES IN THE STEM OF PISUM SATIVUM INFECTED WITH PEA ENATION MOSAIC VIRUS (PEMV) INFECTED PEAS.
P W Tsao
Phytopathology 52(8):755
Aug 1962 464.8 P56
Enation mosaic (peas), Peas, Pisum Sativum, Plant anatomy, Fisum Sativum.

2396-68
A TAXONOMIC STUDY OF THE GENUS SCLEROPHTHORA.
K M Safeeulla C G Shaw
Phytopathology 52(8):750
Aug 1962 464-8 P56
Flant taxonomy.

2397-68
THE INFLUENCE OF TEMPERATURE ON THE GERMINATION OF WILD OAT SEEDS.
G Priesen L H Shebeski Weeds 9(4):634-638
Oct 1961 79.8 W41
Seed germination, Seeds, Temperature.

2398-68
EFFECT OF VIRUS INFECTION ON PEROXIDASE ACTIVITY AND C6-C1
RATIOS.
G Loebenstein N Linsey
Phytopathology 53 (3):350
Mar 1963 464-8 P56
Mosaic (tobacco), Peroxidases.

ANTIBIOTIC PRODUCTION BY STREPTOMYCES SP. IN UNAMENDED SOIL.
G Rangaswami S Ethiraj
Phytopathology 52(10):989-992, BIBL. 991-992
Oct 1962 464.8 P56
Antibiotics, Plant biochemistry, Soils, Streptomyces.

2400-68
EFFECTS OF LIGHT INTENSITY AND QUALITY ON THE GROWTH OF ELODEA DENSA AND HETERANTHERA DUBIA.
R D Blackburn J M Lawrence D E Davis
Weeds 9 (2):251-257
Apr 1961 79.8 W41
Light.

401-68
THE METABOLISM OF C14 CHAIN-AND-RING LABELED SIMAZINE BY CORN AND THE EFFECT OF ATRAZINE ON PLANT RESPIRATORY SYSTEMS.

H Funderburk Jr D E Davis Weeds 11(2):101-104
Apr 1963 79.8 W41
Atrazine, Corn, Plant metabolism, Plant respiration, Simazine.

2402-68

EFFECT OF ATRAZINE ON CATALASE AND PEROXIDASE IN RESISTANT AND SUSCEPTIBLE LINES OF CORN.

F F Eastin R D Palmer C O Grogan Weeds 12(1):64-65

Jan 1964 79.8 W41

Atrazine, Catalase, Corn.

003-68
QUANTITATIVE STUDIES ON POSSIBLE COMPETITION OF SILVER, CERIUM AND DODINE FOR RECEPTOR SITES IN FUNGUS SPORES.
L P Miller N Russakon
Phytopathology 54(8):900-901
Aug 1964 464.8 P56
Cerium, Dodine, Fungi, Plant biochemistry, Silver, Spores.

2404-68

OU4-68
STIBULATION OF SPORE GERMINATION AND GROWTH OF GLOMERELLA
CINGULATA BY COPPER AND OTHER HEAVY METAL IONS.
L T Richardson G D Thorn
Phytopathology 52 (8):865-869, TABS.
Sep 1962 464.8 p56
Copper, Germination (spores), Glomerella cingulata, Ions,
Plant physiology, Germination (spores),
Glomerella cingulata.

405-68
INHERITANCE OF PATHOGENICITY IN OAT AND BARLEY SHUTS.
W J Cherewick
Phytopathology 54 (8):890
Aug 1964 464.8 P56
Bycology, Pathogenesis, Plant genetics, Smut (barley),

Smut (oats).

2406-68
A TECHNIQUE FOR COMPARING ISOLATES OF ASCOCHYTA IMPERFECTA
AND OTHER FUNGI.
H W Mead
Phytopathology 52(9):964-965
Sep 1962 464.8 F56
Ascochyta imperfecta, Fungi, Ascochyta imperfecta.

2407-68
TRANSLOCATION OF DALAPON IN YELLOW NUTSEDGE (CYPERUS ESCU-LENTUS).
W J Saidak
Weeds 9(4):626-633
Oct 1961 79.8 W41
Cyperus esculentus, Dalapon, Plant translocation,
Cyperus esculentus, Dalapon.

2408-68
STIMULATION OF SPORE GERMINATION OF PHOMA HERBARUM VAR.
MEDICAGINIS AND COLLETOTRICHUM TRIFOLII.
R L Millar J G Hancock
Phytopathology 53 (3):350
Mar 1963 464.8 P56
Culture media, Nutrient solutions (plants),
Spore germination, Spore germination.

2409-68
EFFECT OF 3-AMINO-1,2,4-TRIAZOLE AND L-HISTIDINE ON RATE OF ELONGATION OF ROOT HAIRS OF AGROSTIS ALBA.
W T Jackson
Weeds 9 (3):437-442
Jul 1961 79.8 R41
Agrostis alba, Amitrole, Plant growth inhibitors,
Root hairs, Agrostis alba.

2410-68
THE EFFECT OF PLANT GROWTH REGULATORS ON FIVE GENERA OF BACTERIA.
L Stewart
Plant Dis Rep 46(7):469-471
15 Jul 1962 1.9 P69P
Bacteria, Plant regulators.

24:11-68
SOME FACTORS AFFECTING GERMINABILITY OF UREDOSPORES OF PUCCINIA CORONATA.
E L Hobbs
Phytopathology 52(11):1223-1225
Nov 1962 464.8 P56
Puccinia coronata, Urediospores, Puccinia coronata,
Urediospores.

2412-68
HERBICIDES ON BLUEGRASS.
R K N Singh R W Campbell
Weeds 13(2):170-171
Apr 1965 79.8 W41
Herbicides, Poa pratensis.

2413-68
CHARACTERISTICS OF JOHNSONGRASS RHIZOMES.
L E Anderson A P Appleby J W Weseloh
Weeds 8 (3) :402-406, BIBL. 405-406
Jul 1960 79-8 W41
Rhizomes, Sorghum halepense.

2414-68
THE INFLUENCE OF N-(3,4-DICHLOROPHENYL) METHACRYLAMIDE ON EARLY GROWTH AND DEVELOPMENT OF COTTON.
S W Bingham W K Porter Jr
Weeds 9(2):282-289
Apr 1961 79.8 W41
Cotton.

#15-68
EFFECT OF N-(3,4-DICHLOROPHENYL.METHACRYLAMIDE ON THE OXIDATION OF ASCORBIC ACID BY CORN.
H Funderburk Jr W K Porter Jr
Weeds 9(4):545-557
Oct 1961 79.8 W41
Ascorbic acid, Corn, Oxidation-reduction potential,
Plant biochemistry.

2416-68
EFFECTS OF N-(3,4-DICHLOROPHENYL) METHACRYLAMIDE ON GROWTH
AND CERTAIN RESPIRATORY ENZYMES OF CORN.
H H Funderburk Jr W K Porter Jr
Weeds 9(4):538-544

BIBLIOGRAPHY

65 2417-68

Oct 1961 79.8 W41 Corn, Enzymes, Plant biochemistry.

2417-68

FFFECT OF LEACHING ON RESPIRATION OF VICTORIN-TREATED OAT TISSUES.

E J Amador H Wheeler
Fhytopathology 53(6):621
Jun 1963 464-8 P56
Helminthosporium victoriae, Helminthosporium victoriae.

2418-68

FACTORS AFFECTING THE PATTERN OF RESPIRATORY CHANGES IN VICTOHIN-THEATED OAT TISSUE.

E J Amador H Wheeler
Phytopathology 54(8):886
Aug 1964 464.8 P56
Oats, Plant respiration, Victorin.

2419-68
RESPIRATOHY AND ENZYMATIC CHANGES IN VICTORIA BLIGHT OF OATS.
R B Grimm H Wheeler
Phytopathology 53(4):436-440, BIBL., TABS.
Apr 1963 464.8 P56
Ascorbic acid, Helminthosporium victoriae,
Plant respiration, Victoria blight (oats),
Helminthosporium victoriae.

2420-68

VARIATION IN MORPHOLOGICAL CHARACTERISTICS AND DALAPON SUSCEPTIBILITY WITHIN THE SPECIES SETARIA LUTESCENS AND SETAHIA PABERII.

P W Santelmann J A Meade
Weeds 9 (3): 406-410, TABS.
Jul 1961 79.8 W41

Dalapon, Herbicides, Plant morphology, Dalapon.

2421-68
TOXICITY OF VICTOXININE.
H P Scheffer R B Pringle
Phytopathology 53 (5):558-561, BIBL.
May 1963 464.8 P56
Helminthosporium victoriae, Toxicology, Toxins, Victoxinine,
Helminthosporium victoriae, Victoxinine.

2422-68
DIHECT ASSAY OF SOILS FOR PUNGISTASIS.
B T Lingappa J L Lockwood
Phytopathology 53(5):529-531, BIBL., TABS.
May 1963 464.8 P56
Soil analysis, Soil fungi, Soil testing.

2423-68
ELECTRON MICROSCOPY OF CONIDIAL CELL WALL OF COCHLIOBOLUS MIYABEANUS.
C Matsui M Nozu T Kikumoto M Matsuura Phytopathology 52(7):717-718
Jul 1962 464.8 P56
Cell wall, Electron microscopy.

2424-68
THE HEACTION OF STRAINS OF FIELD BINDWEED TO 2,4-D.
J W Whitworth
Weeds 12(1):57-58
Jan 1964 79.8 W41

2425-68

PRECIPITATION OF PLANT VIRUSES BY POLYETHYLENE GLYCOL.

T T Hebert
Phytopathology 53(3):362, BIBL.
Bar 1963 464.8 P56

Mosaic (wheat), Polyethylene glycol.

2426-68

PHOSPHOHUS UPTAKE AS INFLUENCED BY ASSOCIATED PLANTS.

E E Chambers I G Holm
Weeds 13 (4):312-314
Oct 1965 79.8 W41
Phosphorus, Plants.

2427-68

HYBHIDIZATION BETWEEN VARIETIES OF ERYSIPHE GRAMINIS.

U Hiura
Phytogathology 52(7):664-666
Jul 1962 464.8 p56
Breeding, Erysiphe graminis.

2428-68
THE UPTAKE, TRANSLOCATION AND METABOLISM OF SIMAZINE AND ATRAZINE BY CORN PLANTS.
M Montgomery V H Freed
Weeds 9(2):231-237, TABS.
Apr 1961 79.8 W41
Atrazine, Corn, Plant metabolism, Plant translocation, Simazine.

2429-68
THE ROLE OF SURFACTANTS IN THE FOLIAR ABSORPTION OF INDOLE3-ACETIC ACID (IAA). .
R E Hughes V H Freed
Weeds 9 (1):54-59
Jan 1961 79.8 W41
Absorption, Beans, Indoleacetic acid, Leaves,
Surface-active agents.

2430-68
INFLUENCE OF SOME ENVIRONMENTAL FACTORS ON HEREDITARY VARIATION IN MONOSPORE CULTURES OF VEHTICILLIUM ALBO-ATRUM.
J N Roth W H Brandt
Phytopathology 54(12):1454-1458, TABS.
Dec 1964 464.8 P56
Environment, Plant genetics, Plant physiology,
Verticillium albo-atrum.

IN VITRO HATCHING OF MELOIDOGYNE HAPLA EGGS AS AFFECTED BY TEMPERATURE, MOISTURE, AND AGE OF EGG MASS. P J Wuest Phytopathology 53(3):353 Mar 1963 4644.8 P56 Humidity, Meloidogyne hapla, Temperature, Meloidogyne hapla.

2432-68

COMMENTS ON THE MOISTURE REQUIREMENTS OF FUNGUS GERMINATION.

R D Schein
Phytopathology 54(11):1427

Nov 1964 464.8 P56

Fungi, Humidity, Seed germination.

2433-68
THE PUNGICIDAL ACTIVITY OF ACROLEIN PHENYLHYDRAZONE AND RELATED COMPOUNDS AGAINST RUST.
G D Thorn
Phytopathology 51(2):77-80, TABS.
Peb 1961 464.8 P56
Acrolein, Hydrazones, Uredinales.

2434-68
GROWTH RESPONSE OF SEVERAL ISOLATES OF FUSARIUM IN RHIZOSPHERES OF HOST AND NONHOST PLANTS.
A A Reyes J E Mitchell
Phytopathology 52(11):1196-1200, TABS.
NOV 1962 464.8 P56
Fusarium oxysporum f. lycopersici, Pusarium solani,
Fusarium solani f. pisi, Plant hosts, Plant physiology,
Hhizosphere, Fusarium oxysporum f. lycopersici,
Fusarium solani, Fusarium solani f. pisi, Plant hosts.

2435-68
MORPHOLOGY AND RESPIRATION OF DISEASED AND NORMAL HELMINTHOSPORIUM VICTORIAE.
E E Psarros G D Lindberg
Phytopathology 52(7):693-699, BIBL. 699
Jul 1962 464.8 P56
Helminthosporium victoriae, Plant morphology,
Plant respiration, Helminthosporium victoriae.

2436-68
BIOCHEMICAL CHANGES IN SEEDLINGS OF BEAN INFECTED WITH COLLETOTRICHUM LINDEMUTHIANUM.
R D Romanowski J Kuc F W Quackenbush
Phytopathology 52(12):1259-1263, BIBL. 1263
Dec 1962 464.8 P56
Beans, Colletotrichum lindemuthianum, Plant biochemistry,
Seedlings, Colletotrichum lindemuthianum.

2437-68
PRODUCTION OF EXTRACELLULAR ENZYMES BY CLADIOSPORIUM CUCUMBERINUM.
J Kuc
Phytopathology 52(9):961-963
Sep 1962 464.8 P56
Cladosporium cucumerinum, Enzymes, Extracellular substances, plant biochemistry, Cladosporium cucumerinum.

2438-68
THE FATE OF LONG CHAIN ESTERS OF 2,4-D IN PLANTS.
J D Morre H J Rogers
Weeds 8(3):436-447, BIHL. 446-447, TAHS.
Jul 1960 79.8 W41
Esters, Plant biochemistry, 2,4-d.

RESPONSE OF ERGOT FUNGUS TO THE NUTRITION AVAILABLE FROM THE HOST PLANT.

J Hybal
Phytopathology 53(3):363, HIHL.
Mar 1963 464.8 P56
Claviceps purpurea, Ergot, Ergot alkaloids.

2440-68
EFFECTS OF VARIOUS FACTORS ON THE GROWTH AND SPORULATION OF GLOMERELLA CINGULATA.
A W Stretch R A Cappellini
Phytopathology 53 (3):352
Mar 1963 464.8 P56
Glomerella cingulata, Nutrient solutions (plants),
Glomerella cingulata.

441-68
A METHOD OF OHTAINING MELOIDGYNE SPP. IN ASEPTIC CULTURES.
C W Miller
Phytopathology 53(3):350-351
Mar 1963 464.8 P56
Flant galls.

USE OF FLUORESCENT STAINS IN THE LOCALIZATION OF DNA IN OCSPORES OF APPANONYCES EUTEICHES. C W Miller TH King Phytopathology 53(3):351 Mar 1963 464.8 P56 Acridine orange, Aphanomyces euteiches, Fluorescent dyes, Aphanomyces euteiches.

ROOT MOISTURE EXTRACTION PROFILES OF VARIOUS WEEDS.
R G Davis A F Wiese J L Pafford
Weeds 13(2):98-100
Apr 1965 79.8 W41
Plant extracts, Roots, Weeds.

444-68
IN VITRO NUTRITION OF XANTHOMONAS MALVACEARUM.
IN V Nayudu
Phytopathology 53 (3):300-301, HIHL., TAHS.
Bar 1963 464.8 P56
Culture media, Xanthomonas malvacearum.

445-68
DISTRIBUTION OF RIHONUCLEASE IN SUBCELLULAR FRACTIONS OF UNTREATED, WOUNDED, AND TMY INFECTED PINTO HEAN LEAVES.
H G Shinde H K Chandrasekhar V Santilli
Phytopathology 54 (8):908
Aug 1964 464.8 P56
Kidney beans, Leaves, Plant biochemistry, Plant injuries,
Ribonuclease.

446-68
TOXICITY OF HENZOIC ACID HERBICIDES TO COTTON AND SOYHEANS.
A F Wiese A G Martin
Weeds 11(1):7-10
Jan 1960 79.8 W41
Benzoic acid, Cotton, Herbicides, Soybeans.

2447-68
SIMILARITY OF MOVEMENT OF N-ALKYL QUATERNARY AMMONIUM COMPOUNDS IN AQUEOUS SYSTEMS ON PAPER CHROMATOGRAMS AND IN
FLANT XYLEM.
M Salerno L V Edgington
Phytopathology 53 (5):605-607, HIHL. 606-607
May 1963 464-8 P56
Ammonium compounds, Chromatography, Xylem.

448-68
THE SULFUR-DEPLETION OF CELLS BY CAPTAN.
R J Lukens
Phytopathology 54 (7):881
Jul 1964 464.8 P56
Captan, Plant biochemistry, Plant metabolism, Sulfur.

2449-68
PATE OF PROMETRYNE IN COTTON PLANTS.
D C Whitenberg
Weeds 13(1):68-71, HIHL. 70-71, TAHS.

Jan 1965 79.8 W41 Cotton.

2450-68

FACTORS INFLUENCING SURVIVAL OF RED AND WHITE CLOVER PLANTS EXPOSED TO LOW TEMPERATURES.

R A Kilpatrick R W Judd Jr G M Dunn A E Rich Phytopathology 54(8):897
Aug 1964 464:8 P56

Clover, Low-temperature research, Plant hardiness, Red clover, White clover.

2451-68
INHERITANCE OF PATHOGENICITY IN A CROSS OF PHYSIOLOGICAL RACES III AND 36 OF PUCCINIA GRAMINIS P. SP. TRITICI. W Q Loegering H R Powers Jr Phytopathology 52(6):547-554, BiHL. 554, TAHS. Jun 1962 464.8 P56 Genetics.

2452-68
CARHOHYDRATE METAHOLISM OF JOHSONGRASS AS INFLUENCED HY SEASONAL GROWTH AND HERHICIDE TREATMENTS.
C G McWhorter Weeds 9 (4):563-568
Oct 1964 79.8 W41
Carbohydrates, Herbicides, Plant biochemistry, Plant metabolism.

2453-68
EFFICACY OF PHORATE AS A PUNGICIDE.
J Hacskaylo R H Stewart
Phytopathology 52(4):371-372
Apr 1962 464.8 P56
Phorate.

2454-68
ENZYMATIC FRAGMENTATION OF COTTON FIHER.
P H Marsh M E Simpson
Phytopathology 54 (7):747
Jul 1964 464.8 P56
Cellulase, Cotton, Enzymes, Enzymology, Fibers.

2455-68
PHYSIOLOGIC SPECIALIZATION IN PHYTOPHTHORA FRAGARIAE.
R H Converse D H Scott
Phytopathology 52(8):802-807, HIHL. 807, TAHS.
Aug 1962 464.8 P56
Phytophthora fragariae.

2456-68
HISTOLOGY OF CRONARTIUM FUSIFORME IN SLASH PINE SEEDLINGS.
F F Jewell R P True S L Mallett
Phytopathology 52(9):850-858, HIHL. 858
Sep 1962 464.8 P56
Cronartium fusiforme, Pinus elliottii, Plant histology,
Seedlings, Cronartium fusiforme, Pinus elliottii.

2457-68

SPORE STAGES AND LIFE CYCLE OF PUCCINIA CARTHAMI.

D E Zimmer
Phytopathology 53(3):316-319, HIHL., PL.
Har 1963 464.8 P56

Life cycle, Puccinia carthami, Safflower, Life cycle,
Puccinia carthami.

458-68
PHYSIOLOGICAL DIFFERENCES HETWEEN A VIRULENT AND A WEAKLY VIRULENT RADIATION-INDUCED STRAIN OF ERWINIA CAROTOVORA.
B A Friedman
Phytopathology 52(4):328-332, HIHL. 332
Apr 1962 464.8 P56
Radiation, Virulence.

2459-68
A RAPID TECHNIQUE FOR FIXING AND MOUNTING GROWING FUNGI.
W A Feder P C Butchins
Phytopathology 54(7):863-864
Jul 1964 464.8 P56
Fungi, Mycology, Photomicrography.

2460-68
THE EFFECT OF SOME INSECTICIDES ON THE GROWTH OF VERTICIL-LIUM ALHO-ATRUM.
W G Hoyman E Dingman
Phytopathology 54 (12): 1434
Dec 1964 464.8 P56
Fungi, Insecticides, Verticillium albo-atrum.

65 2461-68

2461-68
GENETIC CONTROL OF TOXIN PRODUCTION IN HELMINTHOSPORIUM VICTORIAE.
R R Nelson R P Scheffer R B Pringle Phytopathology 53 (4):385-387, BIBL. Apr 1963 464.8 P56 Biological assay, Toxins.

2462-68
THE DEGRADATION OF ISOLATED MICROSOMES FROM CUCUMBER AND CORN SEEBLINGS.
S H West J B Hanson Weeds 8(3):341-348, BIBL. 347-348, TABS.
Jul 1960 79.8 W41
Ethylenediaminetetraacetic acid, Microsomes, Potassium chloride, Seedlings, 2,4-d.

2463-68
MORPHOLOGY AND DEVELOPMENT OF JOHNSONGRASS PLANTS FROM SEEDS AND RHIZOMES.
C G McWhorter
Weeds 9 (4):558-562
Oct 1961 79.8 W41
Rhizomes, Seeds.

246-68
EFFECTS OF REDUCED SUNLIGHT ON WATER STARGRASS (BETERAN-THERA DUBIA).
R E Wilkinson
Weeds 9(3):457-462
Jul 1961 79.8 W41
Light.

2465-68
SOME PHYSIOLOGICAL EFFECTS OF 2,2-DICHLOROPROPIONIC ACID.
M Ingle B J Rogers
Weeds 9(2):264-272, BIBL. 272
Apr 1961 79.8 w41
Chemical control (weeds).

2466-68

ADAPTATION AND SENSITIZATION OF BEAN LEAVES TO HEAT.
C F Yarwood
Phytopathology 54(8):936-940, BIBL. 940, TABS.
Aug 1964 464.8 P56
Beans, Heat, Plant adaptation.

2467-68
ANATOMICAL VIEW OF THE LIFE BISTORY OF THE STRAWBERRY ROOT-LET.
I Vertrees S Wilhelm
Phytopathology 54(12):1437
Dec 1964 464-8 P56
Plant anatomy, Plant morphology, Roots, Strawberries.

2468-68
INFLUENCE OF ISOLEUCINE ISOMERS ON DEVELOPMENT OF THE PERFECT STAGE OF FUSARIUM SOLANI F. CURCURBITAE, RACE 2.
I A Toussoun
Phytopathology 52 (11):1141-1144
Nov 1962 464.8 P56
Isoleucine, Isomers, Plant physiology.

2469-68
PHYSIOLOGICAL, SEROLOGICAL, AND PATHOLOGICAL EVIDENCE THAT PSEUDOMONAS TONELLIANA IS IDENTICAL WITH PSEUDOMONAS SAVASTANOI.
E E Wilson A R Magie
Phytopathology 53(6):653-659, BIBL. 658-659, TABS., PL.
Jun 1963 464.8 P56
Bacterial diseases (plants).

2470-68

ORGANIC CONSTITUENTS IN CONIDIA OF ERYSIPHE GRAMINIS HORDET.

I Malca H C Murray F P Zscheile
Phytopathology 52 (9):891-893
Sep 1962 464.8 P56

Conidia, Organic compounds, Plant physiology, Conidia.

2471-68
EFFECT OF MONURON ON C1402 FIXATION BY RED KIDNEY BEAN LEAVES.
F M Ashton E G Uribe G Zweig Weeds 9(4):575-579, TABS.
Oct 1961 79.8 W41
Kidney beans, Leaves, Monuron, Plant biochemistry.

2472-68
A XYLANASE SYSTEM PRODUCED BY DIPLODIA VITICOLA.
G A Strobel
Phytopathology 53(5):592-596, BIBL. 595-596
May 1963 464-8 P56
Bunch rot (grapes), Diplodia viticola, Enzymes, Xylans,
Diplodia viticola.

2473-68
ABSORPTION AND DISTRIBUTION OF EPTC- S35. .
S Yamaguchi
Weeds 9(3):374-380
Jul 1961 79.8 W41
Absorption, Radioactive tracers.

2474-68
THE ROLE OF AMYGDALIN BREAKDOWN IN THE PEACH REPLANT PROBLEM.
R B Hine
Phytopathology 51(1):10-13
Jan 1961 464.8 P56
Hydrolysis, Peaches.

2475-68
BIOLOGICAL BREAKDOWN OF TWO ORGANIC MERCURIAL FUNGICIDES.
W C Spanis D E Munnecke R A Solberg
Phytopathology 52(5):455-462, BIBL. 461-462, TABS.
May 1962 464.8 P56
Fungicides, Mercury.

2476-68
TEST OF A FIXATIVE FOR VIRUS-INFECTED PLANT CELLS.
R A Solberg J G Bald
Phytopathology 54(7):802-806
Jul 1964 464.8 P56
Virus diseases (plants).

2477-68
WINTER SURVIVAL OF DIGITARIA SANGUINALIS IN SUBTROPICAL CLIMATES.
V B Younger
Weeds 9(4):654-655
Oct 1961 79.8 W41
Plant bardiness, Weather.

2478-68
OXYGEN REQUIREMENT OF THREE ROOT-ROTTING FUNGI IN A LIQUID MEDIUM.
L J Klotz L B Stolzy T A DeWolfe
Phytopathology 53(3):302-305, BIBL., TABS., PL.
Mar 1963 464-8 P56
Culture media, Phytophthora parasitica, Plant metabolism,
Plant respiration, Root rot (citrus),
Thielaviopsis basicola, Phytophthora parasitica,
Thielaviopsis basicola.

2479-68
COMPARISON OF FREE AMINO ACIDS AND AMIDES IN ROOTS OF
HEALTBY AND RADOPHOLUS SIMILIS-INFECTED GRAPEFRUIT
SEEDLINGS.
R W Hanks A W Feldman
Phytopathology 53 (4):419-422, BIBL. 422
Apr 1963 464.8 P56
Amides, Amino acids, Chromatography, Grapefruit,
Radopholus similis, Seedlings, Radopholus similis.

2480-68
QUALITY OF RADIATION INHIBITORY TO SPORULATION OF ALTERNARIA TOMATO.

M Aragaki
Phytopathology 52(11):1227-1228
NOV 1962 464.8 P56
Alternaria tomato, Radiation, Sporulation,
Alternaria tomato, Sporulation.

2481-68
A TECHNIQUE FOR ISOLATING PYTHIU APHANIDERMATUM FROM SOIL.
R B Hine L V Luna
Phytopathology 53 (6):727-728
Jun 1963 464.8 P56
Antibiotics, Soil fungi.

2482-68
PRODUCTION OF MANNITOL BY THE ONION PINK-ROOT ORGANISM.
J R Wright D Le Tourneau
Phytopathology 54 (8):913
Aug 1964 464.8 P56
Mannitol, Pink root (onions).

2483-68 THE ABSORPTION, TRANSLOCATION, AND PATE OF AMIBEN IN SOY-BEANS. D G Swan F W Slife Weeds 13(2):133-138 Apr 1965 79.8 W41 Absorption, Amiben, Soybeans.

THE NATURE OF LOCUS RP1 CONDITIONING RESISTANCE TO RUST IN CORN. K M S Saxena R L Hooker Phytopathology 54 (8):905 Aug 1964 464.8 P56 Plant disease resistance, Plant genetics, Rust (corn).

EFFECT OF FUNGICIDES ON PERMEABILITY OF YEAST CELLS TO THE PYRUVATE ION.
M Kottke H D Sisler Phytopathology 52(9):959-961 Sep 1962 464.8 P56 Sep 1962 464.8 P56 Cells, Fungicides, Ions, Pyruvic acid, Yeast cultures.

HPTAKE OF CYCLOHEXIMIDE BY A SENSITIVE AND A RESISTANT YEAST. E W Wescott H D Sisler

Phytopathology 54 (10):1261-1264
Oct 1964 464.8 P56
Cycloheximide, Plant disease resistance, Yeasts.

2487-68

THE EFFECT OF LOW TEMPERATURE ON GERMINATION OF CHLAMYDO-SPORES OF USTILAGO AVENAE. R W Goth Phytopathology 53(3):357, BIBL.
Mar 1963 464.8 P56
Spore germination, Ustilago avenae, Spore germination, Ustilago avenae.

2488-68 REPRODUCTIVE POTENTIAL OF CYPERIS ESCHLENTIS BY THEERS-WE Tumbleson Thor Kommedahl Weeds 9(4):646-653, TABS. Oct 1961 79.8 W41 Cyperus esculentus, Reproduction, Tubers, Cyperus esculentus, Tubers.

2489-68 EVIDENCE OF AN ENERGY REQUIREMENT FOR ABSORPTION OF CARBON14 -LABELED STREPTOMYCIN AND LEUCINE BY APPLE LEAVES. S Kamimura R N Goodman Phytopathology 54 (12):1467-1474, BIBL. 1474 Dec 1964 464.8 P56 Apples, Carbon isotopes, Energy, Leaves, Leucine, Streptomycin.

2490-68 THE ADSORPTION OF SOME s-TRIAZINES IN SOILS. R E Talbert Q H Fletchhall Weeds 13(1):46-52, BIBL. 51-52, TABS. Jan 1965 79.8 W41 Atrazine, Simazine, Triazine, Simazine, Triazine.

PRECOCIOUS SPORULATION AND LONGEVITY OF CONIDIA OF HELMIN-THOSPORIUM SATIVUM IN SOIL. M G Boosalis Phytopathology 52(11):1172-1177, BIBL. 1177 Nov 1962 464.8 P56 Conidia, Helminthosporium sativum, Longevity, Plant physiology, Soils, Sporulation, Conidia, Helminthosporium sativum, Sporulation.

RESPIRATORY METABOLISM OF PHASEOLUS VULGARIS INFECTED WITH ALPALFA MOSAIC AND SOUTHERN BEAN MOSAIC VIRUSES. A A Bell Phytopathology 54(8):914-922, BIBL. 922 Aug 1964 464.8 P56 Kidney beans, Mosaic (alfalfa), Mosaic (beans), Plant metabolism, Plant respiration.

RELATION OF LIGHT QUALITY TO EFFECTS OF 2,4-D ON CHLORO-PHYLL AND CO2 EXCHANGE. G Williams S Dunn Reeds 9(2):243-250 Apr 1961 79.8 W41

Carbon dioxide, Light.

BIOCHEMICAL CHANGES IN THE WATER-INSOLUBLE MATERIAL OF MAT-URING APPLE FRUIT AND THEIR POSSIBLE RELATIONSHIP TO DISEASE RESISTANCE.
J Wallace J Kuc H N Draudt Phytopathology 52(10):1023-1027, BIBL. 1026-1027 Oct 1962 464.8 P56 Apples, Plant biochemistry, Plant disease resistance.

EFFECT OF THE ADDITION OF ORGANIC AMENDMENTS TO SOIL ON ROOT KNOT OF TOMATOES. II. RELATION OF SOIL TEMPERATURE, MOISTURE AND PH. L F Johnson Phytopathology 52(5):410-413
May 1962 464.8 P56
Organic compounds, Root knot (tomatoes), Tomatoes,
Root knot (tomatoes).

2496-68 ASCORBIC ACID OXIDASE AND TYROSINASE ACTIVITIES IN RELATION TO CROWN-GALL DEVELOPMENT. H W Spurr Jr A C Hildebrandt A J Riker Phytopathology 52(10):1079-1086, BIBL. 1085-1086 Oct 1962 464.8 P56 Ascorbic acid oxidase, Crown galls (tomatoes), Plant biochemistry.

2497-68 PENETRATION OF LIVING AND NON-LIVING SURFACES BY 2,4-D AS INFLUENCED BY IONIC ADDITIVES.

S S Szabo K P Buchholtz
Weeds 9 (2):177-184
Apr 1961 79.8 W41 Ions, 2,4-d.

CHANGES IN FREE AMINO ACID AND AMIDE CONTENT OF RESISTANT AND SUSCEPTIBLE BEANS AFTER INPECTION WITH THE HALO BLIGHT ORGANISM. P N Patel J C Walker P N Patel 3 C Marker Phytopathology 53 (5):522-528, BIBL. 527-528, PL. May 1963 464.8 P56 Asparagine, Beta-alanine, Glutamine, Halo blight (beans), Histidine, Lysine, Methionine, Ornithine, Plant disease resistance.

2499-68 GROWTH AND DIFFERENTIATION OF GERANIUM APICAL MERISTEMS IN VITRO. A D Boettcher A C Hildebrandt Phytopathology 54(8):889 Aug 1964 464.8 P56 Geranium, Plant morphology, Plant physiology.

RELATION OF ENVIRONMENTAL FACTORS TO GROWTH AND SPORULATION RELATION OF ENVIRONMENTAL FACTORS TO GROWTH AND OF CERCOSPORA ZEBRINA.

R D Berger E W Hanson
Phytopathology 53 (3):286-294, BIBL., TABS., PL.
Mar 1963 464.8 P56
Environment.

2501-68 CHANGES IN PROTEINS AND SEVERAL ENZYMES IN SUSCEPTIBLE BEAN LEAVES BY THE BEAN RUST FUNGUS. R C Staples M A Stahman Phytopathology 54(7):760-764, BIBL. 764, TABS. Jul 1964 464.8 P56 Beans, Enzymes, Fungus diseases (plants), Plant biochemistry, Proteins, Rust (beans).

2502-68 THE AMINO ACID COMPOSITION OF A STRAIN OF POTATO VIRUS X. J G Shaw R H Larson Phytopathology 52 (2):170-171 Feb 1962 464.8 P56 Amino acids.

2503-68 AMINO ACID AND AMIDE CONTENT OF HEALTHY AND DISEASE-AFFECTED STRAWBERRY PLANTS.

O P Sehgal D M Boone Phytopathology 54(7):775-778, BIBL. 777-778 Jul 1964 464.8 P56 Amides, Amino acids, Plant biochemistry, Strawberries.

65 2504-68

2504-68

REPAKING DORMANCY IN SEEDS OF CUSCUTA APPROXIMATA.

D C Tingey K R Allred
Weeds 9 (3): 429-436

Jul 1961 79.8 W41

Cuscuta approximata, Seed dormancy, Seed germination,
Seed treatment, Cuscuta approximata.

2505-68 HIGH MANGANESE REQUIREMENTS AND DEFICIENCY SYMPTOMS IN CERTAIN FUNGI. H I Barnett Fhytopathology 54(7):746 Jul 1964 464.8 P56 Fungi, Manganese, Phytopathology, Plant nutrition, Plant nutritional deficiencies.

2506-68 AN IN VITRO METHOD OF EVALUATING THE ACTIVITY OF BUDS ON THE RHIZOMES OF QUACKGRASS (AGROPYRON REPENS). B G Johnson K P Buchholtz Weeds 9(4):600-606 Oct 1961 79.8 W41 Agropyron repens, Plant budding, Rhizomes, Agropyron repens.

2507-68 A RAPID CULTURAL TEST FOR RELATIVE CELLULOLYTIC ACTIVITY OF FUNGI. G S Rautela E B Couling Phytopathology 54(8):904 Aug 1964 464.8 P56 Cellulose, Fungi, Plant metabolism, Virulence, Wood destroying fungi, Virulence.

70 CHEMISTRY

2508-68
DECOMPOSITION OF VAPAM IN SOIL.
N J Turner M E Corden R A Young
Phytopathology 52(8):756
Aug 1962 464.8 P56
Decomposition, Soils, Vapam.

2509-68 BEHAVIOR AND PATE OF CHLORINATED ALIPHATIC ACIDS IN SOILS. P C Kearney C I Harris D D Kaufman T J Sheets Advances Pest Contr Res 6:1-30, BIBL.28-30, TABS 10 Nov 1965 421 AD9 Soil chemistry.

2510-68
CELL-WALL DEGRADING ENZYMES IN SOME PLANT-PARASITIC, MYCELIOPHAGUS, AND FREE LIVING NEMATODES.
V H Dropkin P B Marsh D H Spalding
Phytopathology 52(11):1218
Nov 1962 464.8 P56
Cell Wall, Enzymes, Nematodes.

2511-68 NICOTINOIDS AS INSECTICIDES. I Yamamoto Advances Pest Contr Res 6:231-260, BIBL. 259-260, PL. 10 Nov 1965 421 AD9 Insecticides.

2512-68
CHANGES IN DEGREE OF POLYMERIZATION OF HOLOCELLULOSE DURING DECAY OF SWEETGUM SAPWOOD BY WHITE- AND BROWN-ROT PUNGI. E B Cowling Phytopathology 52(9):923
Sep 1962 464.8 P56
Biochemistry, Holocellulose, Liquidambar, Polymerization, Wood decay, Liquidambar.

2513-68
CORRELATION BETWEEN BIOLOGICAL ACTIVITY AND MOLECULAR STRUCTURE OF THE CYCLODIENE INSECTICIDES.
S B Soloway
Advances Pest Contr Res 6:85-126, BIBL. 124-127, PL., TABS.
10 Nov 1965 421 AD9
Insecticides.

2514-68
QUANTITATIVE IN AMINO ACIDS IN MYCELIUM OF COLLETOTRICHUM
CAPSICI FOLLOWING EXPOSURE TO LETHAL AMOUNTS OF MANEB.
D F Crossan A L Morehart
Phytopathology 52 (11): 1217
Nov 1962 464.8 P56
Amino acids, Colletotrichum capsici, Maneb, Mycelium,
Plant biochemistry, Colletotrichum capsici, Mycelium.

2515-68
BIOCHEMICAL BASIS FOR BIOLOGICAL SPECIFICITY OF DEXON (P-DIMETRYLAMINO-BENZENEDIAZO SODIUM SULPONATE) AS A PUNGISTAT. W J Tolmsoff
Phytopathology 52(8):755
Aug 1962 464.8 P56
Biochemistry, Pungicides.

2516-68
DECOMPOSITION OF PERBAM.
G D Thorn L T Richardson
Phytopathology 54(8):910
Aug 1964 464.8 P56
Decomposition, Ferbam.

2517-68
NON-ENZYMATIC DETOXIPICATION OF 2-CHLORO-4,6-BIS(ETHYLAMI-NO)-S-TRIAZINE(SIMAZINE) BY EXTRACTS OF ZEA MAYS.
P Castelfranco C L Foy D B Deutsch
Weeds 9 (4):580-591
Oct 1961 79.8 W41
Corn, Plant extracts, Simazine, Toxicology, Corn, Simazine.

2518-68

THE EFFECTS OF CALCIUM CARBONATE, LEAD ACETATE AND COPPER SUPPLEMENTS ON BLOOD AND LIVER COPPER CONCENTRATIONS OF YOUNG SHEEP.

R G Hemingway N A Brown J S S Inglis Res Vet Sci 3(4):348-356, TABS. Oct 1962 41.8 R312

Calcium carbonate, Copper, Lead acetate.

EFFECTS OF DAILY ADMINISTRATION OF LEAD ACETATE AND ZINC EFFECTS OF DAILY ADMINISTRATION OF LEAD ACETATE AND 211 SULPRATE DURING PRECNANCY ON THE COPPER, LEAD AND ZINC STATUS OF EWES AND THEIR LAMBS.

R G Hemingway J S S Inglis N A Brown Res Vet Sci 5 (1):7-16, TABS
Jan 1964 41.8 R312 Lambs, Lead acetate, Sheep.

THE DISTRIBUTION OF FREE AMINO ACIDS BETWEEN ERYTHROCYTES AND PLASMA IN THE POWL. Res Vet Sci 1(4):321-327 Oct 1960 41.8 R312

Amino acids, Blood plasma, Chickens, Erythrocytes.

GLYCOLIC ACID OXIDASE, CATALASE AND PEROXIDASE OF COTTON TISSUE. S W Bingham W K Porter Jr Weeds 9(2):299-306
Apr 1961 79.8 W41
Catalase, Cotton, Glycolic acid, Oxidases, Peroxidases, Plant biochemistry.

2522-68
THE ACTIVITIES OF CERTAIN ENZYMES FROM COTTON TREATED IN COTYLDON STAGE WITH N-(3,4,-DICLOROPHENYL) METHACRYLAMIDE. S W Bingham W K Porter Jr Weeds 9(2):290-298
Apr 1961 79.8 W41

Cotton, Cotyldons, Enzymes, Plant biochemistry, Cotyldons.

DETERMINATION OF VOLATILITY LOSSES OF C14-CDAA FROM SOIL SURFACES. J H Deming Weeds 11(2):91-95 Apr 1963 79.8 W41 Soil analysis.

THE METABOLISM OF PHENOTHIAZINE IN CHICKENS.
N Platonow W T Oliver
Res Vet Sci 1(4):371-381, TABS
Oct 1960 41.8 R312 Chickens, Metabolism, Phenothiazine.

SOME CHEMICAL AND PHYSICAL PROPERTIES OF WEED KILLERS. SUPP-LEMENT 1. A W Swezey R W Nex Weeds 9(2):209-215 Apr 1961 79.8 W41 Chemistry, Herbicides.

2526-68

THE DECOMPOSITION OF AMITROLE IN CALIFORNIA SOILS.
BE Day L S Jordan R T Hendrixson
Weeds 9 (3):443-456
Jul 1961 79.8 W41
Amitrole, California, Decomposition, Soil chemistry, Soils,
California.

A HYPOTHESIS OF AMITROLE ACTION BASED ON ITS BEHAVIOR TOWARD FREE RADICAL GENERATING SYSTEMS. P Castelfranco M S Brown Weeds 11(2):116-124, BIBL. 123-124 Apr. 1963 79.8 W41 Amitrole.

2528-68

PHOTODECOMPOSITION OF TRIAZINES. Weeds 12(1):5-6
Jan 1964 79.8 W41
Photochemistry.

2529-68 HERBICIDAL PROPERTIES OF LOW-VOLATILE ESTERS OF DALAPON. B E Day L S Jordan R T Hendrixson Weeds 11(2):128-130 Apr 1963 79.8 W41 Dalapon, Herbicides, Dalapon.

2530-68

330-68
PHOTODECOMPOSITION OF SUBSTITUTED PHENYLURBAS.
L S Jordan C W Coggins Jr B E Day W A Clerx
Weeds 12(1):1-4
Jan 1964 79.8 W41 Photochemistry.

2531-68

FASTING METABOLISM OF THE LACTATING COW. A Robertson H Paver P Bardon T G Marr Res Vet Sci 1(2):117-124 Apr 1962 41.8 R312 Cattle, Lactation, Metabolism.

A RAPID METHOD FOR THE DETERMINATION OF COPPER IN BIOLOGICAL TISSUES BY MEANS OF ZINC DIBENZYLDITHIOCARBAMATE. N A Brown R G Hemingway Res Vet Sci 3(4):345-347 Oct 1962 41.8 R312 Copper, Tissues, Zineb.

2533-68

THE CHEMICAL COMPOSITION OF MEDUSAHEAD AND DOWNY BROME.
R W Bovey D Le Tourneau L C Erickson
Weeds 9(2):307-311, TABS.
Apr 1961 79.8 W41 Bromus tectorum L., Plant biochemistry, Plant physiology, Bromus tectorum L..

THE EXCRETION OF INULIN, CREATININE AND PERROCYANIDE BY THE POWL. A H Sykes Res Vet Sci 1(4):315-320 Oct 1960 41.8 R312 Chickens, Inulin.

80 2535-68

80 ENGINEERING

2535-68 CALIBRATION OF AGAR COLUMNS FOR PARTICLE SIZE DETERMINATION.

R I Steere G K Ackers
Phytopathology 52(11):1221
Nov 1962 464.8 p56 Agar, Particle size determination. MULTIDOSE INJECTION APPARATUS FOR DUTCH ELM DISEASE INOC-ULATIONS. F W Holmes Phytogathology 52(9):924 Sep 1962 464.8 P56 Injections, Ulmus, Injections. LIQUID-LIQUID PHASE SEPARATION IN CONCENTRATING BARLEY STRIPE MOSAIC VIRUS. RG Timian W B Lunsetter H J Klosterman Phytopathology 52(8):755 Aug 1962 464.8 P56 Stripe mosaic (barley). 2538-68 A TRACTOR-MOUNTED POTATO SPRAYER DESIGNED FOR FIELD PLOT STUDIES. E Manzer Phytopathology 52(9):925 Sep 1962 464.8 P56 Potatoes, Spraying equipment. 2539-68 METHOD FOR COLLECTION OF PANCREATIC JUICE IN THE CONSCIOUS SHEEP. R B Taylor
Res Vet Sci 1(2):111-116
Apr 1960 41.8 R312 Pancreatic juice, Sheep. 2540-68 A ROOT OBSERVATION BOX AND TECNIQUES FOR STUDYING INFECTION AND PATHOGENESIS BY NEMATODES.

N A Minton Plant Dis Rep 46(3):199 15 Mar 1962 1.9 P69P Pathogenesis, Plant nematodes, Roots. 541-68
CAN HELICOPTERS COMPETE WITH AIRPLANES IN AGRICULTURE.

R A Moore
Agr Chem 18(4):57-58,60-62
Apr 1963 381 AG8
Aerial brush control, Aerial dusting, Aerial fertilizing,
Aerial insect control, Aerial plant disease control,
Aerial seed planting, Aerial spraying, Aerial weed control,
Aircraft, Helicopters. 2541-68 A SAMPLING CAGE FOR AQUATIC INSECTS. A SAMPLING CAGE FOR ACCORD H G James C F Nicholls Can Entomol 93(11):1053-1055 Nov 1961 421 C16 Aquatic insects, Insect collecting equipment. 2543-68 A LOW SPEED WIND TUNNEL FOR DETERMINING THE EFFECTS OF WIND ON FLIGHT ACTIVITY OF INSECTS. C F Nicholls Can Entonol 93(10):865-866 Oct 1961 421 C16

2545-68 A ROLL-UP FIELD CAGE FOR INSECTS. C F Nicholls Can Entomol 92(3):177-178 Mar 1960 421 C16 Insect cages. 2546-68 A PORTABLE MECHANICAL INSECT TRAP. C F Nicholls
Can Entomol 92(1):48-51
Jan 1960 421 C16 Insect collecting equipment. Insect traps. 2547-68 A TECHNIQUE FOR MAINTAINING ACARINE PREDATOR-PREY POPULA-TIONS. T Burnett Can Entomol 92(3):234-237 Mar 1960 421 C16 Acarina, Insect cages, Insect rearing, Predaceous insects, Acarina. 2548-68 A VARIABLE DOSAGE SPRAYER FOR TREATING SMALL PLOTS. J S Leefe Weeds 9(2):325-328 Apr 1961 79-8 W41 Spraying equipment. 2549-68 NEW APPARATUSES AND REARING TECHNIQUES FOR THE STUDY OF WIREWORMS (COLEOPTERA: ELATERIDAE) IN ORGANIC SOILS OF SOUTHWESTERN QUEBEC. J Lafrance Can Entomol 95(1):1-6 Jan 1963 421 C16 Insect rearing equipment, Quebec, Soil insects, Quebec. A PLASTIC LEAF-CAGE FOR REARING INSECTS ON WHOLE ATTACHED LEAVES. 2550-68 W T Cram H Andison T L Theaker Can Entomol 92(8):640 Aug 1960 421 C16 Insect cages, Insect rearing equipment, Leaves. A 40-CUBIC-POOT AIR-CONDITIONED CABINET. C. Jackson Can Entomol 93 (12):1154-1160 Dec 1961 421 C16 Air conditioning equipment, Insect rearing equipment. 2552-68 A REVERSE-PHASE DISK ASSAY TEST FOR ANTIBIOTICS IN MILK. F V Kosikowski R A Ledford Amer Vet Med Ass J 136(7):297-299, TABS 01 Apr 1960 41.8 AM3 Antibiotics, Milk. 2553-68 AN AUTOMATIC SUCTION-IMPACTION TYPE SPORE TRAP AND ITS USE WITH ONION BLOTCH ALTERNARIA. S M Husain Phytopathology 53(4):382-384, BIBL. Apr 1963 464.8 P56 Onions, Spores, Suction traps, Spores. 2554-68 D34-58
GAS CHROMATOGRAPHIC ANALYSIS OF BLOOD FOR CARBON MONOXIDE.
H C Carlson
Res Vet Sci 5(2):186-189
Apr 1964 41.8 R312
Blood analysis, Carbon monoxide, Chromatography. 2555-68 SAFETY IS THE KEY TO PROFIT AND SUCCESS. D Reade Agr Chem 18(5):49-50 May 1963 381 AG8 Aerial spraying, Aeronautics, Aircraft, Safety education. A SMALL PLOT SPRAYER USING DISPOSABLE SPRAY CONTAINERS.
D H Webster J S Leefe
Weeds 9(2):323-324
Apr 1961 79.8 W41

Spraying equipment.

2544-68

Insect flight, Wind tunnels.

C F Nicholls G E Maybee Can Entomol 93(3):238-239 Mar 1961 421 C16

Freight transportation, Insect cages.

AN IMPROVED CONTAINER FOR SHIPPING LIVE INSECTS.

2557-68

JET STREAM ATOMIZATION.

I O Roth J G Porterfield
Weeds 13 (4):326-328
Oct 1965 79.8 W41
Particle size determination, Spraying equipment.

2558-68
INFLUENCE OF NOZZLE SIZE AND TYPE HARDNESS OF WATER, AND WETTING AGENTS ON SPRAY DRIFT.
G E Page
Weeds 9(2):258-263, TABS.
Apr 1961 79.8 W41
Spraying, Spraying equipment, Water.

2559-68
THE PAILURE OF POLYVINYL SPONGE AS A BONE SUBSTITUTE.
J M Cameron
Res Vet Sci 1(3):230-231
Jul 1960 41.8 R312
Boges.

CIRCULAR PLOT DESIGNS FOR EVALUATION OF MULTIPLE DOSAGES OF AGRICULTURAL CHEMICALS APPLIED WITH BOOM-TYPE FIELD SPRAY-FRS IN A SINGLE PLOT.

J R Hardison
Flant Dis Rep 47 (10):853-857
15 Oct 1963 1.9 P69P
Chemical control (plant diseases), Fungicides, Spraying.

661-68
THE USE OF FLUORESCENT TRACERS TO STUDY DISTRIBUTION OF SOIL APPLIED HERBICIDES.
C G McWhorter O B Wooten
Weeds 9(1):42-49
Jan 1961 79.8 W41
Fluorescent substances, Herbicides, Radioactive tracers,
Soil treatment.

562-68
A DEVICE FOR SUBSURFACE APPLICATION OF HERBICIDES.
O B Wooten C G McWhorter
Weeds 9(1):36-41
Jan 1961 79.8 W41
Chemical control (weeds), Herbicides, Soil treatment.

563-68
A TWO-GUN) GROUND SPRAYER.
C H Herbel F N Ares
Weeds 9(4):656-657
Oct 1961 79.8 W41
Spraying equipment.

2564-68
A CARBON DIOXIDE PRESSURED PORTABLE FIELD SPRAYER.
D T Lillie
Weeds 9(3):491-492
Jul 1961 79.8 W41
Carbon dioxide, Spraying equipment.

2565-68
INFRARED PHOTOGRAPHY OF POTATO LATE BLIGHT.
F E Manzer G R Cooper
Fhytopathology 53(3):350
Mar 1963 464.8 P56
Infrared photography, Late blight (potatoes),
Fhytophthora infestans.

2566-68
A PRACTICAL APPARATUS FOR FEEDING ARTIFICIAL DIETS TO ALL STAGES OF RHODINIUS PROLIXUS STAL.
W G Friend E Cartwright
Can Entomol 95(4):362-364
Apr 1963 421 C16
Insect nutrition.

2567-68

TECHNIQUES FOR EVALUATING AQUATIC WEED HERBICIDES. P A Frank N E Otto T R Bartley Weeds 9(4):515-521

Oct 1961 79.8 W41

Aquatic weeds, Herbicides, Toxicology.

90 INDUSTRY

Economics

2568-68 1962 PESTICIDE EXPORTS SHOW GAIN DURING FIRST HALF. Agr Chem 18(4):34 Apr 1963 381 AG8 Ddt, Foreign trade, Pesticides.

Education

2569-68
INDUSTRY TOXICOLOGISTS TO DISCUSS POISONING SYMPTOMS WITH MEDICAL GROUPS.
I H Milliman
Agr Chem 18(3):38,41,43,116-117
Mar 1963 381 AG8
Medicine, Poisoning, Public opinion, Toxicology.

2570-68
THE IMPACT OF PESTICIDES ON PUBLIC HEALTH AND RECREATION.
G F Macleod
Agr Chem 18(5):25,97-99
May 1963 381 AG8
Festicides, Public health, Public opinion, Recreation.

ABIES MAGNIFICA Penetration of red fir by the dwarf mistletoe Arceuthobium campylopodum. 1103	ACTRIBOSIPHON PISUM Growth, reproduction and longevity in one biotype of the pea aphid, Acyrthosiphon pisum (Harr.) (Homoptera: Aphidi- dae). 860
ABCRTION A virus of ovine abortionisolation from sheep in the United States and characterization of the agent. 2020	
Isolation of the virus of enzootic abortion of ewes from california and oregon sheep. 215:	kidney cell cultures. 2173 ADREMAL CORTEX
Owine wiral abortion - incidence and distribution in Idaho.	Observations on a case of primary adrenocortical insufficiency in a dog. 2234
Sporadic ovine wibriosis in wirginia. 2262	ADSORPTION
ABSCESSES Pathology of the cetacea. A veterinary study on whales - Part I. 197	APRIAL BRUSH CONTROL
Pathology of the Cetacea. a veterinary study on whales -	254 1
ABSORPTION	Can helicopters compete with airplanes in agriculture. 2541
The role of surfactants in the foliar absorption of indole- 3-acetic acid (IAA) 2429	APPRIAL PERTILIZING Can helicopters compete with airplanes in agriculture.
Absorption and distribution of EPTC- S35 2473	
The absorption, translocation, and fate of amiben in soybeans.	APPIAL INSECT CONTROL Can helicopters compete with airplanes in agriculture. 2541
ABSORPTION (BIOLOGICAL) Pancreatic atrophy and absorption failure in a Boxer. 1930	AERIAL PLANT DISEASE CONTROL) Can helicopters compete with airplanes in agriculture. 2541
ABSTRACTS Abstracts of papers accepted for presentation at the fifty- sixth annual meeting of the american phytopathological soci- ety, lafayette, ind., august 23, 24, 25, 26, 1964.	ABBIAL SEED PLANTING Can helicopters compete with airplanes in agriculture.
Report and abstracts of the 1964 annual meeting of the Potomac Division of The American Phytopathological Society.	APRIAL SPRAYING Can helicopters compete with airplanes in agriculture. 2 2541
Abstracts of papers accepted for presentation at the fifty- fourth annual meeting of The American Phytopathological Society, Corvallis, Ore., August 26, 27, 28, 29, 1962.	Safety is the key to profit and success. 2555 AERIAL WEED CONTROL Can helicopters compete with airplanes in agriculture.
Report and abstracts of the 1961 meeting of the Norteastern Division of The American Phytopathological Society. 101:	5 AERONAUTICS
ACABINA	Safety is the key to profit and success. 2555
A technique for maintaining acarine predator-prey popula- tions. 254	AFRICA 7 Rabies of farm livestock in Africa. 1981
ACFR Some factors associated with maple decline in New Hampshire. 1538	AGAR Agar gel diffusion studies with a mucosal disease of cattle 1preliminary results with the technique. 1938
Nematodes associated with maple dieback and maple blight.	Agar gel diffusion studies with a mucosal disease of cattle II. A serological relationship between a mucosal disease and swine fever. 1939
ACER SACCHARUM The nature and occurrence of an annual canker of maple in Pennsylvania. 1317	Calibration of agar columns for particle size determination. 2535
ACETYLCHOLINESTERASES Bound acetyl cholinesterase in the central nervous system of	AGE Determination of the optimal age range of mice for use in
Acheta domesticus (L.) (Orthoptera). 903	
ACHONDROPLASIA Bovine achondroplasia. III. Standards of metacarpal index- es for achondroplastic, brachycephalic dwarfs and controls. 1799	AGGLUTINATION TEST Agglutinating Anaplasma marginale antigen. 1860
ACIDS	Evaluation of a plate test for the detection of Leptospiral antibodies in bovine serum.
The comparative fungicidal properties of acidic nitrogen derivatives of polyhalo-alkyl sulfenyl chlorides. 1180	Serologic investigation of pseudotuberculosis in sheep. I Agglutination test. 2017
ACRIDING ORANGE Use of fluorescent stains in the localization of DNA in cospores of Aphanomyces euteiches. 2442	Research note- A rapid macroscopic plate agglutination test for Newcastle disease- A preliminary report. 2159
ACROLEIN The fungicidal activity of acrolein phenylhydrazone and re-	AGRICULTURAL ECONOMICS Drugs and carcass quality. 2073
lated compounds against rust. 2433	Action by poultry inspection to help reduce condemnation losses. 2134

AGRICULTURAL EFFICIENCY	
AGRICULTURAL EFFICIENCY Drugs and carcass quality. 2073	alfalfa to two physiological races of Uromyces striatus medicaginis. 142
AGRICULTURE The role of plant pathology in tropical plantation agriculture. 1419	Relation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa.
AGROPYRON INTERMEDIUM Incidence and control of Tilletia contraversa in perennial grasses. 1406	Interrelated effects of environment and age of alfalfa and red clover seedlings on susceptibility to Pythium debary-anum.
AGROPYRON REPENS Identification of dalapon in quackgrass rhizome. 1757	Similarity of species of fungi isolated from roots of alfal fa and red clover.
An in vitro method of evaluating the activity of buds on the rhizomes of quackgrass (Agropyron repens). 2506	Alfalfa stem nematode in Alabama. Resistance of alfalfa to two species of root-knot nematodes
AGROSTIS	162
Chemical control of Rhizoctonia brown patch of bentgrass. 1035	Effect of temperature on resistance of alfalfa to the stem nematode (Ditylenchus dipsaci). 165
AGROSTIS ALBA Fffect of 3-amino-1,2,4-triazole and L-histidine on rate of elongation of root hairs of Agrostis alba. 2409	Biological assays of extracts of alfalfa samples from bloat producing pastures. 201
AIR Fungicidal activity of air passed through columns of soil	ALKALINE PHOSPHATASE Alkaline bone phosphatase activity in cattle. 191
treated with fungicides. 2368	ALLELES Genetics of response in pepper to three strains of potato
AIR CONDITIONING EQUIPMENT A 40-cubic-foot air-conditioned cabinet. 2551	virus Y. 149
AIR POLLUTION Ozone injury to vegetation in the northeastern U.S	ALLERGIES Allergy studies on cattle vaccinated with killed Mycobacterium paratubeculosis. 179
2324	Thiram sensitivity. 189
AIR SACULITIS Effective concentration and time of administration of deoxycorticosterone trimethylacetate in treatment of chronic respiratory disease. 2011	ALMONDS The hull rot disease of almond and the pathway for translocation of a toxin involved in symptom development. 96
AIR TEMPERATURE Relation of air temperature and age and nutrition of the host to the development of halo and common bacterial blights of bean. 1568	ALOPECIA Toxicity of carbamate, triazine, dichloropropionanilide, an diallyactamide compounds to sheep. 195
ALK-BORNE PLANT DISEASES Spread of petal blight of camellias by air-borne ascospores of Sclerotinia camelliae. 1249	ALTERNARIA Influence of moisture content, temperature, and length of storage upon survival of fungi in barley kernels. 152
AIRCRAFT	AITERNARIA TENUIS Inhibition of spore germination of Alternaria tenuis by
Can helicopters compete with airplanes in agriculture. 2541	sulfur dioxide. 108
Safety is the key to profit and success. 2555	ALTERNARIA TOMATO Quality of radiation inhibitory to sporulation of Alternaria tomato. 248
ALABAMA Cultural growth at different temperatures of Ascochyta gossypii from Georgia, Alabama, and Texas. 1181	ALTITUDE Nematodes associated with red clover growing on favorable and unfavorable sites. 166
ALASKA Two new species of Ips De Geer (Coleoptera: Scolytidae) from western Canada and Alaska. 821	Pulmonary hypertension and right ventricular hypertrophy in cattle at high altitude.
ALBERTA Avian mycologic survey in alberta. 1907	ALUMINUM HYDROXIDE Immunity study of a new diluted formalin-inactivated Newcastle disease vaccine. 200
ALBUMINS Presence of blood-serum albumin in mastitic milk. 1851	AMERICA
ALEYRODIDAE Ability of single whiteflies to transmit concomitantly a strain of infectious chlorosis of Malvaceae and of Leonurus mosaic virus. 1238	Synopsis of the genus Orius Wolff in America north of Mexico (Heteroptera: Anthocoridae). AMIBEN Photochemical alteration and inactivation of amiben. 173
Whitefly transmission of Kanthomonas pelargonii and histo- logical examination of leafspots of Pelargonium hortorum. 1525	The effect of applied water on preemergence applications of amiben. 232
ALFALPA	Dissipation of amiben. 232
Development of spring blackstem in alfalfa as affected by nutrients added to spore suspensions at the time of inoculation. 1004	The absorption, translocation, and fate of amiben in soybeans.
Variation in Phytophthora cryptogea from alfalfa. 1094	AMIDES Comparison of free amino acids and amides in roots of
Effect of crop rotation on alfalfa and soybean stands. root rots, and yields.	healthy and Radopholus similis-infected grapefruit seedlings.
Defeat of recurrent phanotypic selection on resistance of	Amino acid and amide content of healthy and disease-affecte

ANOXIA

MINES Controlling Penicillium decay of oranges with certain aliphatic amines. 989	ANGIOCARDIOGRAPHY Angiocardiography in canine dirofilariasis II. utilization of a rapid film change technique. 2287
MHINO ACIDS Effects and interactions of varied levels of temperature, amino acids, and a vitamin on the rate of larval development	ANGULAR LEAFSPOT (STRAWBERRIES) Angular leaf spot of strawberry caused by Xanthomonas fragariae sp. nov. 1524
in the fly Pseudosarcophaga affinis. Amino acids in relation to pathogenicity of two wild-type lines of Venturia inaequalis to two apple varieties.	ANIMAL ANATOMY A fully formed and functional right oviduct in a Single Comb White Leghorn pullet. 2072
Williams, b j. 1029 Free amino acid content of stripe rust uredospores. 1042	ANIMAL BREEDING
Comparison of free amino acids and amides in roots of healthy and Radopholus similis-infected grapefruit seedlings.	ANIMAL COMMUNITIES Kendall s itau coefficient as an index of similarity in comparisons of plant or animal communities. 836
The amino acid composition of a strain of potato virus x. $$2502$	ABIMAL DISEASES Pacteria and fungi pathogenic to man and animals. 1891
Amino acid and amide content of healthy and disease-affected	
strawberry plants. 2503	Bovine papular stomatitis. III. Histopathology. 2060
Quantitative in amino acids in mycelium of Colletotrichum capsici following exposure to lethal amounts of maneb.	Fat necrosis in man and animals. 2115
The distribution of free amino acids between erythrocytes	Report of the committee on nomenclature and reporting of diseases northeastern conference on avian diseases June
and plasma in the fowl. 2520	
HINGTRANSPERASES Serum transaminase in the blood of lambs given preventive	Pendulous crop in the chicken- a pathologic study. 2248
treatments for white muscle disease. 2049	Studies on the pathology of Johne s disease in sheep. III. Pathologic changes in sheep with naturally occuring infections. 2254
Fate of amitrole in soil. 1743	ANIMAL EXTRACTS
Effect of 3-amino-1,2,4-triazole and L-histidine on rate of elongation of root hairs of Agrostis alba. 2409	Reversions of Erwinia amylovora from the avirulent rough
The decomposition of amitrole in California soils. 2526	i de la companya de
A hypothesis of amitrole action based on its behavior toward free radical generating systems. 2527	
MMONIUM COMPOUNDS Similarity of movement of N-alkyl quaternary ammonium compounds in aqueous systems on paper chromatograms and in	MNIMAL MORPHOLOGY Morphologic and histochemical studies of skeletal lesions in rats fed sweet pea (Lathyrus odoratus) seeds. 2212
plant xylem. 2447	Effect of mycostatin on candidiasis in chickens on a
NAPHYLAXIS A comparison of experimental anaphylactic shock in guinea- pigs with naturally-occurring oedema disease and	high-glucose diet. 1949 Nutritional muscular dystrophy in lambs- importance of the
haemorrhagic gastro-enteritis in pigs. 2203	3 ewe s diet at certain stages of gestation and lactation. 2023
Agglutinating Anaplasma marginale antigen. 1860	chickens inoculated with strain RPL-12 avian leukosis
Studies in anaplasmosis. II. Electron microscopy of Anaplasma marginale in deer. 2198	
NAPLASMOSIS Agglutinating Anaplasma marginale antigen. 1860	chickens. 2190
Studies of anaplasmosis. I. Filtration of the causative agent.	Leptospirosis in hamsters on diets containing various levels of riboflavin. 2215
Studies in anaplasmosis. II. Electron microscopy of Anaplasma marginale in deer. 2198	Control of chronic respiratory disease. IV. The effect of a low-calcium diet and high concentrations of chlorotetracycline on the isolation of Mycoplasma from experimentally infected chicks.
Field trial with the complement-fixation test for anaplasmosis in a herd free of clinical evidence of infection. 2249	ANIMAL PHYSIOLOGY
Control of anaplasmosis under Wyoming conditions. 2276	ANIMAL RESPIRATION
ANCYLOSTOMATIDAE Cutaneous larva migrans. 1848	
ANEMIA Bemoglobin determination in swine anemia. 1834	
Bemoglobin determination in swine anemia. 1834 Batyl alcohol for bracken poisoning questioned. 1886	Lungworms enhance severity of swine influenza. 1888
Iron-dextran and vitamin B complex for the treatment of anemia in adult sheep. 1937	ANOXIA The effect of temperature, anoxia, or injection of various substances on haemolymph composition and super cooling in
Observations on avian anlastic anomia in Florida 2060	larvae of Anagasta kuehniella (Zell.). 885

ANTHELMINTICS

NTHELMINTICS A critical evaluation of bephenium hydroxynaphthoate as anthelmintic in 8 yearling Hereford calves.	an 1777	of antibodies in gastro-intestinal nematode infections in sheep.	n 216
Anthelmintics for ruminants. I. Studies on the toxicity and efficacy of Bayer 21-199 as an anthelmintic.	1786	Fowlpox virus neutralization antibody and viremia in turkeys.	219
Anthelmintics for ruminants. II. Anthelmintic activity toxicity of ruelene in sheep.		Agglutinins for 11 types of leptospires in serum from cat tle in northeastern Texas.	t- 224
DNP effective against canine Spirocercosis.	1879	ANTICOAGULANTS Hematologic findings associated with some common diseases	s o
Haemonchosis in artificially infected lambs.	1890	poultry.	194
A review of piperazine and piperazine compounds as poul ascaracides.	try 2084	ANTIGENS A fluorescent-antibody study of progressive distribution southern bean mosaic virus antigen in bean leaves.	o£ 103
NTHRACNOSE (CUCUMBERS) Accumulations of sulfur35 around cucumber anthracnose lions.	es- 1452	Investigations of antigenic components produced by sweet tato roots in response to black rot infection.	ро 126
NTHRACNOSE (DESHODIUM)		Mycoplasma gallisepticum antigen production.	209
Anthracnose of Desmodium in Georgia.	1361	Bovine tuberculosis- studies of complement fixation anti- gens.	- 211
NTHRACNOSE (PLATANUS OCCIDENTALIS) The relationship between severity of anthracnose of syc and temperature.	amore 1157	The immunological antigenicity of rapid heat inactivated viruses. I. Newcastle disease virus.	221
NTHRACNOSE (WATERMELONS) Histology of watermelon anthracnose.	1562	ANTISEPTICS Microsporum infections in cats.	192
NTIBIOTICS Stendomycin salicylate, a new antibiotic for the contro Sphaerotheca pannosa war. rosae.	1 of 962	ANTISEBUM Preparation of cucumber mosaic virus antiserum for use in vector transmission studies.	n 119
A selective antibiotic medium for isolation of Phytopht and Pythium from plant roots.	hora 1483	ABTITOXINS Staphylococcic antitoxins in dairy cattle. I. A review of	
Treatment of cattle bloat.	1850		179
Equine sporotrichosis.	1871		185
The influence of dietary calcium-phosphorus and terepht acid on antibiotic control of experimental infectious synovitis.	halic 1945	Experimental studies on the occurrence of staphylococcal antitoxin in the whey of cows. APHANOMYCES EUTEICHES	190
Effect of dipping eggs in antibiotic solutions on PPLO transmission in chickens.	2037	Penetration and infection of pea roots by zoospores of Aphanomyces euteiches.	97
Survival of PPLO injected into eggs previously dipped i antibiotic solutions.	n 2038	Aphanomyces root rot of peas as affected by organic and meral soil amendments.	min 138
Effects of certain aptibiotics in the treatment of wibr in sheep.	2110		244
Control of chemical, drug, and biological residues in m		APHIDIDAE Factors determining the rate of bean yellow mosaic virus transmission by the aphid Myzus persicae.	97
Antibiotic production by Streptomyces sp. in unamended soil.	2399	Reversions of Erwinia amylovora from the avirulent rough to the virulent smooth form on exposure to aphid extracts	
A technique for isolating pythiu aphanidermatum from so	11. 2481	Isolation of tobacco vein distorting virus from tobacco	135
A reverse-phase disk assay test for antibiotics in milk	2552	Hill technique for evaluating the resistance of cereals that barley yellow dwarf virus.	to 137
NTIBODIES Streptococcus agalactiae in colostrum of first-calf hei	fers. 1829	Latent periods in the aphid transmission of barley yellow dwarf virus.	w 141
Agammaglobulinemia in a 3-month-old calf.	1918	Aphid transmision of white clover mosaic virus.	151
Evaluation of a plate test for the detection of Leptosp antibodies in bovine serum.	iral 1933	Re-examination of vector-specificity in the barley yellow dwarf virus in Washington.	w 158
Colostral antibody to rabies in cattle vaccinated with flury strain of the virus.	HEP 2016	APPLES A new pest of apple in New Brunswick.	80
Prevalence of leptospiral agglutinating antibodies in Allegheny county, Pennsylvania, dogs.	2052		98
Application of the conglutination complement absorption to detect hog cholera antibodies. I. The technique.	test 2081		100
Persistence of foot-and-mouth disease virus in bovine k and blood as related to the occurrence of antibodies.			102
The use of the haemagglutination technique for the dete	2128 ection	Amino acids in relation to pathogenicity of two wild-type lines of Venturia inaequalis to two apple varieties. williams, b j. 1	e 102:

	ARTEMISIA ABSINTEIUM
The prevalence of latent viruses in commercial apple varieties. 1072	Studies in the life history of Artemisia absinthium. 1755 ARTERIES
Detection and identification of latent viruses in apple. 1113	Pulmonary arteriotomy for removal of Dirofilaria immitis in the dog. 2281
Chlorotic leaf spot and dwarfing, as possible contaminants of stem-pitting virus, and their over-all influence on the growth habit of apples. 1137	ARTERIOSCLEROSIS Arteriosclerosis in cattle with Johne s disease. 1916
Froduction cf proteolytic enzymes by four pathogens of apple fruit.	ARTIFICIAL INSEMINATION The present and future of artificial insemination. 1784
Pathological anatomy of rapid decline of Spy 227 apple. 1277	ASCOCHYTA Cause and prevention of the rapid spread of the Ascochyta disease of Chrysanthemum. 1481
The comparative effects of various fungicide programs on fruit numbers and yields of apple trees. 1296	ASCOCHYTA IMPERFECTA A technique for comparing isolates of Ascochyta imperfecta and other fungi. 2406
Chlorotic leaf spot from a mechanically transmissible virus from apple. $$1330$	ASCORBIC ACID
Characteristics of filamentous viruses isolated mechanically from apple. 1332	The effect of Capillaria obsignata, Madsen, 1945, on the vitamin A and ascorbic acid metabolism in the domestic fowl. 1976
The analysis of 2-aminobutane residues in citrus and apples. 2328	The effect of green feed and ascorbic acid upon single experimental infections of Trichostrongylus axei (Cobbold, 1879) in the laboratory rabbit. 2116
Production of extracellular enzymes by four pathogens of apple fruit. 2376	Effect of N-(3,4-dichlorophenyl.methacrylamide on the oxi- dation of ascorbic acid by corn. 2415
Evidence of an energy requirement for absorption of carbon14 -labeled streptomycin and leucine by apple leaves. 2489	Respiratory and enzymatic changes in victoria blight of oats.
Biochemical changes in the water-insoluble material of maturing apple fruit and their possible relationship to disease resistance. 2494	ASCORBIC ACID OXIDASE Ascorbic acid oxidase and tyrosinase activities in relation to crown-gall development. 2496
PRICOTS Shock symptoms of the stone fruit ringspot virus complex in apricot. 1360	ASCOSPORES Spread of petal blight of camellias by air-borne ascospores of Sclerotinia camelliae. 1249
QUATIC BIRDS New waterfowl host records for Sarcocystis rileyi and a review of sarcosporidiosis in birds. 2223 QUATIC INSECTS	ASPARAGIBE Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight organism. 2498
A sampling cage for aquatic insects. 2542	ASPERGILLOSIS
QUATIC WEEDS Endcthal derivatives as aquatic herbicides in fishery habitats. 1683	Cutaneous aspergillosis in a cow. 2030 ASSAY
Evaluation of herbicides applied to soil for control of aquatic weeds in irrigation canals.	A dependable local lesion assay for turnip yellow mosaic virus.
Evaluating herbicides against aquatic weeds. 1721	An improved method for assaying infectivity of tobacco mosa- ic virus. 1577
Techniques for evaluating aquatic weed herbicides. 2567	Assays of volatile fungitoxic effluents from soil treated with fungicides such as Mylone. 2346
RBOVIRUSES Clinical manifestations of eastern equine encephalomyelitis in pheasants. 2221	An assay method for soil fungistasis and response of selected fungi to the principle. 2359
RCEUTHOBIUM Rapid germination as a viability test for seed of Arceutho- bium spp. 1009	ASSES The nematode genus Strongyloides grassi, 1879 in Indian livestock. I. Observations on natural infections in the donkey (equus asinus). 2107
Fungi which provide some local biological control of Arceuthobium spp. in the Pacific Northwest. 1017	ASTER LEAPHOPPER Evidence for the simultaneous transmission of two viruses by
Control of berry and leaf abscission and mold control in packaged mistletoe. 1401	the aster leafhopper (Macrosteles fascifrons). 1104
RECEUTHOBIUM CAMPYLOPODUM Penetration of red fir by the dwarf mistletoe Arceuthobium campylopodum. 1103	ASTER YELLOWS (CARROTS) Recovery of aster yellow virus from carrot tissue cultures inoculated in vitro. 1189
RGEBTINA The first case of Toxoplasma gondii in domestic ducks in Argentina. 1980	ASTER YELLOWS (CELERY) Differences in incubation periods of aster yellows virus strains. 948
RESENIC COMPOUNDS Herbicdal value of arsenic trioxide in Eastern United States. 1709	ASTER YELLOWS (FLAX) Reduction of aster yellows in flax via systemic insecticides. 1373
1709	ATRAZINE Forage crop establishment in soil containing atrazine or simazine residues. 1751

ATRAZINE

SUBJECT INDEX			
ATROPBIC RHINITIS			
Inactivation of simazine and atrazine in the field.	1752	BABY PIGS The personatheless of experimental lenning ill in sign	
Metabolism of atrazine by susceptible and resistant pla	nts. 2329	The neuropathology of experimental louping-ill in pigs.	1816
Mode of action of atrazine and simazine in susceptible resistant lines of corn.	and 2330		182 7 1853
	2550		1033
A corn mutant deficient in 2,4-dihydroxy-7-methoxy-1,4-benzoxazin-3-one with an altered tolerance of atrazine.	2333	Thyroxine utilization rate and some other indicies of peripheral iodine metabolism in sucking pigs.	1898
The metabolism of C14 chain-and-ring labeled simazine b	v	Dietetic liver cirrhosis of pigs in Ghana.	1998
corn and the effect of atrazine on plant respiratory systems.	2401	Inoculation of baby pigs with lapinized hog cholera wacce (1 ml.).	ine 2048
Effect of atrazine on catalase and peroxidase in resist and susceptible lines of corn.	ant 2402	Inoculation of baby pigs with lapinized hog cholera wacc (2 and 4 $\mathfrak{ml.}$).	ine 2051
The uptake, translocation and metabolism of simazine an razine by corn plants.	d at- 2428	Focal necrosis in the mucosa of the gallbladder in pigs hog cholera.	with 2064
The adsorption of some s-triazines in soils.	2490	The excretion of Aujeszky s disease virus by experimenta -infected pigs.	11y 2100
ATROPBIC RHINITIS Therapy of atrophic rhinitis.	1885	The neuropathology of Aujeszky s disease in the pig.	2101
ATROPINE Organic phosphorus compound poisoning in livestock.	1852	Studies on enteroviruses of the pig-I.	2163
	1032	Studies on enteroviruses of the pig-VI	
ATTRACTANTS Development and survival of the onion maggot under fiel artificial conditions on attractive and non-attractive varieties.		the relationship of the t80 strain of a swine polio- encephalomyelitis virus to some other viruses as shown b neutralization tests in tissue cultures.	у 2165
The attraction of mosquitos by human or animal baits in lations to the transmission of disease.	re- 906	A comparison of experimental anaphylactic shock in guine pigs with naturally-occurring oedema disease and haemorrhagic gastro-enteritis in pigs.	2203
Field tests of some hydrolized proteins as lures for th apple maggot, Rhagoletis pomonella (Walsh).	e 1594	Lack of larvacidal action of Ronnel and Bayer 21-199 against migrating Ascaric suum in baby pigs.	231 2
AVENA FATUA		BACTERIA	
Effect of nitrogen fertilizers on germination and stand wild oats.	of 1671	Bacterial flora of healthy and dead larvae of Pseudaleti unipuncta (Haworth).	878
Breaking wild oat dormancy with gases at high pressure.	1708	Pigmentation of soybean seed coats associated with bacted dunleavy, j.	ria. 1070
AVIAN ENCEPHALOMYELITIS Landmarks in avian encephalomyelitis.	1911	Changes in virulence of soft-rot of bacteria during labo tory cultivation and after ultraviolet light irradiation	
Apparent natural infection of Corturnix quail hens with virus of avian encephalomyelitis - case report.	the 1974	Fungistatic properties of a bacterium isolated from the soil.	1174
Studies with eastern encephalitis in white Pekin duckli	ngs. 2033	Diseases affecting production of certified tomato plants	
An in vitro meutralization test with avian encephalomyelitis virus (AEV)	2174		1885
Plaque formation of avian encephalomyelitis virus in a	0477	Bacteria and fungi pathogenic to man and animals.	1891
chicken embryo kidney cell culture system. Studies on avian encephalomyelitis. IV Epizootiology.	2177	In vitro drug sensitivity of bacteria isolated from smal animals.	.1 1926
AVIAN LEUKOSIS COMPLEX	2218	The effect of diethylstilbestrol and progesterone on the growth of four mastitis-producing bacteria.	2047

TAN LEUKOSIS CURPLEX
The incidence of avian leukosis in broilers at processing.
2181

AVIAN LEUKQSIS COMPLEX VIRUSES

The effect of nutrition on mortality from leukosis in chickens inoculated with strain RPL-12 avian leukosis 2104 virus.

AVITAMINOSIS A relationship between vitamin B12 and reproduction, and a method of diagnosing vitamin B12 deficiency in individual 1935

AVCCADOS Crown gall on avocado. 1490

B VIRUS Simian giant-cell pneumonia with coexistent B virus 1875 infection.

The effect of plant growth regulators on five genera of 2410 BACTERIAL BLIGBT (BEANS)
Relation of air temperature and age and nutrition of the host to the development of halo and common bacterial blights
1568

BACTERIAL DISEASES (PLANTS)
Cowpea (southern pea) diseases in Georgia, 1961-1962. 1434 Progression in vivo, rate of growth in vitro, and resistance to streptomycin, as indices of virulence of Erwinia amylo-

Physiological, serological, and pathological evidence that Pseudomonas tonelliana is identical with Pseudomonas 2469 savastanoi.

BACTERIAL LEAF SPOT (BEDPEPPERS) The effect of high nitrogen fertilizer on the control of bacterial leafspot of peppers caused by Xanthomonas vesicatoria and the yields of marketable fruit. 12	Control of barley yellow dwarf in winter oats by a systemic insecticide. 1335
CONTROL SPOT (PEACHES) Control of bacterial spot with dodine. 12	Interaction of genes conditioning reaction of Algerian bar- ley and pathogenicity of Erysiphe graminis f. sp. hordei. 1377
ACTERIAL SPOT (BEDPEPPERS) The relationship of nutrition to the development of bacterial spot of pepper.	Influence of temperature, humidity, and inoculum concentration on development of Helminthosporium sativum and Sep toria passerinii in excised barley leaves. 1430
ACTERIAL SPOT (TOMATOES) In vitro nutrition of the tomato bacterial spot organism. 15	Pathogenicity of Helminthosporium victoriae and related species on oats and barley. 1436
ACTERIAL VACCINES	Inoculating barley seedlings with Ustilago nuda and wheat seedlings with U. tritici. 1518
Experimental immunization against ovine vibriosis. I. The use of live and formalin-killed Vibrio fetus vaccines.	Virus cause of blue dwarf of oats and its transmission to barley and flax. 1520
ACTERIAL WILT (BANANAS) Insect dissemination-a newly discovered mode of spread of bacterial wilt of banana. 10	Influence of moisture content, temperature, and length of storage upon survival of fungi in barley kernels. 1527
CACTERIAL WILT (DIANTHUS CARYOPHYLLUS) Reaction of twenty-one commercial carnation varieties to	Effects of temperature on covered smut expression in two barley varieties. 1555
	17 Barley seedling response to covered smut infection. 1559
ACTEBIAL WILT (TOMATOES) A study of the role of some nematodes in the incidence and severity of southern bacterial wilt of tomato.	Inheritance of reaction to Puccinia hordei in barley. I. Genes for resistance among North American race different- iating varieties. 1580
MCTERICIDES Host-contaminant biology of muscoid flies. III. Effect of hibernation, diapause, and larval bactericides on normal flora of blow-fly prepupae. 8	BARLEY STRAW Influence of barley straw on the early stages of pathogenesis in Fusarium root rot of bean. 1088
An antibacterial substance from cauliflower seeds. 10	BATYL ALCOHOL 21 Batyl alcohol for bracken poisoning questioned. 1880
Noncellular bactericidal factors in inflammatory exudate from the uterine and pleural cavities of estrous and pseudopregnant rabbits.	BEAGLE DOGS Eye changes in beagles following intravenous injection of radium 226. 1805
Thiram sensitivity.	93 BEAN PODS
AMBOO Control of bamboo in Puerto Rico by herbicides. 17	Transmission of bean pod mottle virus in soybeans by beetles: 1364 22
	BEANS
ANANAS The uneven distribution of Fusarium oxysporum f. cubense i Honduras banana soils. 9	31
An effective program for the control of banana mosaic.	New types of primary necrotic lesions produced by common bean mosaic virus. 950
The relationship between leaf uncurling stages and infecti patterns on banana leaves caused by Cercospora musae.	Relations of disease development and intensity to carbohy-
11	12 A fluorescent-antibody study of progressive distribution of southern bean mosaic virus antigen in bean leaves. 1039
Measurement of spray-oil volatility and its relation to Sigatoka fungus disease control and phytotoxicity on banan leaves. 14	The effect of rust on the distribution of C14-containing compounds in bean. 1051
Water relations in banana plants infected with Pseudomonas solanacearum. 14	A new strain of common bean mosaic virus. 1055
Relation of wascular occluding reactions in banana roots t	Influence of barley straw on the early stages of pathogene- o sis in Fusarium root rot of bean. 1088
BABLEY	The effect of rust on the weight, growth rate, and P32 content of bean.
The barley jointworm, Harmolita hordei (Harr.) (Hymenoptera: Chalcidoidea), in Prince Edwards Island.	94 Exudation patterns from bean seeds and hypocotyls and their
Tetranychus sinhai Baker (Acarina: Tetranychidae) a new pest of cereals varietal reaction of barley.	effect on Fusarium solani f. phaseoli. 1127 62 Influence of glucose, cellulose, and inorganic nitrogen compounds on biological control of bean root rot. 1202
Influence of moisture content, temperature, and time of storage upon survival of certain microflora in barley ker-	Cellulase and the Rhizoctonia disease of bean. 1214
	01 Web blight -a severe disease of beans and soybeans in 33 Mexico. 1239
Effect of cyanide in anaerobic treatment of barley for con	- The growth curve of bean pod mottle virus during systemic
	95 infection. 1333
	75 A new severe symptom-inducing strain of common bean mosaic virus. 1387
Trypan blue and boiling lactophenol for staining and clear ing barley tissues infected with Ustilago nuda. 12	92 Occurrence on Phyllosticta leaf spot in beans in 1963.

BEEF CATTLE

1394	September, 1959. 1679
Isolation of Thielaviopsis basicola from bean rhizosphere. 1395	Bibliography of weed investigations for july-december 1961, table of contents.
Two new strains of alfalfa mosaic virus systemically infectious to bean. 1396	BIG VEIN (LETTUCE) Evidence for the survival of the big-vein virus within Ol- pidium resting sporangia. 1048
Systemic resistance induced by localized virus infections in beans and cowpeas. 1459	Fungicidal control of big vein in the irrigated lettuce crop. 1449
Penetration and host-parasite relationships of Fusarium solani f. phaseoli in the bean plant. 1461	BIOCHEMISTRY
Disease development, disease intensity, and carbohydrate levels in rusted bean plants. 1515	Serological and biochemical evidence of the similarity between Pseudomonas savastanoi and P. tonelliana. 1145
Inheritance of resistance to halo blight of bean. 1571	Biochemical and neuropathological changes in swayback. 2202
Cycloheximide behavior in bean and cherry tissue. 2340	Changes in degree of polymerization of holocellulose during decay of sweetgum sapwood by white- and brown-rot fungi.
The role of surfactants in the foliar absorption of indole-3-acetic acid (IAA) 2429	2512
Biochemical changes in seedlings of bean infected with Collectorichum lindemuthianum. 2436	Biochemical basis for biological specificity of Dexon (p- dimethylamino-benzenediazo sodium sulfonate) as a fungistat. 2515
Adaptation and sensitization of bean leaves to heat. 2466	BIOLOGICAL ASSAY A dependable local lesion assay for turnip yellow mosaic
Changes in proteins and several enzymes in susceptible bean leaves by the bean rust fungus. 2501	virus (TYMV) 1392
BEEF CATTLE Urolithiasis. I. Incidence of bladder calculi, urine prop-	Biological assays of extracts of alfalfa samples from bloat- producing pastures. 2018
erties, and urethal diameters of feedlot steers. 1934	Genetic control of toxin production in Helminthosporium victoriae. 2461
Effect of grazing intensity on parasitism of beef cattle. 2285	BIOLOGICAL CONTROL A virus inhibitor from tobacco. 1450
EETS Effects of mineral fertilizers on damping-off of table beets. 1305	BIOLOGICAL CONTROL (INSECTS) Host specificity of Calophasia lunula (Hufn.) (Lepidop- tera: Noctuidae). 801
ENZOIC ACID Control of field bindweed and other perennial weeds with benzoic and phenylacetic acids. 1707	Genetics and biological control.
Toxicity of benzoic acid herbicides to cotton and soybeans.	BIOLOGICAL CONTROL (PESTS) Influence of glucose, cellulose, and inorganic nitrogen compounds on biological control of bean root rot. 1202
ENZOQUINONES Naturally occurring quinones in wheat and barley and their toxicity to loose smut fungi. 1291	BIOLOGICAL CONTROL (WEEDS) Fungi which provide some local biological control of Arceu- thobium spp. in the Pacific Northwest. 1017
BEPHENIUM HYDROXYNAPHTHOATE A critical evaluation of bephenium hydroxynaphthoate as an anthelmintic in 8 yearling Hereford calves. 1777	BIOPSY The use of tail bone biopsy for studying skeletal deposition of fluorine in cattle. 1940
BERBIES Control of berry and leaf abscission and mold centrol in packaged mistletce. 1401	The uterine biopsy technique for following the histologic changes caused by Vibrio fetus in the uterine mucosa.
BETA-ALANINE Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight organism. 2498	BIRDS Avian diseases- Official organ of american association of avian pathologists, inc. 1820
STRITOGRAPHY	Avian mycologic survey in alberta. 1907
Bibliography of weed investigations - April, May, June, 1959. 1669	Avian tuberculosis. 2014
Bibliography of weed investigations for January, February, March 1961.	Report of the committee on nomenclature and reporting of diseases northeastern conference on avian diseases June 1960. 2207
Bibliography of weed investigations for April, May, June, 1960.	BLACK ROOT ROT (PINUS) Black root rot in Florida sandhills. 1417
Bibliography of weed investigations for January, February, March 1960. 1673	BLACK ROT (SWEETPOTATOES) Investigations of antigenic components produced by sweet potato roots in response to black rot infection. 1269
Bibliography of weed investigations for October, November, December 1960. 1674	Control of black rot by prebedding heat treatment of sweet-
Bibliography of weed investigations for October, November, December 1959. 1675	potato roots. 1273 BLACK SHANK (TOBACCO)
Bibliography of weed investigations for July, August, September, 1960. 1676	Expression of black shank resistance in leaves of flue-cured tobacco. 1581
Bibliography of weed investigations for July, August,	

BLACK SPOT (CAULIFLOWER) A new black spot of cauliflower from India.	1257	BLOOD PLASMA The distribution of free amino acids between erythrocytes and plasma in the fowl. 2520
BLACK SPOT (ROSA) Control of rose black spot with fungicides. BLACKBEAD	1019	BLOOD PROTEINS Electrophoretic studies of bovine serum. III. Serum protein changes in anaplasmosis. 2003
The protozoan etiology of blackhead.	1979	Serum protein changes in lambs with naturally acquired
Chemotherapy of histomoniasis of turkeys. II. The val 5-nitro-2-furaldehyde acetylhydrazone and 4,7-phenant		nematode infections. 2313
line-5,6 quinone in prevention and treatment.	2089	BLOOD SERUM Presence of blood-serum albumin in mastitic milk. 1851
BLIGHT (ACER) Nematodes associated with maple dieback and maple blider	ght. 1614	Major blood electrolyte concentrations in cattle during the developement of hypomagnesaemia. 2013
BLIGHT (APPLES) Corticum salmonicolor in the United States.	1252	BLOOD TESTS Hematologic findings associated with some common diseases of poultry. 1948
BLIGHT (COTTON) Cultural growth at different temperatures of Ascochytegossypii from Georgia, Alabama, and Texas.	a 1181	A sensitive whole blood test for Mycoplasma gallisepticum. 2176
BLIGHT (PEARS) Corticum salmonicolor in the United States.	1252	BLUE DWARF (OATS) Evidence for the simultaneous transmission of two viruses by the aster leafhopper (Macrosteles fascifrons). 1104
BLOAT Treatment of cattle bloat.	1850	Virus cause of blue dwarf of oats and its transmission to
Eloat prevention.	1895	barley and flax. 1520
Biological assays of extracts of alfalfa samples from producing pastures.	bloat- 2018	BLUEBERRIES Nonpathogenicity of Pratylenchus penetrans to sterile low- bush blueberry seedlings. 1259
Experimental production of frothiness of reticulorumic contentsits significance as a possible cause of bloom	at.	Blueberry stem blight caused by Botryosphaeria dothidea (B. ribis). 1282
BLOOD	2274	An ectoparasitic root nematode on lowbush blueberry (Vaccinium spp.).
Studies on bovine portal blood. II. Blood flow determations with observations on hemodilution in the portal		Parasitism and pathogenesis of the cultivated highbush blue- berry by the stubby root nematode. 1663
The calcium, phosphorus, magnesium, carotene, and vita content of the blood of range cattle in eastern Monta		BLUETONGUE VIRUS The use of tissue culture-propagated bluetongue virus for vaccine preparation. 1773
Multicatheterization of blood vessels of sheep for mestudies of insecticides.	tabolic 1792	BOARS Leptospires isolated from prepuce of boars. 2044
Response of hemoglobin and cellular elements of blood hypervitaminosis D in monkeys.	after 1804	BOLL ROT (COTTON) Effects produced in cotton fiber by Rhizopus, a boll rot fungus. 1390
Serum transaminase in the blood of lambs given preventreatments for white muscle disease.	tive 2049	BONE MARROW Hemadsorption and cytopathic effect produced by african
Persistence of foot-and-mouth disease virus in bovine and blood as related to the occurrence of antibodies.	kidney 2128	swine fever virus in swine bone marrow and buffy coat cultures. 2112
A simple and rapid method for staining blood films winethylene blue.	th new 2158	BONES Alkaline bone phosphatase activity in cattle. 1915
Blood enzyme interrelationships in white muscle disease		The experimental replacement of segmental defects in bone with a plaster of paris-epoxy resin mixture. 2226
BLOOD ANALYSIS		The failure of polyvinyl sponge as a bone substitute. 2559
Gas chromatographic analysis of blood for carbon mono	xide. 2554	BORAX
BLOOD CELLS The blood cells of the turkey.	2206	Further data on borax as a control of surface infection of slash pine stumps by Fomes annosus. 1243
BLOOD CBEMISTRY Major blood electrolyte concentrations in cattle during developement of hypomagnesaemia.		BOTRYTIS Inter-relationships among fungi associated with strawberries in Oregon. 1304
BLOOD CIRCULATION		Botrytis sp. on Douglas fir seedlings. 1311
Studies on bovine portal blood. II. Blood flow determations with observations on hemodilution in the portal		Nature of predisposition of castorbeans to botrytis. ii. Raceme compactness, internode length, position of staminate flowers, and bloom in relation to capsule susceptibility. 1378
BLCOD PARASITES A simple and rapid method for staining blood films wimethylene blue.	th new 2158	BOTRYTIS CINERA The effect of environment on the toxic action of sulfur di- oxide on the spores of Botrytis cinerea. 991

	SUBJECT	INDEX
BOTRYTIS CINEREA		
BOTRYTIS CINEREA Studies on the germination of conidiospores of Botrytis cinerea.	1158	BUFFALORS Necrosis of the tail in the buffalo. a deficiency disease . $196 $
BOTULISM Partial reactivation of formalin-inactivated Clostridium botulinum tyre C toxin.	n 234 7	In vitro studies on the effect of some antimalarial drugs of Fasciola worms in buffaloes, cattle, and sheep. 228
BOVINE ENTEROVIRUSES Serologic relationship between bovine enteroviruses and	2265	Chemotherapeutic studies of gastrointestinal parasites of beef cattle and bison in Kansas.
infectious bovine rhinotracheitis virus. BOVINE PAPILLOMA VIRUS	2265	BULBS Colletotrichums associated with lily bulbs. 129
Further observations on immunity to bovine cutaneous papillomatosis.	2229	BUNCB ROT (GRAPES) The effect of grape washings on the germination of spores of fungi associated with bunch rot of grapes.
BOVINE PAPULAR STOWATITIS VIRUS Bovine papular stomatitis. III. Histopathology.	2060	A xylanase system produced by Diplodia viticola. 247
BOVINE VIRUS DIARRHEA VIRUS Serologic survey for infectious bovine rhinotracheitis a bovine viral diarrhea antibodies.	and 2042	BUSB DWARF (RASPBERRIES) Affinities of viruses affecting fruit trees and raspberry.
BOXER DOGS Pancreatic atrophy and absorption failure in a Boxer.	1930	BUSB REDPEPPERS (VECETABLE) Pathogenicity of a root-knot nematode (Meloidogyne incog- nita acrita) and a root-lesion nematode (Pratylenchus pene- trans) on pepper (Capsicum frutescens). 160
BRAIN DISEASES Diabetes insipidus attributed to visceral larva migrans dog.	in a 1884	BUTT ROT (TREES) Yellow-poplar butt rot infection from dead ancillary stems.
BRASSICA Powdery mildew - a new disease of rapeseed and mustard India.	in 1237	Red root and butt rot in a Georgia slash pine plantation.
BREEDING Hybridization between varieties of Erysiphe graminis.	2427	BUTTERFLIES Tryptophan and tyrosine metabolism in the pupa of papilioni butterflies. II The general pattern of tryptophan metabolism during the pupal stage of Papilio xuthus. 88
BRITISB COLUMBIA A new species of Nepytia (Lepidoptera: Geometridae), of economic importance to Douglas fir in British Columbia.	813	CABBAGE Races of clubroot in North America. 157
Laboratory and field observations on two predators of the pear psylla in british Columbia.	he 861	CACAO Complementary isolates of Phytophthora palmivora from cacao and rubber, and their taxonomy. 156
Biology of the mountain pine beetle, Dendroctonus monti- colae Hopkins, in the East Kootenay Region of British Golumbia. III. Interaction between the beetle and its host, with emphasis on brood mortality and survival.	868	CADMIUM The effect of cadmium compounds on Strongyloides papillosus in sheep. 230
BROWINE Inhibition of sugarcane mosaic virus by MC-2 and bromine	e. 1014	CALCIUM Calcium content of leaves from stubborn and non-stubborn diseased Washington Navel Orange trees.
BROMUS TECTORUM Effects of different densities of downy brome (Bromus to	06-	Calcium and phosphorus absorption and its relationship to growth in the dog.
torum) on growth and survival of crested wheatgrass (Agr pyron desertorum) in the greenhouse.		The calcium, phosphorus, magnesium, carotene, and vitamin A content of the blood of range cattle in eastern Montana. 178
BROMUS TECTORUN L. The chemical composition of medusahead and downy brome.	2522	Vitamin D prevents milk fever but may be toxic. 187
BROWN PATCB (GRASSES) Chemical control of Rhizoctonia brown patch of bentgrass	2533 s.	The influence of dietary calcium-phosphorus and terephthali acid on antibiotic control of experimental infectious synovitis.
	1035	Hypocalcemia in ewes - a case report. 214
BROWN BOT (CBERRIES) Toximetric studies of fungicides against the brown rot of anisms, Sclerotinia fructicola and S. laxa.	org- 2373	Control of chronic respiratory disease. IV. The effect of a low-calcium diet and high concentrations of chlorotetracycline on the isolation of Mycoplasma from
BROWN SPOT (TOBACCO) Epiphytology of tobacco brown spot caused by Alternaria longipes.	1285	experimentally infected chicks. 226 CALCIUM CARBONATE

CALCIUM GLUCONATE Stinging caterpillars.

1872

The effects of calcium carbonate, lead acetate and copper supplements on blood and liver copper concentrations of

CALCIUM CHLORIDE
Influence of vitamins and other compounds on the degree of infection of wheat by Puccinia graminis tritici. 1402

1887

BRUCELLOSIS

BROWN TIP (GLADIOLUS)

Influence of different plant nutrients upon brown tip of gladioli.

1539

The vaginal tampon test in the diagnosis of Brucellosis and some comparisons with two vaginal nucous tests. 2106

Incidence of human brucellosis continues decline.

	CARBON DIOXI
CALCULI Urolithiasis. I. Incidence of bladder calculi, urine properties, and urethal diameters of feedlot steers. 1934	CANATYPOX Canary pox. 1866
crties, and urethal diameters of feedlot steers. CALIFORNIA Gilbertella fruit rot of peaches in California. 969	CANINE DISTEMPER Serologic findings as an aid in canine distemper immunization. 1813
Clubroot on sweet alyssum, Lobularia maritima, in Califor-	Antigenic relationship between canine distemper and measles
nia. 1165 Isolation of the virus of enzootic abortion of ewes from california and oregon sheep. 2153	viruses, the epidemiologic significance of. 1995 CANINE DISTEMPER VACCINES Contributions of tigges culture to coning horatitis and dis-
The catalase, California, and cell count tests for detect-	Contributions of tissue culture to canine hepatitis and distemper vaccination. 1913
ing abnormalities in milk. 2322 The decomposition of amitrole in California soils. 2526	CANINE DISTEMPER VIRUS Use of cell culture-adapted canine distemper virus in the complement-fixation test. 1908
CALIFORNIA MASTITIS TEST Interpretation of the California Mastis Test results on	The canine distemper-measles complex. I. Immune response of dogs to canine distemper and measles viruses. 1946
milk from individual mammary quarters, bucket milk, and bulk herd milk. 2148	The structure of canine distemper virus. 2166
CALLIPHORIDAE The fine structure of synapses tight junction in the central nervous system of the blowfly larva. 832	CANINE HEPATITIS VACCINES Contributions of tissue culture to canine hepatitis and distemper vaccination. 1913
Studies on the haemolymph proteins of the blowfly Phormia regina. I. Changes in ontogenetic patterns.	CANKER (ACER) The nature and occurrence of an annual canker of maple in Pennsylvania. 1317
Some physiological studies in relation to age in the blowfly Calliphora erythrocephala Meig. 894	CANKER (COFFEE) Relation between chlorogenic acid content and resistance to
CALLISTEPHUS CHINENSIS Determination of inoculum potential of infested soil. 992	coffee canker incited by Ceratocystis fimbriata. 1241 CANKER (PEACHES)
CALLUS (PLANTS). Inhibition of callus and root growth in tomato stems excised	Chemotherapeutic suppression and exaggeration of Cytospora canker disease in peach trees. 1504
from plants inoculated with a combination of tobacco mosaic virus and potato virus X. 1141	CAPSICUM ANNUM Genetics of response in pepper to three strains of potato virus Y. 1495
CALVES Clinical and hematologic studies on pure Dictyocaulus viviparus (Block) lungworm infections in calves. 1797	CAPTAN Effect of repeated applications of dodine and of captan on apple scap foliage lesions. 1316
Neural mechanisms in sexual behavior. III. Preputial mus- cles and their reflexes in bull calves and rams. 1801	Microsporum infections in cats. 1927
Nitrite intoxication in cattle. 1864	The sulfur-depletion of cells by captan. 2448
Young calves grow faster without hay. 1886	CARBAMATES Control of wheat stem rust with nickel and carbamate sprays.
Agammaglobulinemia in a 3-month-old calf. 1918	1132
Observations on calf diseases in Kenya. Part II. Calf scours:coli-bacillosis of calves, with special reference to vaccination.	Persistance of soil-incorporated EPTC and other carbamates. 2336
CANADA A new species of Anthocoris from Canada, and distribution	CARBOHYDRATES Relations of disease development and intensity to carbohy- drate levels in rusted bean plants. 1002
records for three other species (Heteroptera: Anthocoriidae).	Disease development, disease intensity, and carbohydrate levels in rusted bean plants. 1515
Two new species of Ips De Geer (Coleoptera: Scolytidae) from western Canada and Alaska. 821	Carbohydrate metabolism of Johsongrass as influenced by
The growth characteristics, in terms of live weight, of some grasshoppers (Orthoptera: Acrididae) of western Canada.	carbon dioxide treatments. 2452 CARBON DIOXIDE The effect of infection by Helminthosporium carbonum on
Occurrence of Pissodes terminalis Hopp. (Coleoptera: Curculionidae) in Canada: life history, behaviour, and	some CO2 fixation and other enzymes in corn seedlings. 1005
cytogenetic identification. 870	A technique for measuring CO2 production of wheat at 15-16 percent moisture content.
Notes on Matsucoccus macrocicatrices Richards (Homoptera: Margarodidae) and its association with Septobasidium pin- icola Snell in eastern canada. 873	Activity of Rhizoctonia in soil as affected by carbon dioxide. 1383
Wheat striate mosaic in Canada. 1159	The effects of four herbicides on microorganisms in nine Oregon soils.
Mortality in White Leghorn females on a farm in southern Alberta. 1937	Acetate utilization and carbon dioxide production in normal and ketotic sheep pregnant with twins.
Epidemiology of leptospirosis in the United States and Canada. 1960	The effect of atmospheric envoirment upon the growth of Mycoplasma gallisepticum. 2032

Relation of light quality to effects of 2,4-D on chlorophyll and CO2 exchange. \$2493\$

CARBON DISULFIDE

A carbon dioxide pressured portable field sprayer.	2564	Leukemia and related neoplasms in the cat. II. MALIGNANG other than lymphoid.	CIES 183
CARBON DISULFIDE Field studies comparing piperazine-carbon disulfide com		Diagnosis and incidence of rabies in domestic cats.	1846
with carbon disulfide for parasite control in the horse	2295	Cutaneous larva migrans.	1848
Treatment of opossums with Physaloptera infections.	2306	Zoophilic microsporum.	189
CABBON ISOTOPES Evidence of an energy requirement for absorption of car		Leukemia and related neoplasms in the cat. I.Lymphoid malignancies.	192
-labeled streptomycin and leucine by apple leaves.	2489	Microsporum infections in cats.	192
CABBON MONOXIDE Gas chromatographic analysis of blood for carbon monoxi	ide. 2554	Prevalence of leptospiral agglutinating antibodies in Allegheny county, Pennsylvania, dogs.	205
CABBON TETRACHLORIDE Carbon tetrachloride inactivation of the agent of disea in Helminthosporium victoriae.	ise 1168	Disc protrusion in the cat: wentral protrusions and radisplits.	ial 214:
Carbon tetrachloride poisoning of ewes on a low selenium ration.		Preliminary trials with bithional against tapeworm infectin cats, dogs, sheep, and chickens.	230
CARBOXYLIC ACIDS		CATTLE Oxygen uptake by maturing bovine placenta.	176
<pre>Fffect of the Helminthosporium leafspot disease on orga acid content of corn seedlings.</pre>	1477	Open teat sinus surgery for correcting teat occlusions part II.	176
CABCASSES Drugs and carcass quality.	2073	A preliminary report on the serum protein-bound iodine dairy cattle.	in 177
CARCINOMA Bilateral hydronephrosis resulting from a transitional epithelial carcinoma in a dog.	2090	The effect of sodium selenite on cattle.	177
Epidermoid carcinoma of the esophagus of an antelope.	2277	Studies on bovine portal blood. II. Blood flow determinations with observations on hemodilution in the portal v	
CARDARIA DRABA Morphological and herbicide susceptibility differences strains of hoary cress.	among 1684	The calcium, phosphorus, magnesium, carotene, and vitams content of the blood of range cattle in eastern Montana.	
An ecological study of lens- and globe-podded hoary cre	esses 1698	The present and future of artificial insemination.	178
CARROTS Precautions in isolating Thielaviopsis basicola with ca discs.	rrot 1260	A comparison of a hemagglutination test with a modified hemolytic test on serums from intradermal bovine tubercu reactors and nontuberculous cattle.	
Yields and flavor of potatoes and carrots on plots receiving annual soil treatments.	1655	Allergy studies on cattle vaccinated with killed Mycobacterium paratubeculosis.	1790
CARTILAGE Cartilagenous tumors (chondroma and chondrosarcoma) in		Staphylococcic antitoxins in dairy cattle. I. A review of the literature.	of 179
animals. CARYA	2125	Bovine achondroplasia. III. Standards of metacarpal indees for achondroplastic, brachycephalic dwarfs and contro	
A study of noninsect galls on Carya, Quercus, and Salix	942	The programme for the eradication of bovine tuberculosis	
CASTORBEANS Nature of predisposition of castorbeans to botrytis. ii		Clinical signs of rabies in cattle.	182
Raceme compactness, internode length, position of stami flowers, and bloom in relation to capsule susceptibilit		Open teat sinus surgery for correcting teat occlusions.	182
Weed control in castorbeans.	1753	The tuberculin test.	182
CATALASE	-at-	Tuberculosis in domestic animals other than cattle.	1827
The catalase, California, and cell count tests for dete ing abnormalities in milk.	2322	Streptococcus agalactiae in colostrum of first-calf hei	fers.
Effect of atrazine on catalase and peroxidase in resist and susceptible lines of corn.	2402	The early control of bovine tuberculosis.	183
Glycolic acid oxidase, catalase and peroxidase of cotto	on 2521	Mineral oil adjuvant vaccine for bacillary hemoglobinuri	ia. 1839
CATERPILLARS Stinging caterpillars.	1887	Detection of bovine tuberculosis by complement-fixation test.	1840
CATHETERS Multicatheterization of blood vessels of sheep for meta	bolic	Zoonotic aspects of vibriosis.	1849
studies of insecticides.	1792	Treatment of cattle bloat.	1850
CATS Tuberculosis in domestic animals other than cattle.	1827	Organic phosphorus compound poisoning in livestock.	1852
Bilateral feline embryonal sarcoma.	1832	Agglutinating Anaplasma marginale antigen.	186 (

Hypoderma and parturition complicate sweet clower poison	ning. 1867	Bowine tuberculosis- studies of complement fixation anti- gens. 21	111
Vitamin D prevents milk fever but may be toxic.	1877	Vesicular stomatitis- patterns of complement-fixing and se	
Batyl alcohol for bracken poisoning questioned.	1880	um-neutralizing antibodies in serum of convalescent cattle and horses. 21	e 119
Bovine lymphosarcoma. Eloat prevention.	1895	A revised concept of the pathologic changes of the tongue cattle with vesicular stomatitis.	in 127
Experimental studies on the occurrence of staphylococcal antitoxin in the whey of cows.	1904	Persistence of foot-and-mouth disease virus in bowine kidn and blood as related to the occurrence of antibodies.	1e y
Arteriosclerosis in cattle with Johne s disease.	1916		- 137
Rift valley fever.	1921	Infectious meningo-encephalitis in cattle, caused by a	
Evaluation of a plate test for the detection of Leptosp antibodies in bovine serum.	iral 1933	haemophilus-like organism. 21	149
Agar gel diffusion studies with a mucosal disease of ca II. A serological relationship between a mucosal diseas		Keratoconjunctivitis associated with infectious bovine rhinotracheitis.	15 1
and swine fewer.	1939	Rhinosporidiosis in a horse. 21	194
The use of tail bone biopsy for studying skeletal depos: of fluorine in cattle.	ition 1940	A case report lymphoblastic lymphoma N a bowine fetus.	211
Observations on the epidemiology of mastitis due to Streptococcus mberis in a laboratory herd during a		Further observations on immunity to bovine cutaneous papillomatosis.	229
complete lactation.	1941	Hypocalcemia without paresis in cows. 22	239
Fulmonary hypertension and right ventricular hypertrophy cattle at high altitude.	y in 1950	The distribution of copper in bowine and owine foetuses, with reference to their age and maternal liver copper	
Foot rot in cattle.	1951		24 1
The combined effect of infectious bowine rhinotracheiti: virus and Pasteurella hemolytica on cattle.	s 1952	Field trial with the complement-fixation test for anaplasmosis in a herd free of clinical evidence of infection.	245
Endobronchial inoculation of cattle with warious strains of Mycoplasma mycoides and the effects of stress.	s 1965	Agglutinins for 11 types of leptospires in serum from cat-	
Antigenicity of Mycoplasma mycoides. Iexamination of body fluids from cases of contagious bovine pleuropneum	onia. 1966	Squamous-cell carcinoma of the vulva of cattle in Kenya.	25 6
Epizootiology of bowine leukemia.	1986	The artificial oral infection of cattle with Taenia	
Rumen magnets reduce hardware disease in cows.	1993		25 8
Oximes for treatment of coumaphos poisoning in cattle.	1996	Propagation and titration of vaccina virus in bowine epidermal cells.	275
Electrophoretic studies of bovine serum. III. Serum		Control of anaplasmosis under Wyoming conditions.	2 7 6
protein changes in anaplasmosis.	2003	Cattle scabies and mange reported at 1961 livestock shows.	28 0
Isolation and identification of Leptospira :ardjo from cattle in Louisiana.	2004	The effect of dimethoate on Dermatobia hominis in cattle.	283
Bowine endometritis: A review.	2012		286
Major blood electrolyte concentrations in cattle during developement of hypomagnesaemia.	the 2013	Control of experimental bovine verminous pneumonia. 22 In vitro studies on the effect of some antimalarial drugs	
Colostral antibody to rabies in cattle vaccinated with a	HEP 2016	Fasciola worms in buffaloes, cattle, and sheep. 22 The effect of bephenium embonate on egg production in	288
Miyagawanellosis of cattle in Japan.	2028	Nemtodirus helvetianus and other gastrointestinal nematode	es 28 9
Cutaneous aspergillosis in a cow.	2030	Chemotherapeutic studies of gastrointestinal parasites of	
Serologic survey for infectious bovine rhinotracheitis abovine viral diarrhea antibodies.	and 2042	Studies on experimental concurrent infections of dairy	293
Neuropathology of owine and bowine toxoplasmosis.	2059	calves with coccidia and nematodes. IV. Eimeria spp. and the small hairworm, Trichostrongylus colubriformis. 23	302
Bovine hepatitis associated with ruminal protozoa.	2063	Bovine cysticercosis, with special reference to the early	
Observations in East African cattle of the innocuity and immunogenicity of a modified strain of foot-and-mouth disease virus type S.A.T.2	a 2077	Studies on infection and immunity with the cattle lungworm Dictyocaulus viviparus (Bloch). I. Infection in	
The immunization of cattle with a mouse-adapted strain type S.A.T.2 of the virus of foot-and-mouth disease.	of 2078	Incidence of parasites in calves in Hawaii and the treat-	307
Infectious bovine keratoconjunctivitis. I. Etiology.	2092	ment of Cooperia punctata, with special reference to the efficacy of ruelene.	8 08
Serum protein-bound iodine concentrations in cows, with	2000	A comparison of nematode egg counting techniques for cattle	.e

CAULIFLOWER

	CESTODA
Fasting metabolism of the lactating cow. 253	Bovine cysticercosis, with special reference to the early developmental stages of Taenia saginata. 2304
CAULIFICHER An antibacterial substance from cauliflower seeds. 102	Preliminary trials with bithional against tapeworm infection in cats, dogs, sheep, and chickens. 2305
A new black spot of cauliflower from India. 125	
CELERY Evaluation of treatments for control of soil- bcrne pests in celery seedbeds. 1198	Complementary strains of Phytophthora palmivora from Ceylon rubber. 1334
The celery late blight organism Septoria apiicola. 147	CHARCOAL ROT (SORGHUM) The relation of plant maturity, temperature, and soil moisture to charcoal stalk rot development in grain sorghum.
CELL WALL Electron microscopy of conidial cell wall of Cochliobolus miyabeanus. 242:	1062 Effects of temperature, soil moisture, and time of inocu-
Cell-wall degrading enzymes in some plant-parasitic, mycel- iophagus, and free living nematodes. 2510	
CELLS	CHEMICAL CONTROL (INSECTS) Growth of red pine trees after chemical suppression of the
Response of hemoglobin and cellular elements of blood after hypervitaminosis D in monkeys. 1804	European pine shoot moth. 899
The catalase, California, and cell count tests for detect- ing abnormalities in milk. 232	
Effect of fungicides on permeability of yeast cells to the pyruvate ion. 248	Insecticide tests on the Douglas-fir cone midge, Contarin- ia oregonenis Poote. 2366
CELLULASE	CHEMICAL CONTROL (NEMATODES)
Cellulase and the Rhizoctonia disease of bean. 121	Citrus tree decline caused by Tylenchulus semipenetrans and tree response following chemical treatment. 1602
Enzymatic fragmentation of cotton fiber. 245	Control of Heterodera rostochiensis by sodium methyl di- thiocarbamate. 1615
CELLULOLYTIC ENZYMES pectolytic and cellulolytic enzymes produced by Erwinia carotovora. 2384	Toxicity of some halogenated hydrocarbon mixtures to larvae of the citrus nematode, Tylenchulus semipenetrans. 2371
CELLULOSE Influence of glucose, cellulose, and inorganic nitrogen compounds on biological control of bean root rot. 1202	
A rapid cultural test for relative cellulolytic activity of fungi. 250°	Inactivation of tobacco mosaic virus by volatile chemicals.
CERAMBYCIDAE Descriptions of immature forms and biology of Xylotrechus colonus (Fab.) (Coleoptera: Cerambycidae). 872	Effect of cyanide in anaerobic treatment of barley for control of loose smut. 1195
CERATOCYSTIS PAGACEARUM	Evaluation of treatments for control of soil- borne pests in celery seedbeds. 1198
Dimorphism and interactions between the oak wilt fungus and associated fungi. 131	
Sporulation of Ceratocystis fagacearum in wounds on infected oak trees. 1318	A chemical that retards development of dutch elm disease.
CERATOCYSTIS FIMBRIATA Relation between chlorogenic acid content and resistance to coffee canker incited by Ceratocystis fimbriata. 124	Symposium on chemical control: theoretical consideration of soil fumigation. 1220
CERATOCYSTIS ULMI	Prevention of Cytospora invasion of injured stems of prune trees with wound treatments. 1233
Factors influencing germ tube development in conidia of Ceratocystis ulmi. 116:	B Effect of certain chemical treatments on colonization of slash pine stumps by Fomes annosus. 1242
A chemical that retards development of dutch elm disease. 1210	Chemical control of Puccinia pitteriana on potatoes in Ecuador. 1270
Environment and development of Dutch elm disease. 1552	The action of propionate on wheat stem rust and sorghum head
CERCOSPORA Factors affecting sporulation, spore size, and pathogenicity of several legume cercosporae. 1000	
· ·	
CERCOSPORA MUSAE The relationship between leaf uncurling stages and infection patterns on banana leaves caused by Cercospora musae.	Duration of protective activity in wheat seedlings of var- ious compounds against stem rust. 1531
1112	Prevention of Dutch elm disease by treatments with 2,3,6- trichlorphenyl acetic acid. 1557
Attrition of a saguaro forest. 1439	Chemical dips for eradication of root-knot nematode from plant roots.
Quantitative studies on possible competition of silver, cerium and dodine for receptor sites in fungus spores. 2403	Pungicidal activity of air passed through columns of soil treated with fungicides. 2368
	Circular plot designs for evaluation of multiple dosages of agricultural chemicals applied with boom-type field sprayers in a single plot. 2560

The distribution of free amino acids between erythrocytes and plasma in the fowl. $$2520\,$

CHEMICAL CONTROL (WEEDS) Experiments with herbicides in soils.	1680	CHICKEN EMBRYO LETHAL ORPHAN VIRUS The relationship between quail bronchitis virus and chic embryo lethal orphan virus.	cken 2095
Pre-emergence weed control in soybeans with mixtures of herbicides.	1686	A study in the epizootiology of CELO virus.	224 2
The role of chemical research in developing selective w control practices.	reed 1690	CHICKEN TYPES (MEAT) A report on broilers from parents free of Mycoplasma	
Herbicides for gladiolus.	1691	callisepticum.	2002
Simazine for controlling weeds in fruit tree and grape plantings.	1696	The incidence of avian leukosis in broilers at processi	ng. 2181
The influence of concentration of fumigant and time of sure on the killing of dormant imbibed seeds.	expo- 1703	CHICKENS Traces of lead in liver and feces of chickens.	1764
Thistle control with cultivation, cropping, and chemica derscheid, 1 a.	1704	Distribution of carbon-14 in Ascaridia galli and the ho- chicken.	1856
Influence of droplet size on effectiveness of lcw-volum		Gallus adeno-like virus in chickens.	186 1
herbicidal sprays. Control of barnyardgrass (Echinochloa crusgalli) in wes	1711 stern	The response of chickens to vaccination with different concentrations of pigeon pox and fowl pox viruses.	1901
irrigated cotton.	1712	Persistence of Newcastle disease virus.	1917
Penetration and persistance of diuron in soil.	1718	L-phase bacterial forms associated with infectious syno in chickens and turkeys.	vitis 1943
Reed control in cotton over a ten-year period by use of more promising materials and techniques.	f the 1724	SU-9064, a water-soluble tranquilizer for handling broi	
Research and organizational needs in the field of weed trol.	con- 1728	and replacement pullets. Hematologic findings associated with some common diseas.	1947 ses of
Effect of overhead and furrow irrigation on performance preemergence herbicides.		poultry. Effect of mycostatin on candidiasis in chickens on a	1948
Effects of surfactants on the herbicidal activity of se herbicides in aqueous spray systems.	everal 1732	high-glucose diet. Salmonellosis in turkeys and chickens associated with	1949
Cultivation techniques in combination with chemical west control in cotton.	ed 1736	contaminated feed. A report on broilers from parents free of Mycoplasma	1956
Weed control research - past, present and future.	1741	callisepticum.	2002
Control of Pennisetum clandestinum, kikuyugrass.	1746	The diagnosis of infectious bronchitis of chickens by the agar gel precipitin feat.	he 2036
Fost-planting weed control in garden chrysanthemums.	1750	Effect of dipping aggs in antibiotic solutions on PPLO transmission in chickens.	2037
Recent advances in the chemical control of wild oats.	1756	The effect of chlortetracycline on chicks infected with	
Simazine for annual weed control in cranberries.	1759	Aspergillu funigatus.	2061
Soil-moisture retention and snow-holding capacity as af ed by the chemical control of big sagebrush, (Artemisia		Therapeutical experiments with a new nitrofuran compound (Tiafur) in salmonellosis of chicks.	2083
tridentata Nutt.).	1760	Chick mortality and the contamination of yolks by member of the enterobacteriaceae.	2108
Some physiological effects of 2,2-dichloropropionic aci	id. 2465	Haemophilus infections in chickens. III. Pactors in int flock transmission of infectious coryza and its chemical	
A device for subsurface application of herbicides.	2562	and antibiotic therapeusis.	2145
CHEMICALS Control of chemical, drug, and biological residues in m	meats.	The pathology of chicks fed histamine.	2150
	2334	Haemophilus infections in chickens. II. The pathology of the respiratory tract.	2152
CHEMISTRY Studies on the chemistry of the fungatoxicity of Folcid	1. 2342	The effect of infectious bronchitis virus on chickens infected with Mycoplasma gallisepticum.	2155
Some chemical and physical properties of weed killers, lement 1.	supp- 2525	Nature of immunity to Newcastle disease in vaccinated chickens. Z. Influence of residual resistance upon the level and duration of immunity following revaccination.	
CHENOPODIUM MURALE A characteristic form of tobacco mosaic virus in tomato	n and	level dad direction of lamining following feverences.	2157
Chenopodium murale.	1482	Studies on parental immunity to infectious laryngotrache of chickens.	eitis 2180
CHERRIES Separation of certain stone fruit viruses in Mountmorer cherry seed.	ncy 1121	A tannic acid modified hemagglutination test for infection bronchitis of chickens.	ious 2189
An attempt to detect virus-free buds in latent virus-infected sweet cherry.	1586	Pendulous crop in the chicken- a pathologic study.	2248
Changes in the DNA content of leaves collected from hea and virus-infected cherry.		Control of chronic respiratory disease. V. Artificial exposure of young chicks to Mycoplasma gallisepticum.	227 2

C	Ħ	T	c	K	S

		CHORISTONEURA FUMIFERANA	
The metabolism of phenothiazine in chickens.	2524	Infection of the jack pine budworm, Choristoneura pinus	
The excretion of inulin, creatinine and ferrocyanide by fowl.	the 2534	Freeman, with a nuclear polyhedrosis virus of the spruce budworm, Choristoneura fumiferana (Clemens), (Lepidoptera: Tortricidae).	859
CHICKS		CHORISTONEURA PINUS	
Limy-bird disease in chicks of the Tasmanian mutton-b (Puffinus tenuirostris).	ird 1989	Infection of the jack pine budworm, Choristoneura pinus Freeman, with a nuclear polyhedrosis virus of the spruce	,
Use of chicks for detecting western equine and St. Loui: encephalitis viruses in mosquitoes.	s 2136	budworm, Choristoneura fumiferana (Clemens), (Lepidop- tera: Tortricidae).	859
CHINESE CABBAGE Races of clubroot in North America.	1570	CHROMATOGRAPHY Similarity of movement of N-alkyl quaternary ammonium co pounds in aqueous systems on paper chromatograms and in	om- 244
CHLORAMPHENICOL Zoonotic aspects of vibriosis.	1849	plant xylem. Comparison of free amino acids and amides in roots of	244
Persistence of chloramphenicol levels in farm animals.	2255	healthy and Radopholus similis-infected grapefruit seedlings.	247
		Gas chromatographic analysis of blood for carbon monoxid	le.
CHLORDANE Photographic in the day	2233		255
Rhabditic dermatitis in the dog.	2233	CHROMOSOMES	
CHLOROGENIC ACID Relation of chlorogenic acid in potato to resistance to fection by Verticillium albo-atrum.	in- 1107	Loss of wildfire resistance in tobacco due to chromosome fragmentation.	117
100200 51 1020222220 02200	,	CHRONIC RESPIRATORY DISEASE	
CHLOROTIC LEAFSPOT (APPLES) A virus disease of pear caused by chlorotic leafspot of apples.	1089	Effective concentration and time of administration of deoxycorticosterone trimethylacetate in treatment of chr respiratory disease.	oni c
Chlorotic leaf spot and dwarfing, as possible contaminal of stem-pitting virus, and their over-all influence on growth habit of apples.		Control of chronic respiratory disease. V. Artificial exposure of young chicks to Mycoplasma gallisepticum.	227
Chlorotic leaf spot from a mechanically transmissible wifrom apple.	irus 1330	CHRYSANTHEBUM Cause and prevention of the rapid spread of the Ascochyt	a
Preliminary observations on the effect of virus infection one-year old apple trees.	on on 1534	disease of Chrysanthemum. Post-planting weed control in garden chrysanthemums.	148
CHLOBTETRACYCLINE		CHRYSANTHEMUM MORIFOLIUM	
Studies of the effects of chlortetracveline, vitamin E, vitamin K on the nutrition of the rate II. Reproduction.		Post-planting weed control in garden chrysanthemums. CICADELLIDAE	1750
	1733	A new corn disease in Ohio.	130
The comparative effects of chlortetracycline and oxytetr cycline in the treatment of turkeys with ornithosis.	ra- 1897	CIMARRON BLIGHT (OATS) A leaf blight of Cimarron oats.	1303
The effect of chlortetracycline on chicks infected with ${\tt Aspergillu}$ funigatus.	2061	CIRCULATORY SYSTEM	
Control of experimental Mycoplasma gallisepticum infect: in young chickens with tylosin and other antibiotics.	ion	Demodex found in variety of internal tissues. CIRSIUM ARVENSE	1862
Control of abronic requirestory discoses IV The offeet	2213	Thistle control with cultivation, cropping, and chemical derscheid, 1 a.	170
Ccntrol of chronic respiratory disease. IV. The effect of a low-calcium diet and high concentrations of chlorotetracycline on the isolation of Mycoplasma from		Competition of forage species with Canada thistle, as affected by irrigation and nitrogen levels.	1717
experimentally infected chicks. Control of infectious synovitis. 8. Degree of infection	2269	CITRUS Growth reduction of citrus seedlings by Fusarium solani	as
as influenced by medication with furazolidone and chlortetracycline.	2271	influenced by the citrus nematode and other soil factors	928
Control of chronic respiratory disease. V. Artificial exposure of young chicks to Mycoplasma gallisepticum.	2272	Some effects of stubborn disease on bark, foliage, fruit and size of citrus trees.	1044
Control of anaplasmosis under Wyoming conditions.	2276	Susceptibility of certain citrus rootstocks to Thielavio sis basicola.	p- 1067
Relative importance of persistence, transfer, and milkin technique to antibiotic residue contamination of milk.		Further studies on the woody gall virus disease of citru	1071
CHOLESTEROL	2331	A factor in root sap of citrus rootstocks associated wit resistance to citrus nematode.	h 1154
Free and esterified cholesterol in the cerebrospinal flucf goats affected with experimental scrapie.	uid 2024	Identification of two citrus virus diseases by serologic agglutination.	al 1175
CHOLINESTERASES Recovery of cholinesterase activity in organophosphate treated insects.	897	Evaluation of tolerance to root rot caused by Phytophtho parasitica in seedlings of citrus and related genera.	
Oximes for treatment of coumaphos poisoning in cattle.	1996	Reduction of soil populations of the citrus nematode by	1484
		Thielaviopsis basicola as a citrus root pathogen.	1487

CONFERENCES COCONUTS Citrus tree decline caused by Tylenchnlus semipenetrans and tree response following chemical treatment. The significance of empty nuts in the Gnam disease of 1602 1357 coconut palms. Phytogathological notes. COLEOPTERA infesting citrus seedlings with the citrus nematode, Tylenchulus semipenetrans. Transmission of bean pod mottle virus in soybeans by beetles* 1657 Ecological relationships of predacions fungi associated with COLIBACILLOSIS Observations on calf diseases in Kenya. Part II. Calf scours:coli-bacillosis of calves, with special reference to the citrus nematode. Longevity of Radopholus similis under field conditions. vaccination. 1962 The analysis of 2-aminobutane residues in citrus and apples. Evidence of genetic susceptibiliy to Hjarre, s disease. 2105 Toxicity of some halogenated hydrocarbon mixtures to the COLLETOTIN 2343 Morphological effects of colletotin on tomato and Digitalis foliage. citrus and root-knot nematode. CLADOSPORIUM Inter-relationships among fungi associated with strawberries COLLETOTRICHUM CAPSICI in Oregon. Quantitative in amino acids in mycelium of Colletotrichnm capsici following exposnre to lethal amounts of maneb. CLADOSPORIUM CUCUMERINUM Production of extracellular enzymes by Cladiosporium cucum-2437 COLLETOTRICHUM PUSCUM erinum. Morphological effects of colletotin on tomato and Digitalis CLASSIFICATION foliage. 1533 The emerging classification of animal viruses- A review. COLLETOTRICHUM GLOEOSPORIOIDES
The influence of conidial matrix on the behavior of Collet-CLAVICEPS PURPUREA otrichum gloeosporioides and Stilbella sp. 2386 Response of ergot fungus to the nntrition available from the host plant. 2439 COLLETOTRICHUM LINDEMUTHIANUM Biochemical changes in seedlings of bean infected with Colletotrichum lindemuthianum. 243 2436 Fragaria virginiana, an indicator host for veinbanding virus of strawberry. Incidence of Salmonella in the hog colon as affected by handling practices prior to slaughter. 2168 CLOSTRIDIUM HEMOLYTICUM BACTERINS Mineral oil adjnvant vaccine for bacillary hemoglobinuria. 1839 COLOSTRUM Streptococcus agalactiae in colostrnm of first-calf heifers CLOVER Pathogenicity, host-parasite relationships, and morphology of some forage legume cercosporae, and factors related to disease development. 1567 COMPETITION Effects of different densities of downy brome (Bromus tectorum) on growth and survival of crested wheatgrass (Agro-Factors influencing snrvival of red and white clover plants exposed to lcw temperatures. 245 pyron desertorum) in the greenhouse. 1735 COMPLEMENT FIXATION
Use of cell culture-adapted canine distemper virus in the CLUBROOT (BRASSICA) Races of clubroot in North America. complement-fixation test. 1570 COCCIDIOIDONYCOSIS The differentiation of subtypes (valuates) of the disease virus by serologic methods I. Complement fixation 2079 The differentiation of subtypes (variants) of foot-and-mouth Coccidioidomycosis in 3 coyotes. 1991 Experimental bovine coccidioidomycosis. 2137 Bovine tuberculosis- studies of complement fixation anti-COCCIDIOSIS Treatment of canine coccidiosis using nitrofurazone and sul-The use of the haemagglutination technique for the detection of antibodies in gastro-intestinal nematode infections in fopamides. A 3,800 bird trial of a new coccidiostats. 1835 sheep. Coccidiosis vaccination. Field trial with the complement-fixation test for anaplasmosis in a herd free of clinical evidence of Is feed medication the answer to coccidiosis in poultry. 2245 infection. CONFERENCES The immunogenicity of a commercial coccidiosis vaccine in conjunction with Trithiadol and Zoalene. 2 Report and abstracts of the 1962 annual meeting of the Potomac Division of The american Phytopathological Society. The activity of nihydrazone in Eimeria tenella infections-Laboratory trials. Abstracts of papers accepted for presentation at the fifty-fourth annual meeting of The American Phytopathological The activity of amprolium in Eimeria tenella infections-laboratory trials. Society, Corvallis, Ore., August 26, 27, 28, 29, 1962. COCCIDIOSIS VACCINES Report and abstracts of the 1961 meeting of the Norteastern

2074

2102

Division of The American Phytopathological Society.

gon. Introduction.

Symposium on pathogen free stock: invitational papers presented June 15, 1960 at the meetings of the Pacific Division of The American Phytopathological Society for Horticultural Science, western region, at Eugene, Ore-

International Symposium on Newcastle Disease Virus as an

Coccidiosis vaccination.

COCCONYCES HIERALIS

Coccomyces hiemalis.

The immunogenicity of a commercial coccidiosis vaccine in conjunction with Trithiadol and Zoalene. 2

The effect of cycloheximide on the germination of conidia of

1462

CONGLUTINANT COMPLEMENT ABSORPTION TEST

	ONGEDITARIT CONFEDERAL ADDONFITOR 1251		
	Evolving Pathogen.	1812	Puccinia sorghi. 151
C	ONGLUTINANT COMPLEMENT ABSORPTION TEST Application of the conglutination complement absorption	test 2081	Responses of corn hybrids to yellow foxtail competition.
C	to detect hog cholera antibodies. I. The technique.	2001	Aerial and ground applications of preemergence herbicides i corn, sorghum, and soybeans.
	Factors influencing germ tube development in conidia of Ceratocystis ulmi.	1163	Mode of action of atrazine and simazine in susceptible and resistant lines of corn. 233
	Effect of root exudates on germination of conidia and m sclerotia of Verticillium albo-atrum inhibited by the s fungistatic principle.		A corn mutant deficient in 2,4-dihydroxy-7-methoxy-1,4- benzoxazin-3-one with an altered tolerance of atrazine.
	Organic constituents in conidia of Erysiphe graminis ho dei.	or- 2470	Phytotoxicity of s-triazine herbicides to corn and weeds as related to structural differences. 236
	Precocious sporulation and longevity of conidia of Helm thosporium sativum in soil.	1in- 2491	The metabolism of C14 chain-and-ring labeled simazine by corn and the effect of atrazine on plant respiratory
C	ONVOLVULUS The status of bindweeds, Mikania spp. as possible hosts the citrus-root nematode, Tylenchulus semipenetrans.	of 1662	systems. 240 Effect of atrazine on catalase and peroxidase in resistant and susceptible lines of corn. 240
С	OPPER The distribution of copper in bovine and ovine foetuses with reference to their age and maternal liver copper		Effect of N-(3,4-dichlorophenyl.methacrylamide on the oxidation of ascorbic acid by corn.
	concentrations. Effect of spray gallonage and leaf character on deposit		Effects of N-(3,4-dichlorophenyl) methacrylamide on growth and certain respiratory enzymes of corn. 241
	and retention of copper-containing fungicides. Stimulation of spore germination and growth of Glomerel cingulata by copper and other heavy metal ions.	2356 11a 2404	The uptake, translocation and metabolism of simazine and at razine by corn plants. 242
	The effects of calcium carbonate, lead acetate and copp supplements on blood and liver copper concentrations of	er	Non-enzymatic detoxification of 2-chloro-4,6-bis(ethylami- no)-s-triazine(simazine) by extracts of Zea mays. 251
	young sheep. A rapid method for the determination of copper in	2518	CORN OIL Horses protected from piroplasmosis by vector control. 185
C	biological tissues by means of zinc dibenzyldithiocarba	mate. 2532	CORYNEBACTERIUM MICHIGANENSE Leaf trichomes as avenues for infection by Corynebacterium michiganense. 146
	The significance of empty nuts in the Guam disease of coconut palms.	1357	CORYZA
C	ORN The effect of infection by Helminthosporium carbonum on some CO2 fixation and other enzymes in corn seedlings.	ı	Haemophilus infections in chickens. III. Factors in intra- flock transmission of infectious coryza and its chemical and antibiotic therapeusis. 214
		1005	COTTON In-covering soil fungicides, nematocides, and insecticides
	Histological structure of corn stalks in relation to fi resistance to stalk rot. $$.eld 1026	for disease control in cotton. 91
	Effect of crop rotation on yields of corn, oats, and wh and on corn stalk rot.	1033	Some considerations of strain variation in cotton seedling pathogens.
	Seasonal population of rhizosphere fungi associated wit corn roots. $ \\$	h 1109	New formulations for cotton seedling blight. 108 Lupine, another legume host of the wilt Fusarium from U.
	Ergot of maize in Mexico.	1110	S. cotton.
	Expression of the monogenic chlorotic-lesion resistance Helminthosporum turcicum in corn seedlings.	to 1126	Infection of seedling cotton by an isolate of Rhizoctonia solani.
	A root rot of corn caused by Helminthosporium pedicella		Susceptibility of cotton and relatives to reniform nematode in Louisiana. 137
	Inheritance of chlorotic-lesion resistance to Helmintho sporium turcicum in corn seedlings.		Effects produced in cotton fiber by Rhizopus, a boll rot fungus.
	Systemic infection of corn by Pusarium moniliforme.	1244	Relation of parasitic nematodes to postemergence damping-of of cotton. 142
	Penetration of meristematic tissues of corn by Physoder maydis.		Control of barnyardgrass (Echinochloa crusgalli) in western irrigated cotton. 171
	Effects of foliar urea treatment on numbers of actinomy antagonistic to Fusarium roseum f. cerealis in the rhizosphere of corn seedlings.	cetes	Weed control in cotton over a ten-year period by use of the more promising materials and techniques.
	A new corn disease in Ohio.	1302	Uptake and distribution of simazine by oat and cotton seed- lings.
	Effect of the Helminthosporium leafspot disease on orga acid content of corn seedlings.		Cultivation techniques in combination with chemical weed control in cotton.
	Differential reaction of stocks of the same long-time i line of Zea mays to Helminthosporium turcicum.		Methods of evaluating pre-emergence herbicides for cotton.
	A second major gene locus in corn conditioning resistant		Response of cotton seedlings to combinations of preemergence

	2225	CDTCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
herbicides and systemic insecticides.	2335	CRISTULARIELLA PYRAMIDALIS Four new hosts of Cristulariella pyramidalis. 999
The influence of N-(3,4-dichlorophenyl) methacrylamide of early growth and development of cotton.	2414	CRONARTIUM FUSIFORME Histology of Cronartium fusiforme in slash pine seedlings.
Toxicity of benzoic acid herbicides to cotton and soybe	2446	2456
Pate of prometryne in cotton plants.	2449	CROWARTION RIBICOLA Inoculation with Cronartium ribicola by bark-patch graft- ing. 1561
Fnzymatic fragmentation of cotton fiber.	2454	
Glycolic acid oxidase, catalase and peroxidase of cotto tissue.	2521	CROP (POULTRY) Recovery of western equine encephalomyelitis virus from crop washings of experimentally infected pigeions. 2138
The activities of certain enzymes from cotton treated is cotyldon stage with N-(3,4,-diclorophenyl) methacrylamid		CROP LOSSES Symposium on plant disease losses. 1184
	2022	Plant disease losses as they occur worldwide. 1228
OTILIDONS The activities of certain enzymes from cotton treated i cotyldon stage with N-(3,4,-diclorophenyl)methacrylamid		Losses caused by Rhizoctonia solani borne on bean seed.
OUMAFHOS Oximes for treatment of coumaphos poisoning in cattle.		Response of cotton seedlings to combinations of preemergence herbicides and systemic insecticides. 2335
Lack of larvacidal action of Ronnel and Bayer 21-199 against migrating Ascaric suum in baby pigs.	1996	CROP ROTATION Bacterial necrosis and isolation frequency of Rhizoctonia from rhizospheres under several cropping sequences. 968
OVER CROPS		Effect of crop rotation on yields of corn, oats, and wheat and on corn stalk rot.
Suitability of various cover crops as hosts for the les nematode, Pratylenchus penetrans.	1624	Effect of crop rotation on alfalfa and soybean stands. root rots, and yields.
OVERED SMUT (BARLEY) Effects of temperature on covered smut expression in tw barley varieties.	ro 1555	Interrelation of bacterial necrosis of Fusarium to crop rotation, isolation frequency, and bean root rot. 1144
Barley seedling response to covered smut infection.	1559	Control of the soybean cyst nematode by crop rotation.
OWPEAS Pusarium wilt of bean in South Carolina and some host relations of the bean Pusarium.	1199	Thistle control with cultivation, cropping, and chemicals. derscheid, 1 a. 1704
Field occurence and properties of the cowpea strain of southern bean mosaic virus.	1231	Cropping, cultivation, and herbicides to eliminate leafy spurge and preuent reinfestation.
Inheritance of resistance to tobacco ringspot and cucum mosaic virus in black cowpea crosses.	1264	CROP YIELDS Effect of crop rotation on yields of corn, oats, and wheat and on corn stalk rot. 1033
Efficacy of screening southern peas in the seedling stator cladosporium spot resistance.	1289	Effect of crop rotation on alfalfa and soybean stands. root rots, and yields.
Cowpea (southern pea) diseases in Georgia, 1961-1962.	1434	Effect of high doses of D-D on soil organisms and the
Systemic resistance induced by localized virus infection beans and cowpeas.	1459	growth and yield of lemon trees. 1136 Measures of the destructive potential of stripe rust in
OTOTES Coccidioidomycosis in 3 coyotes.	1991	Washington. 1161
RABAPPLES		Diseases affecting production of certified tomato plants in Georgia during 1942-1963.
Plowering crab apple varieties as quick indicator hosts latent apple viruses.	975	Survival and yield of winter cereals affected by yellow dwarf.
RANBERRIES Nematode control in cranberry.	1637	CROPS
Simazine for annual weed control in cranberries.	1759	Pathogenicity of Pratylenchus scribneri to crop plants.
RANBERRY BOGS Nematode control in cranberry.	1637	CROWN GALLS (AVOCADOS) Crown gall on avocado. 1490
RIMSON CLOVER Kabatiella caulivora, a seed-borne pathogen of Trifoliu incarnatum in Oregon.	1306	CROWN GALLS (PLANTS) Electronmicrographs of rice dwarf and wound tumor virus in ultrathin sections of their respective arthropod and plant hosts.
RINKLE (STRAWBERRIES) Obtaining virus-free strawberries by excision and cultu of apical meristems of plants infected with the yellow crinkle, and veinbanding viruses and certain other viru complexes.	edge,	CROWN GALLS (TOMATOES) Ascorbic acid oxidase and tyrosinase activities in relation to crown-gall development. 2496
RINKLE LEAF (CHERRIES) Symptom stability in sweet cherry trees affected by		CROWN ROT (BANNAS) Fungi associated with crown rot of boxed bananas. 1347
crinkle leaf and deep suture.	1503	CROWN ROT (IRIS) Crown rot disease of iris. 1093

COURS DOT (PSTUDIA) Phytophilotra crown rot of between. 1005 CACHE SDST (CATEGORISTICS CONTROLLED AND ADDRESS CON		
CROWN STOT (CASE STOT	CROWN ROT (PETUNIA)	
The effect of teaperature on cross rust reactions. 1968 On the attargated isdoction of resistance in oasts to cross Tract race 264 by artificial irradiation. 1968 COCCUPING Three alternaria species pathogenic on certain cultivated crosses. 2007 COCCUPING Three alternaria species pathogenic on certain cultivated crosses. 2007 COCCUPING Three alternaria species pathogenic on certain cultivated crosses. 2007 COCCUPING COCCUPI		
CULTURAL CONTROL (PART) CONTROL of Lower transport of the control		
control of Boothers pathopenic on certain cultivated crecifers. COURSESS STATE CONTROL (PARS) Accessor of suffar35 around cucumber anthraccome learning. Accessor state to exacutit viruses in Cucumber anthraccome learning. COURSES STATE COURSE STATE COURSES STATE COURSE STATE COURSE STATE COURSE STATE COURSE STATE COURSES STATE COURSE STATE		In vitro nutrition of Xanthomonas malvacearum. 244
CONTENTS CONTENTS CONTENTS CONTENTS A requalitions of sulfar35 around cucumber swith pelybutene enul- ions. COURTINE Use of chicks for detecting western eguise and St. losis succepabilities viruses in accounts melo. CONTENTS Use of chicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of chicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of chicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of chicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of thicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of thicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of thicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of thicks for detecting western eguise and St. losis succepability viruses in accounts. CONTENTS Use of thicks for detecting western eguise and St. losis succepability viruses in accounts. 100 CONTENTS USE of thicks for detecting western eguise and St. losis succepability viruses in accounts. 101 A western by cultural methods. 102 COLTIONS A western equival of Sulterion toadflar and establises to established for the selection of the succepability of the succepability of the selection of the succepability of the selection of the succepability	CRUCIPERAE Three alternaria species pathogenic on certain cultivated	medium. 247
A method for saintaining cultures and producing describing and producing and structures of silerian theotypes. A method for saintaining cultures and producing incompanion of Fuseriar foot post. A method for saintaining cultures and producing incompanion of Fuseriar for production by Selinithosporium victoriae on synthetic soils containing different nitrogen sources. A selective of Fuseria culture. A variant culture of Fanthonomas malvacerus obtained free weed roots. A selective of Fuseria in culture. A selective actilities of saintaining cultures and producing in contents of fuseriation by Selinithosporium victoriae on synthetic soils containing different nitrogen sources. A selective or fuseriation selective cultures of fuserial structure of Fuseriation by Selinithosporium victoriae on synthetic soils containing different nitrogen sources. As spitator-incubator for assptic culturine of victoria selection of Sustricts is in incolumn and incolumn concentration of severity of spring black stees of staffa. As statics of Severatle disease virus strains in various cell cultures isolated for prepace of boars. 2007 2017 Selective for discontaining of suriors in its see culture and its spinithosporium victoriae on synthetic soils containing different nitrogen sources. 2018 Selective of cycloherization of injected stees of propagation of the selection of select	CUCUMBERS	Breaking dormancy in seeds of Cuscuta approximata. 250
COURTED HELD Resistance to cucurbit viruses in Cucumis melo. See of chicks for detecting western equise and St. Louis acceptabilist viruses in acceptabilist viruse i		
Resistance to concubit viruses in Causais selo. 966 CUICIDAD Use of chicks for detecting western equine and St. Louis accepialities viruses in sorguitoes. 2135 CUITOBAL CORTROL (PLANT DISEASE) Practice of five penant varieties to cultural control of stee ret. 970 Control of Clocotinia tendents in seed fields of Lolius perense by cultural methods. 1077 Thirstle control vith cultivation, cropping, and chemicals. derecheid, 1 a. 1704 Iffects of 2,1,6-trichloroberoic acid and cultural treatments on survival of Delsation toadflax and establisment of Siberian wheetgraces. 1723 CULTOBE MEDIA CONTROL (PLANT DISEASE) CULTOBE CONTROL (PLANT DISEASE) Thirstle control vith cultivation, cropping, and chemicals. derecheid, 1 a. 1704 Iffects of 2,1,6-trichloroberoic acid and cultural treatments on survival of Delsation toadflax and establisment of Siberian wheetgraces. 1723 CULTOBE Median pathogen-free stock by shoot tip culture. 1203 CULTOBE MEDIA CONTROL (PLANT DISEASE) CULTOBE Median pathogen-free stock by shoot tip culture. 1203 Lambda of Public Pathogen and	іодs. 1452	The effect of cycloheximide on the germination of conidia of
Uniform Companies with a content of steep rot. Control of Glocetinia templents in seed fields of Lolius perense by cultural sethods. Control of Glocetinia templents in seed fields of Lolius perense by cultural sethods. Control of Glocetinia templents in seed fields of Lolius perense by cultural sethods. Lourness Companies (REERS) This le control with culturation, cropping, and chesicals. dereched in la. Lourness Companies (REERS) This le control with culturation, cropping, and chesicals. dereched in la. Lourness Companies (REERS) This le control with culturation, cropping, and chesicals. dereched in la. Lourness companies of self-temple control with cultural treat- sents on survival of Dalation to additar and establishment of siberian wheatgrass. LOURNES REERS Chairining pathogen-free stock by shoot tip culture. LOURNES REERS Chairining pathogen-free stock by shoot tip culture. LOURNES REERS CLIFFERS SECULERIES Translocation of berauda grass varieties and lines to root-knot nestades. LOURNES REERS CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. LOURNES REERS CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. LOURNES REERS CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Derauda grass varieties and lines to root-knot nestades. CREMON DACTION Beaction of Deriva and seedlings of Beact CREMON DACTION Beaction of Deriva da de	Resistance to cucurbit viruses in Cucumis melo. 966	
COLTUBE REDIA CAMPROL (PLNY PISSARSE) Control of Clocotinia tenulenta in seed fields of Lolius premas by cultural methods. 1407 COLTUBE CONTROL (PEEDS) Thirdle control with cultivation, cropping, and chesicals. deracheid, 1 a. Effects of 2,3,6-trichlorobensoic acid and cultural treat- sents on survival of Dalmation toadflax and establisment of Siberian wheatgrams. COLTUBE CONTROL (PEEDS) Thirdle control with cultivation, cropping, and chesicals. deracheid, 1 a. Effects of 2,3,6-trichlorobensoic acid and cultural treat- sents on survival of Dalmation toadflax and establisment of Siberian wheatgrams. COLTUBE REDIA Changes in virulence of soft-rot of bacteria during labora- tory cultivation and after ultraviolet light irradiation. A sethod for maintaining cultures and producing inoculation of Uncoyatis colchici. A variant culture of Xanthonomas malvacearus obtained from used roots. 1774 A variant culture of Xanthonomas malvacearus obtained from used roots. 1785 A variant culture of Xanthonomas malvacearus obtained from used roots. 1786 CASTIBL A variant culture of Xanthonomas malvacearus obtained from used roots. 1787 A variant culture of Xanthonomas malvacearus obtained from used roots. 1788 CASTIBL A variant culture of Xanthonomas malvacearus obtained from used roots. 1787 A variant culture of Xanthonomas malvacearus obtained from used roots. 1788 CASTIBL Tambication of theacco mossic virus infectious ribonucleic acid by BgCl2 and the reversal of this effect with cys- teins. CITYLOP Tambication of theacco mossic virus infectious ribonucleic acid by BgCl2 and the reversal of this effect with cys- teins. CITYLOP Tambication of Cytespora invasion of injured stems of put here are the control of the virus in the section of Cytespora invasion of injured stems of put here are the control of the virus in to severate of matterials in inocalum and incoulum concentration to severate of the tereodera cysts in association with sugar- beaction of Cytespora invasion of injured stems of put here ar	Use of chicks for detecting western equine and St. Louis	Cycloheximide behavior in bean and cherry tissue. 234
Stear rot. Control of Glocotinia tenulenta in seed fields of Lolius perenne by cultural sethods. 1007 CDLIVERIO (REEDS) Thistle control with cultivation, cropping, and chesicals. detachoid, 1 a. Effects of 2,3,6-trichlorobenzoic acid and cultural treatsents on survival of Dalastion toadflax and established of Siberian Wheatgrass. Peffects of 2,3,6-trichlorobenzoic acid and cultural treatsents on survival of Dalastion toadflax and established of Siberian Wheatgrass. CDLIVER BEDIA CDLIVER BEDIA CARDEN PARISA CALLEDROCLIDIES SCOLARIUS CHIRDROCLIDIES SCOLARIUS CHIRDROCLIDIES SCOLARIUS CHIRDROCLIDIES SCOLARIUS CHIRDROCLIDIES SCOLARIUS CHIRDROCLIDIES SCOLARIUS CARDEN PARISA CALLEDROCLIDIES SCOLARIUS CALLEDROCLIDIES S	CUITURAL CONTROL (PLANT DISEASES)	
Direction by culture. Direction by culture of Nanthononas malvacearum obtained from sever frowards and first and inclusing fifteent mitrogen sources. Direction by flagin-roots of resolution of Phytophthora and Pythium from plant roots. A selective antilictic sedium for isolation of Phytophthora and Pythium from plant roots. A selective antilictic sedium for isolation of Phytophthora and Pythium from plant roots. A selective antilictic sedium for isolation of Phytophthora and Pythium from plant roots. Peaks to of sufficients in inocalum and inocalum concentration to severity of spring hlack stee of selfaffa. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Recastle disease virus strains in various cell cultures. Peaks of Reca		
Thistle control with cultivation, cropping, and chemicals. 1773 Miffects of 2,3,6-trichloroberoic acid and cultural treatments on survival of Dalastion toadflar and establisment of Siberian wheatgrass. CULTURE Obtaining pathogen-free stock by shoot tip culture. Obtaining pathogen-free stock by shoot tip culture. CULTURE REDIA Changes in virulence of soft-rot of bacteria during laboratory cultivation and after ultraviolet light irradiation. A method for maintaining cultures and producing inoculation of Urccystis colchici. A variant culture of Xanthononas malvacearum obtained fros weed roots. Torin production by Helminthosporium victoriae on synthetic media containing different nitrogen sources. Torin production by single-roospore isolates of Phytophthora fragariae in culture. Oospore production by single-roospore isolates of Phytophthora fragariae in culture. A selective antibiotic medium and inoculum concentration of Prasaria from soil. A selective antibiotic medium and inoculum concentration of Phytophthora and Pythium from plant roots. Relation of nutrients in inoculum and inoculum concentration to severity of spring black steen of alfalfa. Sudies of Necostle disease virus strains in various cell cultures. Lotopires isolated from propose of hoars. Sudies of Necostle disease virus strains in various cell cultures. Papa, alion of Repa cholera virus in tiesue culture and tissue cultures. Papa, alion of Repa cholera virus in tiesue culture and tissue cultures. Papa, alion of Repa cholera virus in various cell cultures. Lotopires isolated from propose of hoars. Sudies of Necostle disease virus strains in various cell cultures. Papa, alion of Augusta chords. Papa, alion of Augusta chords. Sudies of Recostle disease virus strains in various cell cultures. Papa, alion of Augusta chords. Sudies of Recostle disease virus strains in various cell cultures. Papa, alion of Augusta chords. Sudies of Recostle disease virus strains in various cell cultures. Papa, alion of Augusta chords. Sudies	perenne by cultural methods. 1407	
Effects of 2,3,6-trichlorobenzoic acid and cultural treatments on survival of Dalzation toadflar and establisment of Siberian wheatgrass. CULTURE COLLIGHE Containing pathogen-free stock by shoot tip culture. CULTURE HEDIA Changes in virulence of soft-rot of bacteria during laboratory cultivation and after ultraviolet light irradiation. A method for maintaining cultures and producing inoculation of Urcoystis colchici. A variant culture of Kanthomonas malvacearum obtained from weed roots. Torin production by Helmintosporium victoriae on synthetic media containing different nitrogen sources. The use of Fusarium culture filtrate media in the isolation of rumania from soil. A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. An agitator-incubator for ameptic culturing of virus-infected cells and tissue in liquid media. An agitator-incubator for ameptic culturing of virus-infected cells and tissue in liquid media. Application of activities in incoclulum and innoculum concentration to rewrity of spring black stem of alfalfa. Liptospires isolated from prepuce of boars. Studies of Newcastle disease virus strains in various cell cultures. 2005 Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2017 Employ McTHIOS Deaction of berauda grass varieties and lines to root-knot nematodes. 2018 Preproduction of dalapon in yellow nutsedge (Cyperus esculentum). 2018 Emproduction of dalapon in yellow nutsedge (Cyperus esculentum). 2028 Emproductive potential of Cyperus esculentums by tubers. 204 235 CISTENE Inactivation of tobacco mosmic virus infectious ribonucleic acid by BgCl2 and the reversal of this effect with cymeratic properties of the reversal of this effect with cymeratic properties of phytophytophytophytophytophytophytophyto	Thistle control with cultivation, cropping, and chemicals.	Cylindrocladium root rot of conifer seedlings in Minnesota.
CUITURE MEDIA Changes in virulence of soft-rot of bacteria during laboratory cultivation and after ultraviolet light irradiation. A method for maintaining cultures and producing inoculation of Urocystis colchic. A variant culture of Yanthomonas malvacearum obtained from weed roots. Toxin production by Helminthosporium victoriae on synthetic media containing different nitrogen sources. Toxin production by single-zoospore isolates of Phytophtora fragariae in culture. The use of Fusarium culture filtrate media in the isolation of Fusarium from polar from soil. A magnitator-incubator for asseptic culturing of virus-infects a cells and tissue in liquid media. The use of Fusarium culture for suspensionia-tice or everyity of spring black stem of alfalfa. The production of mutients in inoculum and inoculum concentration to reverity of spring black stem of alfalfa. The use of Nuscalled from prepuce of boars. An agritator-incubator for asseptic culturing of virus-infects cells and tissue in liquid media. Toy of the control of the virus in tissue culture and incomplete to varcine I. Propagation or the virus in tissue culture. 2039 Actions of Newcastle disease virus strains in various cell cultures. 2040 Studies of Newcastle disease virus strains in various cell cultures. 2041 Studies of Newcastle disease virus strains in various cell cultures. 2042 Toy of the control of dalapon in yellow nutsedge (Cyperus esculentum). 2043 CISTENE The productive potential of Cyperus esculentum by tubers. 2045 205 205 205 205 205 205 20	ments on survival of Dalmation toadflax and establisment of	Host range and bioassay of field soil for Cylindrocladium
Changes in virulence of soft-rot of bacteria during laboratory cultivation and after ultraviolet light irradiation. 1108 A method for maintaining cultures and producing inoculation of Urcoystis colchici. 1177 A variant culture of Xanthomonas malvacearum obtained from weed roots. 1278 Toxin production by Helminthosporium victoriae on synthetic media containing different nitrogen sources. 1380 Osspore production by single-zoospore isolates of Phytophthora fragariae in culture. 1381 The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. An agitator-incubator for aseptic culturing of virusinfected cells and tissue in liquid media. 1522 Relation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. 1523 Leptospires isolated from prepuce of boars. 2044 Studies of Newcastle disease virus strains in various cell cultures. 1524 Leptospires isolated from prepuce of boars. 2045 Leptospires isolated from prepuce of boars. 2046 Leptospires isolated from prepuce of boars. 2047 Leptospires isolated from prepuce of boars. 2048 Leptospires isolated from prepuce of boars. 2049 Leptospires isolated from prepuce of boars. 2040 Leptospires isolated from prepuce of boars. 2041 Leptospires isolated from prepuce of boars. 2042 Leptospires isolated from prepuce of boars. 2043 Leptospires isolated from prepuce of boars. 2044 2055 Leptospires isolated from prepuce of boars. 2045 Leptospires isolated from prepuce of boars. 2046 Leptospires isolated from prepuce of boars. 2047 Leptospires isolated from prepuce of boars. 2048 Leptospire isolated from prepuce of boars. 2049 Leptospire isolated from prepuce of boars. 2049 Leptospire isolated from prepuce of boars. 2040 Leptospire isolated from prepuce of boars. 2044 2050 Leptospire isolated from prepuce of boars. 2044 2050 Leptospire isolated from prepuce of boars. 2044 205	Obtainining pathogen-free stock by shoot tip culture.	Reaction of bermuda grass varieties and lines to root-knot
A method for maintaining cultures and producing inoculation of Urocystis colchici. 1177 A variant culture of Xanthomonas malvacearum obtained from weed roots. 1274 Tozin production by Helminthosporium victoriae on synthetic media containing different nitrogen sources. 1348 Oospore production by single-zoospore isolates of Phytophhora fragariae in culture. 1361 The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. A selective antibiotic medium for isolation of Phytophhora and Pythium from plant roots. An agitator-incubator for aseptic culturing of virus-infected cells and tissue in liquid media. Relation of nutrients in inoculum and inoculum concentration to suverity of spring black stem of alfalfa. 1528 Plusacion of hog cholera virus in tissue culture and its application to vaccine I. Propagation or the virus in tissue culture. 2049 Studies of Newcastle disease virus strains in various cell cultures. 2050 Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). 2075 Plays of Fusaria from soil. 2060 CYOSPOBA Prevention of Cytospora invasion of injured stems of prune trees with wound treatments. 2070 Effects of selected Cytospora isolatems of prune trees with ound treatments. 2070 Effects of selected Cytospora isolatems of incurlating tree stems with Cytospora fungi. 2074 The uptake of C14 and P32 from leaves by two species of leafhopper vectors. 2085 The uptake of C14 and P32 from leaves by two species of leafhopper vectors. 2086 A method for maintime of virus—incident of totacco mosaic virus infectious ribonucleic acid by HgCl2 and the reversal of this effect with cysteries. 2075 Docurrence of Heterodera cysts in association with sugar-near trees with wound treatments. 2070 Effects of selected Cytospora invasion of injured stems of prune trees with Cytospora fungi. 208 209 109 209 209 209 209 209 209	Changes in virulence of soft-rot of bacteria during labora- tory cultivation and after ultraviolet light irradiation.	Translocation of dalapon in yellow nutsedge (Cyperus escu-
A variant culture of Xanthomonas malvacearum obtained from weed roots. Torin production by Helminthosporium victoriae on synthetic media containing different nitrogen sources. 1348 Oospore production by single-zoospore isolates of Phytophthora fragariae in culture. The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. An agitator—incubator for asseptic culturing of virus—infected cells and tissue in liquid media. The lation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. Fleation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. Fleation of Newcastle disease virus strains in various cell cultures. Leptospires isolated from prepuce of boars. Studies of Newcastle disease virus strains in various cell cultures. Logidation and serologic typing of avian pleuropneumonia—like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell cultures system. 1274 Inactivation of tobacco mosaic virus infectious ribonucleic acid by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card by HgCl2 and the reversal of this effect with cys—card bidifferent depths. CTSTS Distribution of cysts of Heterodera glycines in soil at different depths. Occurrence of Beterodera cysts i		
teine. 109 Torin production by Helminthosporium victoriae on synthetic media containing different nitrogen sources. 1348 Oospore production by single-zoospore isolates of Phytophthora fragariae in culture. 1381 The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. 1455 A selective antihiotic medium for isolation of Phytophthora and Pythium from plant roots. 1483 An agitator-incubator for aseptic culturing of virus-infected cells and tissue in liquid media. 1512 Relation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. 1528 Propagation to vaccine I. Propagation or the virus in tissue culture. 2039 Leptospires isolated from prepuce of boars. 2044 Studies of Newcastle disease virus strains in various cell cultures. 2005 Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). 2005 Plague formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2177	A variant culture of Xanthomonas malvacearum obtained from	Inactivation of tobacco mosaic virus infectious ribonucleic
Oospore production by single-zoospore isolates of Phytophthora fragariae in culture. The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. An agitator-incubator for aseptic culturing of virus-infected cells and tissue in liquid media. Felation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. Felation of hog cholera virus in tissue culture and its application to vaccine I. Propagation or the virus in tissue culture. Leptospires isolated from prepuce of boars. Leptospires in eastern South Dakota. CTTOSPORA Prevention	Toxin production by Helminthosporium victoriae on synthetic	teine. 109
The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. An agitator-incubator for aseptic culturing of virus-infects cells and tissue in liquid media. Relation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. Propagation of hog cholera virus in tissue culture and its application to vaccine I. Propagation of the virus in tissue culture. Leptospires isolated from prepuce of boars. Studies of Newcastle disease virus strains in various cell cultures. Studies of Newcastle disease virus strains in various cell cultures. Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. Occurrence of Heterodera cysts in association with sugarbetes in eastern South Dakota. 163 CTOSPORA Prevention of Cytospora invasion of injured stems of prune trees with wound treatments. 2123 Effects of selected Cytospora isolates from stone fruits on certain stone fruit varieties. 123 Effects of selected Cytospora invasion of injured stems of prune trees with wound treatments. 2123 Effects of selected Cytospora invasion of injured stems of prune trees with wound treatments. 2124 Effects of selected Cytospora isolates from stone fruits on certain stone fruit varieties. 2125 Effects of contraction of the uptake of C14 and P32 from leaves by two species of leaftopper vectors. 84 The uptake of C14 and P32 from leaves by two species of leaftopper vectors. 84 The effect of rust on the distribution of C14-containing compounds in bean. 105 Absorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves. 107 Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker. 107	Oospore production by single-zoospore isolates of Phytoph-	Distribution of cysts of Heterodera glycines in soil at
A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. An agitator-incubator for aseptic culturing of virus-infected cells and tissue in liquid media. Belation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. Propagation of hog cholera virus in tissue culture and its application to vaccine T. Propagation or the virus in tissue culture. Leptospires isolated from prepuce of boars. L	The use of Fusarium culture filtrate media in the isolation	
An agitator-incubator for aseptic culturing of virus- infected cells and tissue in liquid media. Relation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. Propagation of hog cholera virus in tissue culture and its application to vaccine I. Propagation of the virus in tissue culture. 2039 Leptospires isolated from prepuce of boars. Studies of Newcastle disease virus strains in various cell cultures. 2065 Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2172 Effects of selected Cytospora isolates from stone fruits on certain stone fruit varieties. 123 Relative efficiency of three methods of inoculating tree stems with Cytospora fungi. 150 C14 The uptake of C14 and P32 from leaves by two species of leafhopper vectors. 4 bsorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves. 171 D-D Effect of D-D and various dichloropropenes on the resis- tance of peach seedlings to bacterial canker. 107	A selective antibiotic medium for isolation of Phytophthora	Prevention of Cytospora invasion of injured stems of prune
to severity of spring black stem of alfalfa. Propagation of hog cholera virus in tissue culture and its application to vaccine T. Propagation of the virus in tissue culture. 2039 Leptospires isolated from prepuce of boars. Studies of Newcastle disease virus strains in various cell cultures. 2065 Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2172 Stems with Cytospora fungi. C14 The uptake of C14 and P32 from leaves by two species of leafhopper vectors. 84 The effect of rust on the distribution of C14-containing compounds in bean. 105 Absorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves. 171 Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker. 107		
Application to vaccine T. Propagation of the virus in tissue culture. Leptospires isolated from prepuce of boars. Studies of Newcastle disease virus strains in various cell cultures. 2065 Lisolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2039 The uptake of C14 and P32 from leaves by two species of leafhopper vectors. 84 The effect of rust on the distribution of C14-containing compounds in bean. 105 Absorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves. 171 Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker. 107		
Compounds in bean. Studies of Newcastle disease virus strains in various cell cultures. Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. Compounds in bean. Absorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves. D-D Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker. 105	application to vaccine T. Propagation of the virus in	The uptake of C14 and P32 from leaves by two species of
Studies of Newcastle disease virus strains in various cell cultures. 2065 Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO). Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2065 Absorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves. 171 D-D Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker. 107	Leptospires isolated from prepuce of boars. 2044	
Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO) 2172 D-D Effect of D-D and various dichloropropenes on the resis- Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system. 2177		Absorption, diffusion, and translocation of C14-labeled
Plaque formation of avian encephalomyelitis virus in a tance of peach seedlings to bacterial canker. 107 chicken embryo kidney cell culture system. 2177		D-D

growth and yield of lemon trees.	1136	DEER Studies in anaplasmosis. II. Electron microscopy of Ana-
MAIRY CATTLE A physiological disturbance in animals resulting from i	inges-	plasma marginale in deer. 2198
tion of Rhizoctonia leguminicola infested red clover fo age.		DEFICIENCY DISEASES Necrosis of the tail in the buffalo. a deficiency disease. 1968
Staphylococcic antitoxins in dairy cattle. II	1858	Hypocalcemia in ewes - a case report. 2147
Alkaline bone phosphatase activity in cattle.	1915	DEPOLIANTS
The influence of the magnesium content of the blood-set on the electrocardiogram in milk cows.	rum 2000	Control of hop downy mildew by chemical dessicants. 1443
DALAPON		DEPOLIATION Gloeosporium shoot blight and defoliation of trembling as-
Effects of surfactant concentration on Johnsongrass con with dalapon.	1697	pen. 1045
Surface tension lowering, wettability of paraffin and oleaf surfaces, and herbicidal enhancement of dalapon by seven surfactants.		DEMOGRAPHY The role of disease and desiccation in the population dynamics of the gypsy moth Porthetria dispar (L.) (Lepidoptera: Lymantriidae). 830
Identification of dalapon in quackgrass rhizome.	1757	Some factors that distort the sex ratio of the gypsy moth Porthetria dispar (L.) (Lepidoptera: Lymantriidae). 890
Translocation of dalapon in yellow nutsedge (Cyperus es lentus).	scu- 2407	DEOXYCORTICOSTERONE
Variation in morphological characteristics and dalapon ceptibility within the species Setaria lutescens and Setaria faberii.		Effective concentration and time of administration of deoxycorticosterone trimethylacetate in treatment of chronic respiratory disease. 2011
Herbicidal properties of low-volatile esters of dalapor		DEOXYRIBONUCLEIC ACID Changes in the DNA content of leaves collected from healthy and virus-infected cherry. 2393
ALBULUS MAIDIS		DERMATITIS
The uptake of C14 and P32 from leaves by two species of leafhopper vectors.	£ 843	Cutaneous larva migrans. 1848
The feeding of normal and aster yellows-inoculated corn	n 845	Thiram sensitivity. 1893
leafhoppers.	045	Rhabditic dermatitis in the dog. 2233
DAMPING-OFF (BEETS) Effects of mineral fertilizers on damping-off of table beets.	1305	DETERGENTS Bloat prevention. 1895 DI-ALLATE
AMPING-OFF (COTTOM) Relation of parasitic nematodes to postemergence damping cf cotton.	ng-off 1424	Toxicity of carbamate, triazine, dichloropropionanilide, and diallyactamide compounds to sheep. 1997
ATURA STRAMONIUM Further evidence on systemic resistance induced by loca		DIABETES Diabetes insipidus attributed to visceral larva migrans in a dog. 1884
necrotic virus infections in plants.	1182	Diabetes mellitus in the horse. 1954
DBCP Response of navel orange trees to a postplanting applic of DBCP for control of the citrus nematode.	cation 1651	The interrelationship of diabetes mellitus, obesity, and pyometra in the dog. 2082
DOT		DIAGNOSIS
Carabids collected in a DDT-sprayed peach orchard in Ontario (Coleoptera: Carabidae).	n- 847	A sensitive whole blood test for Mycoplasma gallisepticum. 2176
Pesticide storage in human fat tissue.	1874	DIALYSIS The passage of hog cholera virus through cellulose dialysis
Laboratory evaluation of DDT and phosphamidon on the we ern hemlock looper, Lambdina fiscellaria lugubrosa		membranes. 1983
(Hulst).	2351	DIANTHUS CARYOPHYLLUS Phytophthora wilt of carnation. 1130
1962 pesticide exports show gain during first half. DECLINE (APPLES)	2568	Control of carnation streak virus by shoot tip culture.
Pathological anatomy of rapid decline of Spy 227 apple.	1277	1167 Reaction of twenty-one commercial carnation varieties to Pseudomonas caryophylli. 1217
DECLINE (PEARS). Bud union anatomy of pear (Pyrus) decline trees.	1115	DIAPORTHE PHASEOLORUM
Behavior of pear decline disease on different stock-scicombinations.	ion 1583	Seed-borne aspects of Diaporthe phaseolorum in soybean. 1063
DECOMPOSITION		DIARRHEA A mutton and rice diet for treating chronic diarrhea in the
Decomposition of Vapam in soil.	2508	dog. 1817
Decomposition of ferbam.	2516	Faracin treatment of gray diarrhea in mink. 1824
The decomposition of amitrole in California soils. DEEP SUTURE (CHERRIES)	2526	DICHLOROPROPANE DICHLOROPROPENE MIXTURE Fungicidal control of big vein in the irrigated lettuce crop. 1449
Symptom stability in sweet cherry trees affected by crinkle leaf and deep suture.	1503	Influence of nonhost crops alone or in combination with a nematocide on the longevity of the soybean cyst nematode in

SUBJECT INDEX DIEBACK (ACER) 1628 DISOPHENOL soil. DNP effective against canine Spirocercosis. 1879 Use of root-knot resistant tobaccos to assess injury caused by root-lesion nematodes. Response of cotton seedlings to combinations of preemergence herbicides and systemic insecticides. 2335 Effectiveness of application methods with several nematocides for control of root-knot nematode. 1641 DITHIAZANINE IODIDE DIEBACK (ACER) Canine whipworm in man. 1870 Nematodes associated with maple dieback and maple blight. 1614 DITYLENCHUS DESTRUCTOR Migration of sperm in Ditylenchus destructor. 1603 DIEBACK (FRAXINUS) Etiological studies on the ash die-back disease. 1346 Feeding of ditylenchus destructor on fungi. 1607 DIEBACK (ULMUS) Pathogenic variation and nutritional requirements of A chemical that retards development of dutch elm disease. Ditylenchus destructor. 1664 1210 DITYLENCHUS DIPSACI An evaluation of sodium hypochlorite soil applications for Alfalfa stem nematode in Alabama. 1619 control of Dutch elm disease. Effect of temperature on resistance of alfalfa to the stem nematode (Ditylenchus dipsaci). 1652 Influence of dieldrin and methyl bromide soil treatments on subsequent populations of stylet-bearing nematodes associate DITYLENCHUS RADICICOLA ed with roots of Ladino clover. Observations on the biology and pathogenicity of Ditylenchus radicicola. 2344 1597 DIET A mutton and rice diet for treating chronic diarrhea in the DITTRON 1817 Substituted urea herbicides in the control of undesirable 1695 hardwoods. The influence of dietary calcium-phosphorus and terephthalic acid on antibiotic control of experimental infectious Response of cotton seedlings to combinations of preemergence synovitis. 1945 herbicides and systemic insecticides. The pathology of chicks fed histamine. 2150 The isolation of a latent adeno-like virus from chicken DIETHYLCARBAMAZINE kidney cell cultures. 2173 Prophylactic therapy against dirofilariasis in dogs. 2284 DODINE Control of experimental bovine verminous pneumonia. 2286 Control of bacterial spot with dodine. 1272 DIETHYLSTILBESTROL Effect of repeated applications of dodine and of captan on apple scap foliage lesions. 1316 Chronology relating to use of diethylstilbestrol in poultry and meat animals. Quantitative studies on possible competition of silver, The effect of diethylstilbestrol and progesterone on the growth of four mastitis-producing bacteria. rium and dodine for receptor sites in fungus spores. 2403 DIMETHOATE Calcium and phosphorus absorption and its relationship to growth in the dog. 1775 The effect of dimethoate on Dermatobia hominis in cattle. 2283 Evaluation of the bromsulfophtalein liver function test in 1780 Penetration and translocation of Rogor applied to plants. the dog. 2377 A clinical and pathologic study of 130 neoplasms of the mouth and pharynx in the ${\tt dog}_{\star}$ DIPLODIA VITICOLA 180.3 Enzymatic properties of a xylanase system produced by Diplodia viticola. 1176 Serologic findings as an aid in canine distemper immunization. 1813 A xylanase system produced by Diplodia viticola. 2472 A mutton and rice diet for treating chronic diarrhea in the DIPPING dog. Dipping of hatching eggs for control of Mycoplasma galli-2093 Tuberculosis in domestic animals other than cattle. 1827 septicum. DIPTERA Vaccination safety in small dogs, using bivalent modified Effects and interactions of varied levels of temperature, amino acids, and a vitamin on the rate of larval development 183.0 live virus vaccine. in the fly Pseudosarcophaga affinis. Cutaneous larva migrans. 1848 Notes on flies of medical importance in Japan, part XXIII. Seasonal fluctuation of flies in the Imperial Palace Studies of dogs with infectious canine hepatitis. 1865 Grounds, Tokyo. 908 Canine whipworm in man. 1870 DIROFILARIA IMMITIS DNP effective against canine Spirocercosis. 1879 Pulmonary arteriotomy for removal of Dirofilaria immitis in

2287

2284

2292

dog.

Zoophilic microsporum.

temper vaccination.

complement-fixation test.

Esophageal neoplasms related to Spirocerca.

Diabetes insipidus attributed to visceral larva migrans in a

Use of cell culture-adapted canine distemper virus in the

Contributions of tissue culture to canine hepatitis and dis-

1881

1884

1896

the dog.

DIROPILARIASTS

Angiocardiography in canine dirofilariasis II. utilization

Prophylactic therapy against dirofilariasis in dogs.

Hepatic lesions in dogs with dirofilariasis.

of a rapid film change technique.

		EA	ST AFRICA
Microsporum infections in cats.	1927		1404
The canine distemper-measles complex. I. Immune respons of dogs to canine distemper and measles viruses.	se 1946	Control of hop downy mildew by chemical dessicants.	1443
Culture and serologic studies on four dogs inoculated	with	DOWNY MILDEW (LIMA BEANS) Viability of the downy mildew fungus of lima beans.	934
two leptospiral serotypes, Leptospira pomona and Lepto: ra canicola.	spi- 1959	Culture of Phytophthora phaseoli on living and sterili media.	zed 1385
Retinoblastoma in a dog, a clinico-pathologic report.	1961	DOWNY MILDEW (SPINACH)	1454
Penicillin-resistant staphylococci common in dogs.	1992	Immunity to race 2 of spinach downy mildew. DRUG THERAPY	1454
Antigenic relationship between canine distemper and merviruses, the epidemiologic significance of.	asles 1995	Chemotherapeutic control of wheat leaf rust with pheny hydrazones.	1- 1268
Acute myelogenous leukemia with histopathologic studies following total body irradiation of a dog.	s, 2006	Chemotherapeutic effects of streptomycin on establishmand progression of systemic downy mildew infection in	
Prevalence of leptospiral agglutinating antibodies in Allegheny county, Pennsylvania, dogs.	2052	The efficacy of chemotherapeutic drugs in the control experimental ulcerative enteritis in quail.	
Primary pulmonary tumors of the $\ensuremath{\operatorname{dog}}$ a report of sixtee cases.	n 2054	Is feed medication the answer to coccidiosis in poultr	y -
Cutaneous epithelial neoplasms of the dog \boldsymbol{a} report ocases.	f 153 2055	Chemotherapy of histomoniasis of turkeys. II. The valu	
Neuropathology of canine toxoplasmosis.	2057	5-nitro-2-furaldehyde acetylhydrazone and 4,7-phenanth line-5,6 quinone in prevention and treatment.	2089
Mast cell leukemia in three dogs.	2058	The sensitivity to chemotherapeutic agents of salmonel isolate from pigs.	lae 2098
The interrelationship of diabetes mellitus, obesity, as pyometra in the $\ensuremath{\operatorname{dog}}$	nd 2082	The effect of centrally acting drugs on the concentrat	
Clinical and pathological features of some tumours of central nervous system in dogs.	the 2086	of glucose and eosinophils in horse blood. Persistence of chloramphenicol levels in farm animals.	
Idiopathic thrombocytopenic purpura in the dog.	2088		2255
Bilateral hydronephrosis resulting from a transitional epithelial carcinoma in a $\ensuremath{\operatorname{dog}}$	2090	Cyanacethydrazide as a chemotherapeutic agent in the conference of experimental bovine verminous pneumonia.	2290
Melanoblastic tumors in the dog.	2169	Chemotherapeutic studies of gastrointestinal parasites beef cattle and bison in Kansas.	2293
Adenomyoepithelioma in the dog.	2184	DRUGS	2073
Canine histoplasmosis with intestinal involvements.	2196	Drugs and carcass quality. Control of chemical, drug, and biological residues in a	
Rhabditic dermatitis in the dog.	2233	control of chemical, allay, and biological lesiques in	2334
Observations on a case of primary adrenocortical insufficiency in a dog.	2234	DUCKLINGS Studies with eastern encephalitis in white Pekin duckl:	ings. 2033
Survey of cardiovascular disease in dogspreliminary on the first 1,000 dogs screened.	report 2236	DUCKS	2033
Cutaneous candidiasis in a dog.	2237	Salmonella infections in white Pekin duck. A short summary of the years 1950-1960.	1964
Two cases of neuroblastomas in dogs.	2252	The first case of Toxoplasma gondii in domestic ducks: Argentina.	in 1980
Fulmonary arteriotomy for removal of Dirofilaria immitthe ${\tt dog.}$	is in 2281	DURUM WHEAT	
Prophylactic therapy against dirofilariasis in dogs.	2284	Inheritance of stem rust reaction in two durum varietic Acme and Mindum.	1409
Hepatic lesions in dogs with dirofilariasis.	2292	DWARF BUNT Incidence and control of Tilletia contraversa in perent	nial
Intravenous treatment of whipworm infection in dogs.	2297	grasses.	140 6
Preliminary trials with bithional against tapeworm infoin cats, dogs, sheep, and chickens.	ection 2305	DWARF DISEASE (RICE) Electronmicrographs of rice dwarf and wound tumor virus ultrathin sections of their respective arthropod and p.	
OBESTIC SHORT-HAIR CATS Diagnosis and incidence of rabies in domestic cats.	1846	hosts.	1190
ORSAL VESSEL Purification of insect hyperglycaemic and heart acceleration bear accelerations.	rating 881	DWARF FRUIT A comparison of virus isolates, dwarf-fruit and Spy 22' lethal.	7- 945
OWNY MILDEW (HOPS) Hop downy mildew reaction in selected progeny of a sustible variety.	cep - 1065	DWARFISM Bovine achondroplasia. III. Standards of metacarpal inc es for achondroplastic, brachycephalic dwarfs and conti	
Pactors affecting sporulation and infections by the hony mildew fungus, Pseudoperonospora humuli.	1155	EAST AFRICA Observations in East African cattle of the innocuity as immunogenicity of a modified strain of foot-and-mouth	
Chemotherapeutic effects of streptomycin on establishme and progression of systemic downy mildew infection in		disease virus type S.A.T.2	2077

EASTERN EQUINE ENCEPHALOMYELITIS	
EASTERN EQUINE ENCEPHALOMYELITIS Studies with eastern encephalitis in white Pekin ducklings. 203	ELYMUS CAPUT-MEDUSAE The medusahead problem in Idaho. 1692
Clinical manifestations of eastern equine encephalomyelitis in pheasants. 222	
ECOLOGY Ecological relationships of predacious fungi associated wit the citrus nematode. 166	
Ecologic considerations in turkey ornithosis. 215	Giant stem enations in pisum sativum L. infected with the
ECONOMIC ENTOMOLOGY A new species of Nepytia (Lepidoptera: Geometridae), of economic importance to Douglas fir in British Columbia. 81	pea enation mosaic virus (PEMV) 1073 Relationships of pea enation mosaic virus (PEMV) isolates. 1079
ECZEMA Thiram sensitivity. 189	Observance of giant stem enations on Pisum sativum infected
EDEMA DISEASE	Histopathological changes associated with external leaf
Experimental edema disease (hemolytic Escherichia coli toxemia) in pigs and in mice. 181	1 Anatomical changes in the stem of Pisum sativum infected
EDUCATION Senator Humphrey introduces bill to expand veterinary medical facilities. 176	
EGG YOLKS Necrosis of the tail in the buffalo. a deficiency disease .	Use of chicks for detecting western equine and St. Louis encephalitis viruses in mosquitoes. 2136
196 EGGPLANT	8 Isolation of Listeria monocytogenes from foxes suspected of having rabies. 2139
Screening eggplants for resistance to Verticillium wilt. 127	ENDOMETRIUM 6 Bovine endometritis: A review. 2012
EGGS Effectiveness of thiabendazole against Haemonchus contortus in sheep. 185	
A modified Stoll technique for detecting eggs of Spirocerca lupi. 193	ENERGY Evidence of an energy requirement for absorption of carbon14 -labeled streptomycin and leucine by apple leaves. 2489
Survival of PPLO injected ifto eggs previously dipped in antibiotic solutions. 203	
Dipping of hatching eggs for control of Mycoplasma galli- septicum. 209	formation of plaques by the ECPO-1 virus. 2056
Chick mortality and the contamination of yolks by members of the enterobacteriaceae. 210	Salmonella infections in white Pekin duck. A short
ELECTROCARDIOGRAMS Electrocardiographic and phonocardiographic patterns of normal lambs. 177	ENTEROVIRUSES Studies on enteroviruses of the pig-I. 2163
The influence of the magnesium content of the blood-serum on the electrocardiogram in milk cows. 200	Studies on enteroviruses of the pig-VI the relationship of the t80 strain of a swine polio- encephalomyelitis virus to some other viruses as shown by neutralization tests in tissue cultures. 2165
ELECTROLYTES Release and accumulation of electrolytes by cells and cell fractions after treatment with victorin. 101	Enteroviruses of swine. III. Studies on experimental infection in pigs. 2200
ELECTRON MICROSCOPY Electronmicrographs of rice dwarf and wound tumor virus in	Enteroviruses of swine. II. Studies on the natural history of infection and immunity. 2201
ultrathin sections of their respective arthropod and plant hosts. 119 Electron microscopic demonstration of sugarcane mosaic viru	The effect of environment on the toxic action of sulfur di-
particles in cells of Saccharum officinarum and Zea mays. 124	
Studies in anaplasmosis. II. Electron microscopy of Ana- plasma marginale in deer. 219	Pactors affecting sporulation and infections by the hop dow- ny mildew fungus, Pseudoperonospora humuli. 1155
Electron microscopy of conidial cell wall of Cochliobolus miyabeanus. 242	Influence of environmental factors on Phomopsis junipero- vora. 1540
ELECTROPHORESIS Studies on Trichostrongylus axei Cobbold, 1879). VI. Total serum protein, blood and plasma volume, and electrophoretic serum fractionation in infected and	Interrelated effects of environment and age of alfalfa and red clover seedlings on susceptibility to Pythium debary-anum.
uninfected lambs. 199	4 Environment and development of Dutch elm disease. 1552
ELECTROPHYSIOLOGY A new approach to neuromuscular analysis in the intact free walking insect preparation.	

Effects of environment upon herbicides applied preemergence. $$2360\,$

Influence of some environmental factors on hereditary variation in monospore cultures of Verticillium albo-atrum.	EPIZOOTIC DISEASES A comparison of equine piroplasmosis in South Africa and the United States. 1892
	Rinderpest. 1920
Relation of environmental factors to growth and sporulation of Cercospora zebrina.	Epizootiology of bowine leukemia. 1986
NZYMES The effect of infection by Helminthosporium carbonum on some CO2 fixation and other enzymes in corn seedlings. 1005	Report of the committee on nomenclature and reporting of diseases northeastern conference on avian diseases June 1960. 2207
Tyrosinase formation by Strobilomyces strobilaceous. 1058	Studies on avian encephalomyelitis. IV Epizootiology. 2218
Production of proteolytic enzymes by four pathogens of apple fruit. 1162	New waterfowl host records for Sarcocystis rileyi and a review of sarcosporidiosis in birds. 2223
Enzymatic properties of a xylanase system produced by Di- plodia viticola. 1176	A study in the epizootiology of CELO virus. 2242
Symptoms of Fusarium wilt in relation to quantity of fungus and enzyme activity in tomato stems. 1353	Epizootiology, the basis for rational disease control programs. 2250
Serum enzyme changes in lambs with experimentally-induced acute muscular dystrophy. 1957	EPOXY RESINS The experimental replacement of segmental defects in bone with a plaster of paris-epoxy resin mixture. 2226
Blood enzyme interrelationships in white muscle disease.	EQUINE ENCEPHALOMYELITIS Eastern and western encephalomyelitis found in florida horses. 1869
Production of extracellular enzymes by four pathogens of apple fruit. 2376	EQUINE INFLUENZA VIRUSES Neurotropism of equine influenza-abortion virus in infant
Effects of N-(3,4-dichlorophenyl) methacrylamide on growth and certain respiratory enzymes of corn. 2416	experimental animals. 2210
Production of extracellular enzymes by Cladiosporium cucum-erinum. 2437	EQUIPMENT Evaluation of applied soil fumigants with the soil microbio-logical sampling tube. 2353
Enzymatic fragmentation of cotton fiber. 2454	ERGOT
A xylanase system produced by Diplodia viticola. 2472	Response of ergot fungus to the nutrition available from the host plant. 2439
Changes in proteins and several enzymes in susceptible bean leaves by the bean rust fungus. 2501	ERGOT ALKALOIDS Response of ergot fungus to the nutrition available from the host plant. 2439
Cell-wall degrading enzymes in some plant-parasitic, mycel- iophagus, and free living nematodes. 2510	ERWINIA AMYLOVORA Inhibition of Erwinia amylovora by tissues, extracts, and
The activities of certain enzymes from cotton treated in cotyldon stage with N-(3,4,-diclorophenyl)methacrylamide. 2522	ash from resistant and susceptible pears. 986 The prevalence of Erwinia amylovora in apple buds as de-
	tected by phage. 1000
Inhibition of polygalacturonase by cations. 1309	Reversions of Erwinia amylowora from the avirulent rough to the wirulent smooth form on exposure to aphid extracts.
Enzymatic fragmentation of cotton fiber. 2454	1124
OSINOPHILS The effect of centrally acting drugs on the concentration of glucose and eosinophils in horse blood. 2183	ERWINIA CAROTOVORA pectolytic and cellulolytic enzymes produced by Erwinia carotovora. 2384
PIDEMIOLOGY Epidemiological potentials of potato varieties in relation to late blight. 1535	ERYSIPELAS BACTERINS The use of tricalcium phosphate for the adsorption and concentration of eryspelas bacterin. 1963
Relation of seed- and soil-borne inoculum to epidemiology of angular leaf spot of cucumber in wisconsin. 1566	ERYSIPHE GRAMINIS Hybridization between varieties of Erysiphe graminis.
Bacteria and fungi pathogenic to man and animals. 1891	2427
Observations on the epidemiology of mastitis due to Streptococcus mberis in a laboratory herd during a complete lactation.	ERYSIPHE GRAMINIS F. SP. HORDEI Interaction of genes conditioning reaction of Algerian bar- ley and pathogenicity of Erysiphe graminis f. sp. hordei. 1377
Epidemiology of leptospirosis in the United States and Canada. 1960	ERYTHROCYTE SEDIMENTATION REACTION Hematologic findings associated with some common diseases of poultry. 1948
CUTANEOUS epithelial neoplasms of the dog a report of 153 cases. 2055	ERYTHROCYTES Stable, standardized, sensitized chicken erythrocytes for the polyvalent salmonella indirect hemagglutination test.
A comparison of the effects of four strains of Newcastle disease virus on a strain of human epithelial-like cells (Maben) and strain L mouse fibroblasts.	1809 Iron-dextran and vitamin B complex for the treatment of anemia in adult sheep. 1931
	The distribution of free amino acids between erythrocytes and plasma in the fowl. 2520

ER	YTE	RQL	YC	11
	wm.n			٠.

ERYTHROMYCIN Generalized staphylococcic infection in a monkey.	1910	EXTRACTS Toxin production by Leptospira icterohaemorrhagiae.	1883
Penicillin-resistant staphylococci common in dogs.	1992	EXUDATES Effect of root exudates in overcoming the soil fungista	tic
Haemophilus infections in chickens. III. Factors in int flock transmission of infectious coryza and its chemica		principle.	1119
and antibiotic therapeusis.	2145	Exudation patterns from bean seeds and hypocotyls and to effect on Fusarium solani f. phaseoli.	heir 1127
Control of experimental Mycoplasma gallisepticum infectin young chickens with tylosin and other antibiotics.	2213	Influence of virus and fungus lesions on plant exudation chlamydospore germination of Fusarium solani f. phaseol	i.
Dipping of hatching eggs in erythromycin for the control of Mycoplasma.	2270	EYES	1457
ESOPHAGUS Epidermoid carcinoma of the esophagus of an antelope.	22.0	Eye changes in beagles following intravenous injection radium 226.	of 1805
ESSENTIAL OILS	2277	PAGUS GRANDIFOLIA Radial increment reduction in American beech caused by freeze.	a 915
Measurement of spray-oil volatility and its relation to Sigatoka fungus disease control and phytotoxicity on ba leaves.		FARMING Nature and effects of radioactive fallout on the farm.	177 2
ESTERASES Symptoms of Fusarium wilt in relation to quantity of fusand enzyme activity in tomato stems.	ingus 1353	FASCIOLA In vitro studies on the effect of some antimalarial dru Fasciola worms in buffaloes, cattle, and sheep.	
ESTERS The fate of long chain esters of 2,4-D in plants.	2438	PASCIOLIASIS In vitro studies on the effect of some antimalarial dru	ıgs or
ETHYLENE DIBROWIDE Survival of root-knot nematodes in excised grape roots moist soil fumigated with ethylene dibromide.	in 1654	Fasciola worms in buffaloes, cattle, and sheep. FAT BODY Progressive histochemical change in virus-infected fat	2288
ETHYLENE OXIDE The inactivation of foot-and-mouth disease virus with lethylene oxide.	liquid 2129	of the Western oak looper. FATIGUE (PHYSIOLOGICAL)	861
The effect of gaseous ethylene oxide on dried foot-and- disease virus.	-mouth *	Cage layer fatigue (cage paralysis). FATS	2096
Sterilization of wheat seed by ethylene oxide.	2319	Treatment of cattle bloat.	1850
ETHYLENEDIAMINETETRAACETIC ACID		Pesticide storage in human fat tissue.	187
Equine piroplasmosis.	2027	Bloat prevention.	1895
Hypocalcemia without paresis in cows.	2239	Fat necrosis in man and animals. FECES	2115
The degradation of isolated microsomes from cucumber ar corn seedlings. ETIOLOGY	2462	A modified Stoll technique for detecting eggs of Spirocerca lupi.	1932
Infectious bovine keratoconjunctivitis. I. Etiology.	2092	FEED Oxalate formation in moldy feedstuffs as a possible fac	tor
Studies of anaplasmosis. I. Filtration of the causative agent.	e 2185	in livestock toxic disease.	1825
The aetiology of bovine petechial fever (Ondirt disease		Mineral fortification of feeds.	1868
	2259	Is feed medication the answer to coccidiosis in poultry	2075
FUNDOPPEAR FORMAR	1543	The effect of green feed and ascorbic acid upon single experimental infections of Trichostrongylus axei (Cobbo	
EUPHORBIA ESULA Anatomical studies of Euphorbia esula L.	1706	1879) in the laboratory rabbit.	2116
EVAPORATION Effects of water evaporation, temperature and rates of		Chronic copper toxicosis in sheep fed dry feed. FEED ADDITIVES	223.
application on the retention of ethyl-N,N-di-n-propylthiol carbamate in various soils.	2332	Control of chemical, drug, and biological residues in m	eats. 233
EXERCISE (ANIMALS) Treatment of cattle bloat.	1850	FEED TOXICITY The pathology of chicks fed histamine.	2150
EXTRACELLULAR SUBSTANCES Respiratory activities of cell-free particles from Pytlultimum, Rhizoctonia solani, and sugar beet seedlings.		FEEDING The feeding of normal and aster yellows-inoculated corn leafhoppers.	1 845
	1075	Feeding of ditylenchus destructor on fungi.	1607
Production of extracellular enzymes by four pathogens of apple fruit.	of 23 7 6	Bloat prevention.	1895
Production of extracellular enzymes by Cladiosporium coerinum.	ucum 2437	A possible link in the relationship between silage feed and listeriosis.	ling 2021

PELINE RHINOTHACHEITIS VIRUS Comparative study of three isolates with the original f viral rhinotracheitis virus.	eline 1929	FIUORIDES Alkaline bone phosphatase activity in cattle. 1919
FERBIN Decomposition of ferbam.	2516	The use of tail bone biopsy for studying skeletal deposition of fluorine in cattle. 1946
FERMENTATION Effect of anaerobic fermentation in soil on survival of sclerotia of Verticillium dahliae.	1081	POLIAR APPLICATION Effects of foliar urea treatment on numbers of actinomycetes antagonistic to Fusarium roseum f. cerealis in the rhizosphere of corn seedlings. 129
PERTILITY Effects of pollens on fecundity and longevity of adult Scambus buolianae (Htg.) (Hymenoptera : Ichneumonidae).	856	FOMES ANNOSUS Inoculation and colonization of stumps of Pinus echinata by Fomes annosus. 1164
PERTILIZERS Effects of mineral fertilizers on damping-off of table beets.	1305	Effect of certain chemical treatments on colonization of slash pine stumps by Fomes annosus. 1242
Influence of different plant nutrients upon brown tip ogladioli.		Further data on borax as a control of surface infection of slash pine stumps by Fomes annosus.
Effect of nitrogen fertilizers on germination and stand wild oats.	l of 1671	Fomes annosus root rot of shortleaf, loblolly, and slash pine in Arkansas. 1453
FIBERS Enzymatic fragmentation of cotton fiber.	2454	Colonization of pine stem sections by Fomes annosus and other fungi in two slash pine stands.
FIBROSARCOMA Esophageal neoplasms related to Spirocerca.	1881	FOOD ADULTERATION The problem of adulterated milk and how it affects the veterinarian. 1769
Multicentric neurofibrosarcoma in a Canada goose, Brant canadensis.	a 2062	FOOD CONTAMINATION Salmonellosis in turkeys and chickens associated with contaminated feed. 1950
FIGS Additional hosts of the fig mosaic virus.	1227	Studies on Salmonella contamination of environment and product of rendering plants. 232
FISHERIES Endothal derivatives as aquatic herbicides in fishery habitats.	1683	Comparison of the toxic effects of Crotalaria spectabilis and Crotalaria giant striata as complete feed contaminants.
FLAG SMUT (WHEAT) Postinfection development of flag smut of wheat in relato controlled soil moisture.	tion 1421	An early report on Crotalaria poisoning. 236
FLAX Virus cause of blue dwarf of oats and its transmission barley and flax.		FOOD MOISTURE Moisture content, mold invasion, and seed viability of stored soybeans. 1530
FIORA Bacterial flora of healthy and dead larvae of Pseudalet		FOOD SANITATION Ionizing radiation and food hygiene. 231
unipuncta (Haworth). FLORIDA	878	FOOT ROT (AWIMALS) Foot rot in cattle. 195
Eastern and western encephalomyelitis found in florida horses.	1869	FOOT-AND-MOUTH DISEASE Experiments with a modified strain of the virus of foot-and- mouth disease. 2076
A comparison of equine piroplasmosis in South Africa an the United States.	1892	Observations in East African cattle of the innocuity and immunogenicity of a modified strain of foot-and-mouth
Observations on avian aplastic anemia in Florida.	2069	disease virus type S.A.T.2 207
The relationship between certain chemical soil factors the inoculum potential of Phytophthora prasitica var.		The immunization of cattle with a mouse-adapted strain of type S.A.T.2 of the virus of foot-and-mouth disease. 207
nicotianae. Expression of black shank resistance in leaves of flue-tobacco.	1287 -cured 1581	FOOT-AND-MOUTH DISEASE VIRUS The differentiation of subtypes (variants) of foot-and-mouth disease virus by serologic methods I. Complement fixation test. 207
FLUORESCENCE Abnormal pigmentation and fluorescence in canine teeth.	2164	Differentiation of subtypes (variants) of foot-and-mouth disease virus by serologic methods Ii. Precipitin test in agar gel.
PLUGRESCENT ANTIBODY TECHNIC A fluorescent-antibody study of progressive distribution southern bean mosaic virus antigen in bean leaves.	on of 1039	Growth of foot-and-mouth disease virus in bovine kidney cell suspensions.
FLUORESCENT DYES Use of fluorescent stains in the localization of DNA in	1	Purther studies on the survival of foot-and-mouth disease virus in meat. 2120
oospores of Aphanomyces euteiches. FLUORESCENT SUBSTANCES	2442	Persistence of foot-and-mouth disease virus in bovine kidner and blood as related to the occurrence of antibodies.
The use of fluorescent tracers to study distribution of soil applied herbicides.	2561	The inactivation of foot-and-mouth disease virus with liquidethylene oxide.
		Transfer of immunity to foot-and-mouth disease virus from maternal mice to offspring. 213:

FORAGE PLANTS

The effect of gaseous ethylene oxide on dried foot-and-madicacca mitus	outh 2133	Gilbertella fruit rot of peaches in California.	969
disease vitus.	2 133	PUMIGANTS	
FORAGE PLANTS A physiological disturbance in animals resulting from ir tion of Rhizoctonia lequminicola infested red clover for		The influence of concentration of fumigant and time of exsure on the killing of dormant imbibed seeds.	xpo- 1703
age.	1815	PUNGI	
FOREIGN BODIES Rumen magnets reduce hardware disease in cows.	1993	The storage of ambrosia fungus spores by the pitted ambro beetle, corthylus punctatissimus Zimm. (coleoptera: Scoly tidae).	
POREIGN TRADE 1962 pesticide exports show gain during first half.	2568	Use of specific pesticides in determining probable cause peanut pod rot. $ \\$	of 938
FORMALDEHYDE Mineral oil adjuvant vaccine for bacillary hemoglobinuri	ia. 1839	Fungi associated with red clover roots in West Virginia.	946
Immunity study of a new diluted formalin-inactivated Newcastle disease vaccine.	2001	The effect of near-ultraviolet irradiation on the sporulation of certain fungi.	a- 953
Equine piroplasmosis.	2027	Antagonisms to nematode-trapping fungi in soil.	957
FOWL CHOLERA	1000	Fungi isolated from discolorations in northern hardwoods.	974
Enhancement of infectivity of hog cholera virus. The passage of hog cholera virus through cellulose dialy	1982 ysis 1983	Techniques in isolation of pythiaceous fungi from soil ar diseased pineapple tissue.	nd 98 (
membranes. Some factors that may influence hog cholera transmission		Fungi which provide some local biological control of Arce thobium spp. in the Pacific Northwest.	eu- 1017
Studies on pasteurellosis V. Two immunogenic types of Pasteurella multocida associated with fowl cholera.	2124	Seasonal population of rhizosphere fungi associated with corn roots.	1109
Factors influencing immunity in hog cholera vaccination.		Dynamics of the mycoflora of subterranean parts of winter wheat in the dryland area of Washington.	r 1134
FOWLPOX VACCINES		The endotropic mycorrhiza of Acer saccharum Marsh.	1150
Fowlrox virus neutralization antibody and viremia in turkeys.	2197	The effect of grape washings on the germination of spores fungi associated with bunch rot of grapes.	s of
FOULDOX VIRUS The response of chickens to vaccination with different concentrations of pigeon pox and fowl pox viruses.	1901		a 1192
Powlpox virus neutralization antibody and viremia in turkeys.	2197	Pusarium wilt of bean in South Carolina and some host relations of the bean Pusarium.	1199
POXES		Summation to symposium on Sclerotium Rolfsi.	1232
Isolation of Listeria monocytogenes from foxes suspected having rabies.	of 2139	Penetration of meristematic tissues of corn by Physoderma maydis.	a 1267
Trichinosis occurs in foxes.	2282	Pathogenic and cultural variability of single zoospore is lates of Phytophthora megasperma var. sojae.	so- 1299
PRAGARIA VESCA Evidence that beta-propiolactone can inactivate latent P strawberry virus in Pragaria vesca plants.	961	Susceptibility of certain Verticillium-resistant tomato varieties to an Ohio isolate of the pathogen.	1301
PRANKLINIELLA FUSCA Prankliniella fusca, an additional vector for the tomato		Leaf spot of sesame caused by Cylindrosporium sesami.	、 1323
spotted wilt virus, with notes on Thrips tabaci, another vector.	1321	Physiology of Sclerotium rolfsii, with emphasis on parasitism.	135 1
PREEZING Radial increment reduction in American beech caused by a freeze.	915	Relation of wascular occluding reactions in banana roots pathogenicity of root-inwading fungi.	to 1442
PREIGHT TRANSPORTATION An improved container for shipping live insects.	2544	Relative efficiency of three methods of inoculating tree stems with Cytospora fungi.	1507
PROIT Effects of selected Cytospora isolates from stone fruits certain stone fruit varieties.	on 1234	Relation of moisture content and length-of-storage period to changes in the fungus flora and germination percentage wheat.	
Shock symptoms of the stone fruit ringspot virus complex apricot.	in 1360	Use of nylon mesh in studies of soil fungi.	1529
FRUIT CULTURE	1300	Similarity of species of fungi isolated from roots of alf fa and red clover.	fal- 1590
Simazine for controlling weeds in fruit tree and grape plantings.	1696	Feeding of ditylenchus destructor on fungi.	1607
FRUIT DECAY Control of nost-harvest fruit decay with 2-aminohutane	3a1t	Bacteria and fungi pathogenic to man and animals.	1891
Control of post-harvest fruit decay with 2-aminobutane s solutions.	2317	Zoophilic microsporum.	1896
		Avian mycologic survey in alberta.	1907
		Microsporum infections in cats.	1927

Mycotoxicoses II. antifungal and antimycotoxic efficacy	1973	Control of Scierotinm rolls11 with chemicals.	135
of selected compounds.		Fungicidal activity of N-aryl itaconimides.	144
Rhinosporidiosis in a horse.	2194	Apple scab II. effect of serial applications of fungicide	
An assay method for soil fungistasis and response of se ed fungi to the principle.	2359		144
A mechanism for mercury tolerance in fungi.	2362	Fingicidal control of big weim in the irrigated lettince crop.	144
Froduction of extracellular enzymes by four pathogens o apple fruit.	f 2376	Apple scab III. Effect of serial applications of fnngi- cides on leaf lesions on previonsly unsprayed trees —in- hibition of conidial germination, removal (suppression) of	
Differentiation of three \cdot atropellis species, based on cultural characteristics.	gross 2389	the organism, and subsequent development of late terminal	
Quantitative studies on possible competition of silver, rium and dodine for receptor sites in fungus spores.	ce- 2403	Failnre to control corn stalk rots with above ground apprations of protectant fungicides.	1i- 150
A technique for comparing isolates of Ascochyta imperfe and other fungi.	cta 2406	Soil fungistasis and nematophagus fnngi.	165
Comments on the moisture requirements of fungus germina	tion.	Thiram sensitivity.	189
A rapid technique for fixing and mounting growing fungi	2432	Mycotoxicoses. III. Antifnngal and antimycotoxic activit of 8-hydroxyquinoline under laboratory and simulated fie conditions.	
	2459	Microspornm infections in cats.	192
The effect of some insecticides on the growth of Vertic linm albo-atrnm.	2460	Studies on the chemistry of the fungitoricity of Folcid.	221
High manganese requirements and deficiency symptoms in tain fnngi.	cer - 2505	Assays of volatile fungitoxic effluents from soil treate	234 a 234
A rapid cultural test for relative cellulolytic activit fings.	y of 2507	A laboratory method for testing the fungicidal effect of	
NGI DISSEMINATION Thrbulent transfer of fingus spores.	1369	Evaluation of applied soil fumigants with the soil micro	
NGICIDE RESIDUES The analysis of 2-aminobntane residnes in citrus and ap	ples. 2328	Toxicity and translocation characteristics of six fungication	
NGICIDE RESISTANT FUNGI Streptomycin resistant mntants in Streptomyces scabies.	1059	Effect of spray gallonage and leaf character on deposition and retention of copper-containing fungicides.	on 235
Adapted tolerance to organic fungicides by an isolate o		Influence of soil type on the fungicidal activity of soi finingants against Verticillium dahliae.	1 235
Tolerance to PCNB and pathogenicity correlated in natur occurring isolates of Rhizoctonia solani.		An assay method for soil fungistasis and response of selection of the principle.	ect 235
Induced tolerance to fungicides in three species of fun	gi.	A mechanism for mercury tolerance in fnngi.	236
NGICIDES	1505	Pesticides:their properties, uses and disadvantages. II- fungicides and herbicides. Pesticides in relation to animals.	236
Comparison of the fungicidal and nematocidal properties a number of compounds in field soil.	of 911	Fungicidal activity of air passed through columns of soi	
Control of soil-borne fungi and incidence of Pratylench penetrans.	us 916	Fungistatic and phytotoxic properties of some derivative:	
An evaluation of two fungicides as soil treatment with without herbicide for tomato fruit disease control.	and 997	Toximetric studies of fungicides against the brown rot of	
Control of rose black spot with fungicides.	1019	Biological breakdown of two organic merchrial fungicides.	
Adapted tolerance to organic fungicides by an isolate of ${\tt Bhizoctonia}$ solani.	f 1090		247
Effect of root exudates in overcoming the soil fungista principle.	tic 1119		248
Fungistatic properties of a bacterinm isolated from the soil.	1174	Biochemical basis for biological specificity of Dexon (p- dimethylamino-benzenediazo sodium snlfonate) as a fungis	
The comparative fungicidal properties of acidic nitroge derivatives of polyhalo-alkyl sulfenyl chlorides.	1180	Circular plot designs for evaluation of multiple dosages agricultural chemicals applied with boom-type field spraers in a single plot.	
The effect of adsorption of organic cations to plant ti on their use as systemic fungicides.	1209	FUNGUS DISEASES (PLANTS)	93
Spread of petal blight of camellias by air-borne ascosp of Sclerotinia camelliae.	ores 1249	Symposium on Sclerotium Rolfsii. Colonization of lima bean plants by Phytophthora phaseolias affected by temperature and age of plants.	
The comparative effects of various fungicide programs of ruit numbers and yields of apple trees.	n 1296	A parasitic Rhizoctonia on species of Thallophytes (al-	,,,

FURAZOLIDON

gae), Bryophytes, and Pteridophytes. 995	A synergistic Fusarium-nematode interaction in carnations. $164 \circ$
Nutrient studies on Leucostoma persoonii and a Zythiaceae species pathogenic on Prunus domestica. 1117	PUSARIUM MONILIFORME Systemic infection of corn by Pusarium moniliforme. 124
Sclerotium rolfsii, history, taxonomy, host range, and distribution.	Systemic infection of corn by Fusarium moniliforme. 124
Effects of selected Cytospora isolates from stone fruits on certain stone fruit varieties. 1234	Growth reduction of citrus seedlings by Pusarium solani as influenced by the citrus nematode and other soil factors. 92:
Leaf spot of sesame caused by Cylindrosporium sesami.	Determination of inoculum potential of infested soil.
Sporulation and sporophore survival of Echinodontium tinctorum. 1325	Mitigation of Fusarium wilt symptoms of tomato seedlings by seed inoculation with a species of Cephalosporium. 101
Effects produced in cotton fiber by Rhizopus, a boll rot fungus.	Semeiology of Pusarium wilt of tomato. 105
Occurrence on Phyllosticta leaf spot in beans in 1963.	Symptom retardation of Fusarium wilt of tomato seedlings by a Cephalosporium species.
Observations on the succession of fungi on hardwood pulpwood bolts.	Physiology of selective pathogenicity in Pusarium oxysporum.
Black root rot in Florida sandhills. 1417	The role of naturally occurring fungitoxicants in selective pathogenicity of Fusarium oxysporum.
Thielaviopsis basicola associated with declining sweet orange seedlings in Plorida. 1418	Relationship of root-knot nematodes to the development of Pusarium wilt in the sweetpotato.
Cowpea (southern pea) diseases in Georgia, 1961-1962. 1434	Pusarium wilt of hemp. 146
Fungi associated with the discolorations around root columns	A new form of Fusarium oxysporum.
caused by Pomes igniarius. 1437	Pusarium wilt of eucalyptus. 154
Early references to Armillaria root rot in California. 1467	FUSARIUM OXYSPORUM F. LYCOPERSICI The effect of metabolites produced by Fusarium oxysporum f.
Cause and prevention of the rapid spread of the Ascochyta disease of Chrysanthemum. 1481	lycopersici (Sacc.) Snyd. and Hans. on root elongation of tomato seedlings.
Soil moisture in relation to growth reduction of sweet orange seedlings by Thielaviopsis basicola. 1489	Symptoms of Fusarium wilt in relation to quantity of fungus and enzyme activity in tomato stems.
Armillaria mellea in Hawaii. 1502	Growth response of several isolates of Fusarium in rhizo- spheres of host and nonhost plants. 243
Virus-fungus relationships in a root-rot complex in red clover. 1508	FUSARIUM OXYSPORUM F. VASINFECTUM
Mode of action of Septoria linicola. 1522	Infection relationship between Meloidogyne incognita acrita and Pusarium oxysporum f. vasinfectum in cotton.
Interactions of two pea Pusaria in soil and associated host responses. 1554	Comparative reactions of certain cottons to Fusarium and Verticillium wilts.
Weeds as carriers of two potatoe pathogens in Colorado.	FUSARIUM ROSEUM Fungi associated with crown rot of boxed bananas. 134
Changes in proteins and several enzymes in susceptible bean leaves by the bean rust fungus. 2501	PUSARIUM ROSEUM F. CEREALIS Effects of foliar urea treatment on numbers of actinomycete antagonistic to Fusarium roseum f. cerealis in the
URAZOLIDONE Control of infectious synovitis. 8. Degree of infection	rhizosphere of corn seedlings. 129
as influenced by medication with furazolidone and chlortetracycline. 2271	FUSARIUM SOLANI Growth reduction of citrus seedlings by Pusarium solani as influenced by the citrus nematode and other soil factors.
USARTUM Nutrition in relation to root and top growth of Trifolium pratense and severity of Fusarium root rot. 1052	Development of Fusarium canker of black poplars. 100
Fusarium root rot of soybean. 1106	Preconditioning and placement of organic materials in con-
Interrelation of bacterial necrosis of Fusarium to crop rotation, isolation frequency, and bean root rot. 1144	trol of bean root rot. 104 Influence of barley straw on the early stages of pathogene-
Lupine, another legume host of the wilt Fusarium from U. S. cotton. 1156	sis in Fusarium root rot of bean. Cottonwood canker caused by Fusarium solani. 142:
Pusarium wilt of bean in South Carolina and some host relations of the bean Fusarium. 1199	Influence of virus and fungus lesions on plant exudation and chlamydospore germination of Fusarium solani f. phaseoli.
Inter-relationships among fungi associated with strawberries in Oregon. 1304	145 Growth response of several isolates of Fusarium in rhizo-
Influence of moisture content, temperature, and length of storage upon survival of fungi in barley kernels. 1527	spheres of host and nonhost plants. 243
The role of pectic substances in chemically induced resistance to Fusarium wilt of tomato.	The influence of nitrogen on the root disease of bean cause by Fusarium solani f. phaseoli.
	Exudation patterns from bean seeds and hypocotyls and their

	GLYCI
effect on Fusarium solani f. phaseoli. 1127	vitro. 2499
Influence of nonsusceptible plants on the survival of Fus- arium solani f. phaseoli in soil. 1458	GERM-FREE LIFE An apparently virus-free leaf of a systematically invaded plant. 958
Fenetration and host-parasite relationships of Fusarium solani f. phaseoli in the bean plant. 1461	GERMAN SHEPHERD DOGS Incidence of intestinal parasites in german shepherd dogs.
PUSARIUM SOLANI F. PISI Interactions of two pea Fusaria in soil and associated host responses. 1554	GERMINATION (SPORES)
Growth response of several isolates of Fusarium in rhizospheres of host and nonhost plants. 2434	1-proline and 1-alanine as substitutes for higher tempera- tures in the germination of fungus spores. 1097
GALLBLADDER Focal necrosis in the mucosa of the gallbladder in pigs with	Studies on the germination of conidiospores of powdery mil- dew of wheat. 1153
hog cholera. 2064	Storage viability of bean rust uredospores. 1356
GALLUS ADEMO-LIKE VIRUS Gallus adeno-like virus in chickens. 1861	Studies on the germination and metabolism of teliospores of Ustilago maydis. 2391
SAMMA GLOBULINS Agammaglobulinemia in a 3-month-old calf. 1918	Stimulation of spore germination and growth of Glomerella cingulata by copper and other heavy metal ions. 2404
ARDENIA Helicotylenchus nannus, a spiral nematode associated with declining gardenias. 1600	GHANA Notes on Salmonella infections in animals in Ghana. 1999
SARLIC Penicillium decay of garlic. 1558	GIBBERELLIC ACID The effect of gibberellic acid on the parasitism of Rhizoctonia solani on beans and cotton. 971
Breaking wild oat dormancy with gases at high pressure. 1708	Effect of gibberellic acid on development of hypocotyl lesions caused by Rhizoctonia solani on Red Kidney bean.
SASTROINTESTINAL DISEASES Chemotherapeutic studies of gastrointestinal parasites of beef cattle and bison in Kansas. 2293	GIBBERELLINS Influence of gibberellin on bud differentiation of sour cherry and on damage by sour cherry yellows. 1212
SEESE Multicentric neurofibrosarcoma in a Canada goose, Branta canadensis. 2062	GLADIOLUS Transmission of some Gladiolus viruses on tools in harvesting flowers and corms. 1397
SENES Genetics of response in pepper to three strains of potato	Three cowpea mosaic viruses from Gladiolus. 1399
virus Y. 1495	Some properties and fine structure of a new virus isolated from Gladiolus. 1446
A second major gene locus in corn conditioning resistance to Puccinia sorghi. 1510	Penicillium core rot of gladiolus. 1499
Inheritance of chlorotic-lesion resistance to Helminthospo- rium turcicum in seedling corn. 1511	Herbicides for gladiolus. 1691 GLOMERELLA CINGULATA
Resistance to the wildfire disease in relation to the gene- chromosome set ratio in tobacco. 1513	Effect and interaction of temperature and host genes on growth and pathogenicity of Glomerella cingulata on Lupin-us angustifolius. 998
INTERPOLATION OF GENES CONDITIONING REACTION OF Algerian bar- ley and pathogenicity of Erysiphe graminis f. sp. hordei.	Stimulation of spore germination and growth of Glomerella cingulata by copper and other heavy metal ions. 2404
Inheritance of pathogenicity in a cross of physiological taces iii and 36 of Puccinia graminis f. sp. tritici.	Effects of various factors on the growth and sporulation of Glomerella cingulata. 2440
2451	GLUCOSE The effect of temperature, anoxia, or injection of various
GEORGIA Cultural growth at different temperatures of Ascochyta gossypii from Georgia, Alabama, and Texas. 1181	substances on haemolymph composition and super cooling in larvae of Anagasta kuehniella (Zell.). 885
Symptoms associated with watermelon mosaic virus in south Georgia. 1433	Influence of glucose, cellulose, and inorganic nitrogen com- pounds on biological control of bean root rot. 1202
Cowpea (southern pea) diseases in Georgia, 1961-1962. 1434	The effect of centrally acting drugs on the concentration of glucose and eosinophils in horse blood. 2183
Red root and butt rot in a Georgia slash pine plantation.	GLOTAMINE
Apparent eradication of mosaic of sweetpotatoes in Georgia aided by the disappearence of the insect vector. 1500	Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight organism. 2498
GERANION	GLYCINE Anatomical studies of soybean roots artificially inoculated
Characterization of five geranium virus isolates and in vitro growth of geranium stem tips. 1049	with Heterodera glycines. 1605 Erythrocyte survival studies in the horse, using glycine-2-
Whitefly transmission of Manthomonas pelargonii and histological examination of leafspots of Pelargonium hortorum. 1525	C14. 1794

Growth and differentiation of geranium apical meristems in

GLYCOLIC ACID GLYCOLIC ACID simazine residues. 1751 Glycolic acid oxidase, catalase and peroxidase of cotton 2521 GRASSHOPPERS Note on oviposition in plant stems by grasshoppers (Or-GOATS thoptera : Acrididae). 851 Some physiologic data on goats. 1782 The growth characteristics, in terms of live weight, of some grasshoppers (Orthoptera: Acrididae) of western Canada. Tuberculosis in domestic animals other than cattle. 1827 853 Organic chosphorus compound poisoning in livestock. 1852 On the lipids of the egg of the grasshopper Aulocara Nodular lesions in the omentum of goats. 1978 elliotti. 883 Free and esterified cholesterol in the cerebrospinal fluid of goats affected with experimental scrapie. 20 GRAZING Effect of grazing intensity on parasitism of beef cattle. 2285 Experimental strongyloidiasis in sheep and goats. IV. GREEN EAR (PEARLMILLET) Migration of Strongyloides papillosus in lambs and Sporangial germination of Sclerosporia graminicola and artificial infection of Pennisetum glaucum. accompanying pathologic changes following percutaneous 2120 Rickettsial infection (heartwater) in sheep and goats in the GREEN RING MOTTLE (APPLES) Sudan. 2260 Green mottle virus produces russet ring symptoms on apple fruit. GOMPHRENA GLOBOSA Further evidence on systemic resistance induced by localized Effects of different densities of downy brome (Bromus tectorum) on growth and survival of crested wheatgrass (Agropyron desertorum) in the greenhouse. necrotic virus infections in plants. 1182 1735 COUL Articular gout in turkeys: a case report. 2216 GRISEOFULVIN GRAIN Equine sporotrichosis. 1871 Tetranychus sinhai Baker (Acarina: Tetranychidae) a new pest of cereals -- varietal reaction of barley. 862 Microsporum infections in cats. 1927 Host plant records and biology of aphids on cereal grains and grasses in Manitoba (Homoptera > Aphididae). GROWTH FACTORS 898 Rhizoctonia fragariae sp. nov. in relation to strawberry degeneration in Southwestern Ontario. 1546 Vapor action of organic mercurials against seed-borne cereal diseases. 1092 The effect of growth factors on the growth of Vibrio fetus. Survival and yield of winter cereals affected by yellow Young calves grow faster without hay. 1886 Reaction of cereals and sudan grass to Meloidogyne spp. and the relation of soil temperature to M. javanica popula-The effect of atmospheric envoirment upon the growth of 2032 Mycoplasma gallisepticum. tions. GRYLLTDAR RYLLIDAE
Free amino acid changes associated with diapause in the egg
887 GRAIN MOISTURE Influence of moisture content, temperature, and time of storage upon survival of certain microflora in barley kerof the field cricket Teleogryllus. GUAM DISEASE (COCONUTS)

The significance of empty nuts in the Guam disease of 1101 GRAPE VINEYARDS coconut palms. 1357 Incidence of systemic dead-arm and its relation to topo-graphy in michigan vineyards. 1262 GUINEA PIGS Toxin production by Leptospira icterohaemorrhagiae. 1883 Early references to Armillaria root rot in California. 1467 A comparison of experimental anaphylactic shock in quineapigs with naturally-occurring oedema disease and haemorrhagic gastro-enteritis in pigs. GRAPEFRUIT 2203 Comparison of free amino acids and amides in roots of healthy and Radopholus similis-infected grapefruit HARMONCHOSTS seedlings. 2479 Haemonchosis in artificially infected lambs. 1890 Resistance to haemonchosis in sheep following phenothiazine The effect of grape washings on the germination of spores of fungi associated with bunch rot of grapes. treatment of a previous infestation. 2025 The influence of Tylenchulus semipenetrans on growth of 1887 Stinging caterpillars. grape cuttings. HAIRY VETCH
The effect of four species of plant parasitic nematodes on Evidence suggesting a grape nematode problem in New York 1638 vineyards. hairy vetch. Survival of root-knot nematodes in excised grape roots in HALO BLIGHT (BEANS) Relation of air temperature and age and nutrition of the host to the development of halo and common bacterial blights moist soil fumigated with ethylene dibromide. 1654 Chemical weed control in young grapes. 1677 GRASS SICKNESS Inheritance of resistance to halo blight of bean. 157 1 Grass sickness in horses. 1845 Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight GRASSES Reaction of grass to stripe rust at Pullman, Wash. 1074 organism. 2498

HALOGEN COMPOUNDS

1702

Toxicity of some halogenated hydrocarbon mixtures to larvae of the citrus nematode, Tylenchulus semipenetrans. 237

PAGE .118

A technique for controlled exposure of emerging grass seed

Forage crop establishment in soil containing atrazine or

lings to soil-active herbicides.

HAMSTERS Leptospirosis in hamsters on diets containing various levels of riboflavin. 2215	
HAHDWOODS Fungi isolated from discolorations in northern hardwoods. 974	Effect of the Helminthosporium leafspot disease on organic
Substituted urea herbicides in the control of undesirable hardwoods. 1695	HELMINTHOSPORIUM SATIVUM Influence of temperature, humidity, and inoculum concen-
HAHVESTING DATE Peanut yields and quality increased by delayed harvest and disease control. 1322	tration on development of Helminthosporium sativum and Sep toria passerinii in excised barley leaves. 1430 Precocious sporulation and longevity of conidia of Helmin-
	thosporium sativum in soil. 2491
HAWAII Armillaria mellea in Hawaii. 1502	Inheritance of chlorotic-lesion resistance to Helmintho-
Pathogenecity of Helicotylenchus nannus and its relation with Pythium graminicola on sugarcane in Hawaii. 1575	sporium turcicum in corn seedlings. 1140 Differential reaction of stocks of the same long-time inbred
Influence of the stubby-root nematode on growth of sugarcane in Hawaii. 1665	line of Zea mays to Helminthosporium turcicum. 1497
Pathogenicity of Meloidogyne incognita acrita and its re- lation with Pythium graminicola on sugarcane in Hawaii.	rium turcicum in seedling corn. 1511
1666 Incidence of parasites in calves in Hawaii and the treatment of Cooperia punctata, with special reference to the	HELMINTHOSPOHIUM VICTORIAE Carbon tetrachloride inactivation of the agent of disease in Helminthosporium victoriae. 1168
efficacy of ruelene. 2308	Pathogenicity of Helminthosporium victoriae and related species on oats and barley. 1436
HAY Young calves grow faster without hay. 1886	The toxicity of citroxinine. 2345
HBAD SMUT (CORN) Pathogenicity to sorghum and corn of a hybrid between the head smut fungi on each of these crops. 1339	Effect of leaching on respiration of victorin-treated oat tissues. 2417
Physiologic specialization of sphacelotheca reiliana to sorghum and corn.	Respiratory and enzymatic changes in victoria blight of oats. 2419
	Toxicity of victoxinine. 2421
HEAD SMUT (SQHGHUM) Pathogenicity to sorghum and corn of a hybrid between the head smut fungi on each of these crops. 1339	Morphology and respiration of diseased and normal Helmin- thosporium victoriae. 2435
Physiologic specialization of sphacelotheca reiliana to sorghum and corn. 1340	HEMAGGLUTINATION A comparison of a hemagglutination test with a modified hemolytic test on serums from intradermal bovine tuberculin
The action of propionate on wheat stem rust and sorghum head smut. 1403	
HEAHT	the polyvalent salmonella indirect hemagglutination test.
 Hematologic findings associated with some common diseases of poultry. 	
HEARTWATEH DISEASE	Encephalomyelitis of swine caused by a haemagglutinating virus. III. Serological studies. 1936
Hickettsial infection (heartwater) in sheep and goats in the Sudan. 2260	The use of the haemagglutination technique for the detection
HEAT	of antibodies in gastro-intestinal nematode infections in sheep. 2162
Control of black rot by prebedding heat treatment of sweet- potato roots. 1273	A tannic acid modified hemagglutination test for infectious bronchitis of chickens. 2189
Heat adaptation in a rust and a virus. 1466	HEMAGGLUTINATION-INHIBITION TEST
Differentiation of quail bronchitis virus and infectious bronchitis virus by heat stability. 2261	A previously unreported serotype of avian Mycoplasma.
Adaptation and sensitization of bean leaves to heat. 2466	Response of hemoglobin and cellular elements of blood after
HEAT THEATMENT Heat-induced variegation-a model disease. 1541	
Influence of heat treatment on the number of ectopic	Hemoglobin determination in swine anemia. 1834
lymphoid foci in chickens. 2113 HELICOPTEHS	HEMOLYSINS Studies of staphylococci of canine origen with particular reference to the nature and distribution of their
Can helicopters compete with airplanes in agriculture. 2541	haemolysins. 2182
HELMINTHOSPOHIUM Storage of fungi in seeds of small grains. 1275	
Intraspecific variation in pathogenicity in the genus Hel- minthosporium to Graminus species. 1423	
Influence of moisture content, temperature, and length of	Studies of dogs with infectious canine hepatitis. 1865
storage upon survival of fungi in barley kernels. 1527	Duck hepatitis virus in duck embryo fibroblast cultures. 2026

HERBICIDE RESIDUES

Bovine hepatitis associated with ruminal protozoa.	2063	Recent advances in the chemical control of wild oats.	
PRESECTOR RESIDUES Conments on tests of herbicide mixtures.	924		175 6 175 8
Experiments with herbicides in soils.	1680	Plute-feed applicator for granular herbicides.	1762
Liquid vs. granular pre-emergence herbicides.	1748	Toxicity of carbamate, triazine, dichloropropionanilide, diallyactamide compounds to sheep.	an d
Persistance of soil-incorporated EPTC and other carbama	2336		2323
Spray retention by bermudagrass.	2337	Response of cotton seedlings to combinations of preemerg	
Dissipation of simazine from the soil.	2338	herbicides and systemic insecticides.	2335
Residues in soil one year after herbicides were applied sorghum.	to 2339	Residues in soil one year after herbicides were applied sorghum.	233 9
ERBICIDES	000	Effects of environment upon herbicides applied preemerge	236 C
Comments on tests of herbicide mixtures.	924	Acetylenic derivatives as herbicides.	2363
An evaluation of two fungicides as soil treatment with without herbicide for tomato fruit disease control.	997	Pesticides: their properties, uses and disadvantages. II. fungicides and herbicides. Pesticides in relation to	
Experiments with herbicides in soils.	1680	animals.	236 4
Endothal derivatives as aquatic herbicides in fishery habitats.	1683	Phytotoxicity of s-triazine herbicides to corn and weeds related to structural differences.	2365
Pre-emergence weed control in soybeans with mixtures of herbicides.	two 1686	Measurement of microbiological effects of herbicides.	2378
Herbicides for gladiolus.	1691	Herbicides on bluegrass.	2412
Role of herbicides in soybean production.	1694	Variation in morphological characteristics and dalapon s	
The effects of four herbicides on microorganisms in nin ${\tt Oregon\ soils.}$	ie 1701	ceptibility within the species Setaria lutescens and Setaria faberii.	2420
A technique for controlled exposure of emerging grass s lings to soil-active herbicides.	seed- 1702		2446
Cropping, cultivation, and herbicides to eliminate leaf spurge and preuent reinfestation.	Ty 1705	Carbohydrate metabolism of Johsongrass as influenced by seasonal growth and herbicide treatments.	2452
Herbicdal value of arsenic trioxide in Eastern United States.	1709	Some chemical and physical properties of weed killers, s lement 1.	2525
Influence of droplet size on effectiveness of lcw-volumerbicidal sprays.	ne 1711	Herbicidal properties of low-volatile esters of dalapon.	2529
Evaluation of herbicides applied to soil for control of aquatic weeds in irrigation canals.	: 1713	The use of fluorescent tracers to study distribution of soil applied herbicides.	256 1
Interrelations of cultivations, herbicides, and methods		A device for subsurface application of herbicides.	256 2
application for weed control in soybeans.	1714		2567
Interrelations of row spacings, cultivations and herbic for weed control in soybeans.	ides 1715	HEREDITY Inheritance of resistance to common bunt, Tilletia carie in a cross of P.I. 178383 x Elgin wheat.	s, 1085
Evaluating herbicides against aquatic weeds.	1721	Inheritance of reaction to Puccinia hordei in barley. I.	
Control of bamboo in Puerto Rico by herbicides.	1722	Genes for resistance among North American race different	
Characteristics and herbicidal control of flat pea.	1727	HEREFORD CATTLE	
Effect of overhead and furrow irrigation on performance preemergence herbicides.		A critical evaluation of bephenium hydroxynaphthoate as	ав 1777
Soil-incorporated pre-planting herbicides for witchweed trol.	1730	HETERODERA Anatomical studies of soybean roots artificially inocula	
Effects of surfactants on the herbicidal activity of se herbicides in aqueous spray systems.	veral 1732	Occurrence of Heterodera cysts in association with sugar	
Herbicides and herbicide mixtures for weed control in peanuts.	1734	HETERODERA GLYCINES	1639
Methods of evaluating pre-emergence herbicides for cott	on. 1737		1599
Movement of herbicides in soil with simulated furrow in gation.	ri- 1744	Influence of nonhost crops alone or in combination with nematocide on the longevity of the soybean cyst nematode soil.	
A pendulum sprayer for pot cultures.	1747	Control of the soybean cyst nematode by crop rotation.	1620
Aerial and ground applications of preemergence herbicid corn, sorghum, and soybeans.	les in 1754	Lethal time-temperature relation for Heterodera glycines	1629 •

164	HOG CHOLERA VIRUS Subculturable swine buffy coat cells with hog cholera virus.
Fenetration, infection, and development of Heterodera glycines in soybean roots and related anatomical changes.	1878
HETERODERA ROSTOCHIENSIS	Cultivation of hog cholera virus in subculturable swine buf- fy coat cells. 2071
Control of Heterodera rostochiensis by sodium methyl di- thiocarbamate. 1619	The effect of Salmonella choleraesius infection on immunity to hog cholera. 2228
HETERODERA SCHACHTII Occurrence of Heterodera cysts in association with sugar- beets in eastern South Dakota. 1639	HOLOCELLULOSE Changes in degree of polymerization of holocellulose during decay of sweetgum sapwood by white- and brown-rot fungi. 2512
HETEROSIS Responses of corn hybrids to yellow foxtail competition. 1693	HONDURAS
HIBERNATION Host-contaminant biology of muscoid flies. III. Effect of hibernation, diapause, and larval bactericides on normal flora of blow-fly prepupae.	HOPS Factors affecting sporulation and infections by the hop dow-
Overwintering capabilities of uredospores and mycelium of Puccinia graminis tritici in the Pacific Northwest. 106	Control of hop downy mildew by chemical dessicants. 1443
HISTABINE The pathology of chicks fed histamine. 2150	
The distribution of histamine in the sheep stomach. 220	
HISTIDINE Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight	HORSES Safety of intravenous proteolytic enzymes (Varizyme) in equine practice. 1779
organism. 249	Erythrocyte survival studies in the horse, using glycine-2- C14. 1794
HISTOCHEMISTRY Frogressive histochemical change in virus-infected fat body of the western oak looper. 86	Tuberculosis in domestic animals other than cattle. 1827
Morphologic and histochemical studies of skeletal lesions in	Grass sickness in horses. 1845
rats fed sweet pea (Lathyrus odoratus) seeds. 221	
HISTOLOGY The histopathology of foot-and-mouth disease in pregnant and lactating mice. 213	
	Streptococcus equi may be sole cause of strangles. 1873
The uterine biopsy technique for following the histologic changes caused by Vibrio fetus in the uterine mucosa. 226	A comparison of equine piroplasmosis in South Africa and the United States. 1892
HISTOPATHOLOGY	Diabetes mellitus in the horse. 1954
Bovine papular stomatitis. III. Histopathology. 2060	Equine piroplasmosis. 2027
HISTOPLASHQSIS Canine histoplasmosis with intestinal involvements. 2190	um-neutralizing antibodies in serum of convalescent cattle
Chronology relating to use of diethylstilbestrol in poultry and meat animals. 1830	
HOG CHOLERA	of glucose and eosinophils in horse blood.
Hog cholera colostral antibody studies. 185	
Agar gel diffusion studies with a mucosal disease of cattle II. A serological relationship between a mucosal disease and swine fever. 1939	Field studies comparing piperazine-carbon disulfide complex with carbon disulfide for parasite control in the horse. 2295
Propagation of hog cholera virus in tissue culture and its application to vaccine I. Propagation of the virus in tissue culture.	HOST INDEXING (PLANTS) Comparison of one- and two-year-old wood as inoculum in indexing for a latent apple virus. 1020
Focal necrosis in the mucosa of the gallbladder in pigs with hog cholera. 2060	
Application of the conglutination complement absorption test to detect hog cholera antibodies. I. The technique. 208	
The transenteral entrance of the virus in hog cholera.	Obtaining virus-free stock by index techniques. 1472
222!	Effect of source host on infectivity of tobacco mosaic virus isolates. 1584
EOG CHOLERA VACCINES Inoculation of baby pigs with lapinized hog cholera vaccine (1 ml.). 2048	
Inoculation of baby pigs with lapinized hog cholera vaccine (2 and 4 ml.).	tions. 1627 Host range of Tylenchorhynchus claytoni on some forrest
The effect of Salmonella choleraesius infection on immunity to hog cholera.	nursery seedlings. 1668

	SUBJECT	INDEX	
HOST PLANTS			
HOST PLANTS Host plant records and biology of aphids on cereal grain and grasses in Manitoba (Homoptera > Aphididae).	ns 898	HYDROLYSIS The role of amygdalin breakdown in the peach replant prob- lem. 24	- 47
HOT WATER TREATMENT (PLANTS) Heat therapy of bean rust.	1047	HYDRONEPHROSIS Bilateral hydronephrosis resulting from a transitional epithelial carcinoma in a doq. 20	09
Time-temperature relationships in thermal inactivation sclerotia of Macrophomina phaseoli.	of 1367	HYGROHYCIN B	
HULL ROT (PRUNUS AMYGDALUS) The hull rot disease of almond and the pathway for trancation of a toxin involved in symptom development.	nslo- 963	HYPERTENSION	80
HUMAN DISEASES Canine whipworm in man.	1870		95
Incidence of human brucellosis continues decline.	1872	HYPERTROPHY Pulmonary hypertension and right ventricular hypertrophy i cattle at high altitude. 19	in 95
Pesticide storage in human fat tissue.	1874	•	,
Bacteria and fungi pathogenic to man and animals.	1891	HYPODERMA Hypoderma and parturition complicate sweet clover poisoning 11	ng 86
Zoophilic microsporum.	1896		
Microsporum infections in cats.	1927	HYPONAGNESEMIA Major blood electrolyte concentrations in cattle during the developement of hypomagnesaemia. 20	he
Fat necrosis in man and animals.	2115	Serum protein-bound iodine concentrations in cows, with	
Rhinosporidiosis in a horse.	2194		09
HUMIDITY Equilibrium humidities and survival of some tick larvae	797	HYPOMYCES SOLANI F. CUCURBITAE On the genetics of Hypomyces solani f. cucurbitae to PCNB and TCNB.	11
Influence of temperature, humidity, and inoculum concer tration on development of Helminthosporium sativum and toria passerinii in excised barley leaves.			37
Relation of moisture content and length-of-storage perito changes in the fungus flora and germination percentawheat.		ILEX	69
Influence of moisture content, temperature, and length storage upon survival of fungi in barley kernels.	of 1527	Pathological anatomy of leaf spots of holly. Histological differentiation of fungal, chemical, mechani-	92
In vitro hatching of Meloidogyne hapla eggs as affected temperature, moisture, and age of egg mass.	l by 2431	cal, and insect damage to holly leaves.	94
Comments on the moisture requirements of fungus germina		Significant aspects of bacterial blight of Ilex opaca	02
HYACINTH DOLICHOS A new powdery mildew of Dolichos lablab from India.	1258	IMMUNITY Immunity studies on avian infectious synovitis. 19	90
	.250	The canine distemper-measles complex. I. Immune response	
HYBRIDS Wheat leaf rust resistance combinations.	1331	of dogs to canine distemper and measles viruses.	94
Pathogenicity to sorghum and corn of a hybrid between thead smut fungi on each of these crops.	:he 1339	Transfer of immunity to foot-and-mouth disease virus from maternal mice to offspring. 2	13
A synthetic hybrid of two varieties of Puccinia gramini	is.	Nature of immunity to Newcastle disease in vaccinated chickens. Z. Influence of residual resistance upon the	
	1426	level and duration of immunity following revaccination.	15
HYDBACRYLIC ACID BETA-LACTONE Evidence that beta-propiolactone can inactivate latent strawberry virus in Fragaria vesca plants.	A 961	Studies on parental immunity to infectious laryngotrachei of chickens.	ti 18
HYDRAZONES Chemotherapeutic control of wheat leaf rust with phenyl		Enteroviruses of swine. II. Studies on the natural history of infection and immunity.	у 20
hydrazones. The fungicidal activity of acrolein phenylhydrazone and lated compounds against rust.	1268 1 re- 2433	The effect of Salmonella choleraesius infection on immunit to hog cholera.	t y 22
HYDROCARBONS		Further observations on immunity to bovine cutaneous papillomatosis.	22
Toxicity of some halogenated hydrocarbon mixtures to the citrus and root-knot nematode. HYDROGEN-ION CONCENTRATION	1e 2343	Studies on infection and immunity with the cattle lungworn Dictyocaulus viviparus (Bloch). I. Infection in laboratory animals.	
Effect of hydrogen ion concentration on growth rates of			
Phtophthora sp. Relation of soil pH to development of poinsettia root r	1046	Modification of immunity of Poncirus trifoliata to yellow- vein virus by the addition of vein-enation virus and susceptible tissue. 23	
	4043	The second secon	

IMMUNIZATION

Inhibition of callus and root growth in tomato stems excised from plants inoculated with a combination of tobacco mosaic virus and potato virus X.

1141

PAGE 122

Relation of soil pH to development of poinsettia root rots. 1213

Effects of soil acidity on the adsorption, penetration, and persistence of simazine. 2325

INFECTIOUS CANINE HEPATITIS VIRUS

Effects of temperature, soil moisture, and time of inoc lation on symptom development of sorghum charcoal rot.	u- 1142	The immunogenicity of a commercial coccidiosis vaccine i conjunction with Trithiadol and Zoalene.	.n 2102
Inoculation and colonization of stumps of Pinus echinat Fomes annosus.		Susceptibility of Japanese quail (Coturnix coturnix japonica) to experimental infection with Haemophilus gallinarum.	2146
Artificial inoculation of longleaf pine with Scirrhia a cola.	ci- 1229	Immunization against mycoplasma infections of poultry.	2156
Artificial inoculation of pearl millet plants with Scle spora graminicola.	ro- 1236	Nature of immunity to Newcastle disease in vaccinated chickens. Z. Influence of residual resistance upon the	
A method of controlled inoculations with conidicspores Erysiphe graminis war. tritici.	of 1261		2157
Influence of soil temperature, isolates, and method of inoculation on resistance of mint to Verticillium wilt.	1380	A study of infectious laryngotracheitis virus. II. The duration and degree of immunity induced by conjunctival vaccination.	2171
Influence of temperature, humidity, and inoculum concentration on development of Helminthosporium sativum and	Sep		se) 2192
toria passerinii in excised barley leaves. Systemic resistance induced by localized virus infectio		INMUNOCHEMISTRY Investigations of antigenic components produced by sweet tato roots in response to black rot infection.	po- 1269
Inoculating barley seedlings with Ustilago nuda and whe		A simplified technique for the serum-neutralization test infectious bronchitis.	in 2031
seedlings with U. tritici. Inoculation with Cronartium ribicola by bark-patch graf ing.	1518 t- 1561	IMMUNOLOGY Studies of Newcastle disease. II. Evaluation of two killed Newcastle disease vaccines.	2123
Sporangial germination of Sclerosporia graminicola and tificial infection of Pennisetum glaucum.	ar- 1588	The immunological antigenicity of rapid heat inactivated viruses. I. Newcastle disease virus.	l 2217
Allergy studies on cattle vaccinated with killed Mycobacterium paratubeculosis.	1790	IN VITRO In vitro nutrition of the tomato bacterial spot organism	
Testing and marketing of rabies vaccine, modified live virus, chicken-embryo origin.	1828	INCLUSION BODIES	156 9
Vaccination safety in small dogs, using bivalent modifi live virus vaccine.	.ed 1830	Intranuclear inclusion bodies in the leaves of cotton pl infected with leaf crumple virus. INCUBATION	1488
Immunization of sheep against owine wibriosis.	1833	Apparent natural infection of Corturnix quail hens with	the 1974
Mineral oil adjuvant vaccine for bacillary hemoglobinur	ia. 1839	INDIA	13/4
Subculturable swine buffy coat cells with hog cholera w		The nematode genus Strongyloides grassi, 1879 in Indian livestock. I. Observations on natural infections in the	2107
The response of chickens to vaccination with different concentrations of pigeon pox and fowl pox viruses.	1901	INDICATOR PLANTS Relative merits of shirofugen and peach trees as indicat for Prunus ringspot virus in prune trees.	ors 1506
Revaccination procedures for infectious laryngotracheit	is. 1919	INDOLEACETIC ACID The role of surfactants in the foliar absorption of indo	
Rinderpest.	1920		2429
Vaccination against Johne's disease. Experimental immunization against ovine vibriosis. I. T	1944	INDUSTRIAL RELATIONS Fourth annual meeting of the American Association of AvianPathologists.	1778
use of live and formalin-killed Vibrio fetus vaccines.	1953	INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS Keratoconjunctivitis associated with infectious bovine	1,,,
Observations on calf diseases in Kenya. Part II. Calf scours:coli-bacillosis of calves, with special referenc vaccination.	e to 1962		2151
The production and properties of Newcastle disease vacc (Komarov strain) in Nigeria.	ine 19 7 0		2031
Rabies of farm livestock in Africa.	1981	The diagnosis of infectious bronchitis of chickens by the agar gel precipitin test.	e 2036
Immunity study of a new diluted formalin-inactivated Newcastle disease vaccine.	2001	The effect of infectious bronchitis virus on chickens infected with Mycoplasma gallisepticum.	2155
A note on the prophylactic vaccination of wild animals.	2005	A tannic acid modified hemagglutination test for infecti- bronchitis of chickens.	ous 2189
Colostral antibody to rabies in cattle vaccinated with flury strain of the virus.	HEP 2016	INFECTIOUS BRONCHITIS VIRUS Recent studies on the virus of infectious bronchitis.	200.0
Coccidiosis vaccination.	2074		2009
The immunization of cattle with a mouse-adapted strain	of 2078	INFECTIOUS CANINE HEPATITIS VIRUS Infectious canine hepatitis virus infects mink.	1854

INFECTIOUS DISEASES

NPECTIOUS DISPASES Transmission of ornithosis from sheep to turkeys. 1876	
Enteroviruses of swine. II. Studies on the natural history of infection and immunity. 2201	Curculionidae) in Canada: life history, behaviour, and cytogenetic identification. 87 1
NFECTIOUS LARYNGOTRACHEITIS Revaccination procedures for infectious laryngotracheitis.	Notes on the life history and habits of the spruce cone worm, Dioryctria reniculella (Grt.) (Lepidoptera: tpyralidae).
Studies on parental immunity to infectious laryngotracheitis of chickens. 2180	Life history and habits of a spruce needle-miner, Eucordy- lea ducharmei Free. (Lepidoptera: Gelechiidae). 87
NFECTIOUS LARYNGOTRACHEITIS VIRUS	INSECT BIOCHEMISTRY Studies on the haemolymph proteins of the blowfly Phormia
A study of infectious laryngotracheitis virus. II. The duration and degree of immunity induced by conjunctival vaccination. 2171	
Some observations of the propagation of infectious laryngotracheitis virus in tissue culture. 2245	
NPECTIOUS SYNOVITIS Immunity studies on avian infectious synovitis. 1902	fasciatus (Dallas). 2 Essential amino acids determined in the two spotted spider
L-phase bacterial forms associated with infectious synovitis in chickens and turkeys.	mite, Tetranychus urticae Koch (Acarina, Tetranychidae) s with glucose U C14. 90
The influence of dietary calcium-phosphorus and terephthalic	INSECT BIOLOGY
acid on antibiotic control of experimental infectious synovitis. 1945	A fruit-piercing moth of Samoa and the South Pacific islands.
Cultivation of the infectious-synovitis-type pleuropneumonia-like organisms. 2267	
Control of infectious synovitis. 8. Degree of infection as influenced by medication with furazolidone and chlortetracycline.	Biology of the mountain pine beetle, Dendroctonus monti- colae Hopkins, in the East Kootenay Region of British
NFLUENZA Lungworms enhance severity of swine influenza. 1888	Columbia. III. Interaction between the beetle and its host, with emphasis on brood mortality and survival.
NFRARED PHOTOGRAPHY Infrared photography of potato late blight. 2565	Descriptions of immature forms and biology of Xylotrechus colonus (Pab.) (Coleoptera: Cerambycidae). 87
NJECTIONS Safety of intravenous proteolytic enzymes (Varizyme) in equine practice. 1779	Notes on Matsucoccus macrocicatrices Richards (Homoptera: Margarodidae) and its association with Septobasidium pin- icola Snell in eastern canada. 87
Multidose injection apparatus for Dutch elm disease inoculations. 2536	Notes on the life history and habits of the spruce cone worm, Dioryctria reniculella (Grt.) (Lepidoptera: tpyra-
NOCULUM Determination of inoculum potential of infested soil.	Host plant records and biology of aphids on cereal grains and grasses in Manitoba (Homoptera > Aphididae).
992 Development of spring blackstem in alfalfa as affected by nutrients added to spore suspensions at the time of inocu-	Studies on the life-history of Aedes (Skusea) pembaensis (Theobald) (Diptera, Culicidae).
lation. 1004	INSECT CAGES An improved container for shipping live insects. 254
Comparison of one- and two-year-old wood as inoculum in in- dexing for a latent apple virus. 1020	A roll-up field cage for insects.
Importance of nonhosts in maintaining the inoculum potential of Verticillium. $$1053$	
Relation of seed- and soil-borne inoculum to epidemiology of angular leaf spot of cucumber in wisconsin. 1566	A plastic leaf-cage for rearing insects on whole attached 1 leaves. 255
NSECT ANATOMY Ambrosia fungus storage in two species of Gnathotrichus Eichhoff (Coleoptera: Scolytidae). 822	INSECT COLLECTING EQUIPMENT A sampling cage for aquatic insects. 254
NSECT BEHAVIOR	A portable mechanical insect trap. 254
Competition between two species of mites. II. factors influencing intensity.	INSECT COMPETITION Competition between two species of mites. II. factors in- fluencing intensity. 80
Some ecological attributes of a pteromalid parasite and its housefly host. $$817\mbox{\ensuremath{\mbox{\footnotesize 817}}}$	
A fruit-piercing moth of Samoa and the South Pacific islands. 846	Cerambycidae) in Maine. 82
Habituation and associative learning in Drino bohemica Mesn. (Diptera: Tachinidae). 855	The role of disease and desiccation in the population dynamics of the gypsy moth Porthetria dispar (L.) (Lepidoptera: Lymantriidae).
Cover selection by adults of Hypolithus bicolor Esch- scholtz (Coleoptera: Elateridae). 858	Infection of the jack pine budworm, Choristoneura pinus Freeman, with a nuclear polyhedrosis virus of the spruce budworm, Choristoneura fumiferana (Clemens), (Lepidop-
The need for direct observation of behaviour in studies of temperature effects on light reactions. 866	tera: Tortricidae). 85

INSECT NUTRITION INSECT DISSEMINATION 829 A new species of Anthocoris from Canada, and distribution records for three other species (Heteroptera: Anthocorii-Molluscs and arthropods from cardinal nests at London, On-839 tario. Some ecological attributes of a pteromalid parasite and its Occurrence of Pissodes terminalis Hopp. (Coleoptera: Curculionidae) in Canada: life history, behaviour, and housefly host. cytogenetic identification. 87.0 A revision of the genus Ephemerella (Ephemeroptera: ephemerellidae). VII. the subgenus Eurylophella. First North american record of Bufolucilia silvarum (Mei 838 gen) (Diptera : Calliphoridae) parasitizing Bufo terrestris americanus Holbrook. The status of Bessa harvevi (Tnsd.) (Diptera: Achinidae) -844 INSECT METABOLISM Tetranychus sinhai Baker (Acarina: Tetranychidae) a new pest of cereals -- varietal reaction of barley. Studies on the hormonal control of metabolism in Rhodnius prolixus Stal. II. The fifth-stage insects. 862 Biology of the mountain pine beetle, Dendroctonus monti-colae Hopkins, in the East Kootenay Region of British Columbia. III. Interaction between the beetle and its host, with emphasis on brood mortality and survival. Tryptophan and tyrosine metabolism in the pupa of papilionid butterflies. II The general pattern of tryptophan metabolism during the pupal stage of Papilio xuthus. 882 868 INSECT MIGRATION Insect dissemination-a newly discovered mode of spread of Observations on the migration of larvae of Neodiprion swainei Midd. (Hymenoptera: Tenthredinidae). bacterial wilt of banana. 1032 The alfalfa plant bug, Adelphocoris lineolatus (Goeze) in Environmental causes of variation in the sex ratio of an arrhenotokous insect, Dahlbominus fuliginosus (Nees) northern Saskatchewan. 85.2 (Hymenoptera: Eulophidae). 792 INSECT MORPHOLOGY The barley jointworm, Harmolita hordei (Harr.) (Hymenop-tera: Chalcidoidea), in Prince Edwards Island. The rearing of European red mite under controlled environ-794 mental conditions. 807 Two new dactynotine aphids (Homoptera). 811 A further note on the relation of weather to population trends of the plack-headed budworm, Acleris variana (Fern.) (Lepidoptera: Tortricidae). Development and survival of the onion maggot under field and artificial conditions on attractive and non-attractive onion 823 varieties. Life history and ecology of Pulvinaria vitis $\{L_{\bullet}\}$ (Hemiptera: Coccoidea), the cottony scale attacking peach in On Two new species of Cinara Curtis (Homoptera: Aphididae) from Juniperus horizontalis Moench. 848 824 tario. Notes on flies of medical importance in Japan, part XXIII. Seasonal fluctuation of flies in the Imperial Palace Leafhopper vector cells in vitro. 849 The alfalfa plant bug, Adelphocoris lineolatus (Goeze) in northern Saskatchewan. Grounds, Tokyo. 908 Studies on Malayan vectors of malaria methods of trapping, and observations on biting cycles. The growth characteristics, in terms of live weight, of some grasshoppers (Orthoptera: Acrididae) of western Canada. Survey of insects affecting livestock in southwestern On-853 tario. 2278 Growth, reproduction and longevity in one biotype of the pea aphid, Acyrthosiphon pisum (Harr.) (Homoptera: Aphidi-INSECT EGGS Note on oviposition in plant stems by grasshoppers (Or-851 thoptera : Acrididae). Studies on the haemolymph proteins of the blowfly Phormia regina. I. Changes in ontogenetic patterns. Biology of the mountain pine beetle, Dendroctonus monti-colae Hopkins, in the East Kootenay Region of British Columbia. III. Interaction between the beetle and its host, with emphasis on brood mortality and survival. Developmental rates of larch sawfly (Pristiphora erichsonii (Htg.)) larvae in an insectary and in field shelters. 868 On the lipids of the egg of the grasshopper Aulocara 883 Descriptions of immature forms and biology of Xylotrechus colonus (Fab.) (Coleoptera: Cerambycidae) INSECT EVOLUTION The Aphididae of the Canadian Arctic (Homoptera). 808 Spiracular structure and water loss from Tribolium confusum Jacq. and Sitophilus granarius (L.) under reduced press-INSECT FLIGHT A low speed wind tunnel for determining the effects of wind on flight activity of insects. The functional morphology and interpretation of the insect ovipositor. Generic characters in the tribe Ipini (Coleoptera: Scolytidae), with a new species, a new combination, and a new Some physiological studies in relation to age in the blowfly Calliphora erythrocephala Meig. 819 Haemolymph proteins of Ostrinia nubilalis during diapause and prepupal differentiation. Genetics and biological control. 905 901 INSECT HORMONES INSECT MORTALITY Purification of insect hyperglycaemic and heart accelerating Some ichneumonid-sarcophagid interactions in the gypsy moth Porthetria dispar (L.) (Lepidoptera: Lymantriidae). hormones. 889 INSECT IDENTIFICATION INSECT NUTRITION Beeswax in the nutrition of the wax moth Galleria mellonella (L_{\bullet}). species of Anthocoris from Canada, and distribution records for three other species (Heteroptera: Anthocorii-893

827

The occurrence of Nemobius fasciatus (DeGeer) in New-

Leucania comma in North America (Lepidoptera, Noctui-

foundland (Orthoptera: Gryllidae: Nemobiinae).

2566

A practical apparatus for feeding artificial diets to all stages of Rhodinius prolixus Stal.

INSECT OUTBREAKS

NSECT OUTBREAKS A further note on the relation of weather to population	Acheta domesticus (L.) (Orthoptera).	90
trends of the plack-headed budworm, Acleris variana (Fern,) (Lepidoptera: Tortricidae). 823	Pitch discrimination in the locust ear: obervations on single sense cells.	90
Life history and ecology of Pulvinaria vitis (L.) (Hemiptera: Coccoidea), the cottony scale attacking peach in On tario.	INSECT POPULATION A further note on the relation of weather to population trends of the plack-headed budworm, Acleris variana (Fern,) (Lepidoptera: Tortricidae).	82
NSECT PESTS The barley jointworm, Harmolita hordei (Harr.) (Hymenoptera: Chalcidoidea), in Prince Edwards Island. 794	Survey of insects affecting livestock in southwestern Ontario.	27
A field survey of arthropod parasites of birds in Taiwan.	INSECT REARING The rearing of European red mite under controlled environ-	
A new pest of apple in New Brunswick. 804		80
Development and survival of the onion maggot under field and artificial conditions on attractive and non-attractive onion varieties.		11 86
A fruit-piercing moth of Samoa and the South Pacific islands. 846	A technique for maintaining acarine predator-prey populations. 29	54
The alfalfa plant bug, Adelphocoris lineolatus (Goeze) in northern Saskatchewan. 852	INSECT REARING EQUIPMENT New apparatuses and rearing techniques for the study of wireworms (Coleoptera: Elateridae) in organic soils of southwestern Quebec. 25	54
Laboratory and field observations on two predators of the pear psylla in british Columbia. 861	A plastic leaf-cage for rearing insects on whole attached leaves. 2:	55
Tetranychus sinhai Baker (Acarina: Tetranychidae) a new pest of cereals varietal reaction of barley. 862	A 40-cubic-foot air-conditioned cabinet.	55
Dynamic programming, look ahead programming, and the strategy of insect pest control. 863	INSECT REPELLENTS Further considerations regarding the repellency of spray components.	84
Attack and brood production of ambrosia beetles in logging debris.	INSECT TAXONOMY Taxonomy of cocoons and puparia, and their contents, of Ca	
Survey of insects affecting livestock in southwestern Ontario. 2278	nadian parasites of some native Diprionidae (Hymenoptera)	
WSECT PHYSIOLOGY Studies on the hormonal control of metabolism in Rhodnius prolixus Stal. II. The fifth-stage insects. 850	A new birch aphid from central New Brunswick (Homoptera: Aphididae).	80
Studies on the haemolymph proteins of the blowfly Phormia	The Aphididae of the Canadian Arctic (Homoptera).	80
regina. I. Changes in ontogenetic patterns. 865 Ultrasonic production and its reception in some neotropical	A new species of Aspidaphis Gillette (Homoptera: Aphidi- dae).	81
Tettigoniidae. 877	, , ,	81
Purification of insect hyperglycaemic and heart accelerating hormones. 881	Synopsis of the genus Orius Wolff in America north of Mexico (Heteroptera: Anthocoridae).	81
The effect of temperature, anoxia, or injection of various substances on haemolymph composition and super cooling in larvae of Anagasta kuehniella (Zell.).	A new species of Nepytia (Lepidoptera: Geometridae), of economic importance to Douglas fir in British Columbia.	81
Abdominal stretch and inhibition of moulting in Rhodnius prolixus (Hemiptera).	Relationships of Cremifania Czerny (Diptera: Chamaemyii- dae and description of a new species.	81
Free amino acid changes associated with diapause in the egg of the field cricket Teleogryllus.	The gilvarius group of Aspilates Treitschke (Lepidoptera: Geometridae).	81
Spiracular structure and water loss from Tribolium confusum Jacq. and Sitophilus granarius (L.) under reduced pressures.	The natural groups of species in the genus Ips De Geer (Coleoptera : Scolytidae) in North America.	82
The functional morphology and interpretation of the insect ovipositor. 892	Two new species of Ips De Geer (Coleoptera: Scolytidae) from western Canada and Alaska.	82
A new approach to neuromuscular analysis in the intact free		82
walking insect preparation. 895	A note on synchronized emergence in Gomphus vastus Walsh (Odonata: Gomphidae).	82
Recovery of cholinesterase activity in organophosphate treated insects.	Studies on the Canadian and Alaskan Fulgoromorpha (Hem- iptera). I. The genera Achrotile Fieber and Laccocera	
Studies on the pteridines in the milkweed bug, Oncopeltus fasciatus (Dallas). 900		83 : 83 :
Haemolymph proteins of Ostrinia nubilalis during diapause and prepupal differentiation. 901	A revision of the genus Ephemerella (Ephemeroptera:	
Essential amino acids determined in the two spotted spider mite, Tetranychus urticae Koch (Acarina, Tetranychidae) with glucose U C14. 902	A new Hylobius weevil associated with jack pine stand de-	84
Round accept chalinostorage in the contral nervous system of	The cratue of Bosca baryoni (Tood) (Dinters Achini-	

dae) - 844
INSECT TEMPERATURE The role of certain gram-negative bacteria and temperature in larval mortality of the armyworm, Pseudaletia unipuncta (Haworth). 879
INSECT TRAPS Studies on Malayan vectors of malaria methods of trapping, and observations on biting cycles. 909
A portable mechanical insect trap. 2546
INSECT VECTORS The uptake of C14 and P32 from leaves by two species of leafhopper vectors. 843
Leafhopper vector cells in vitro. 849
The storage of ambrosia fungus spores by the pitted ambrosia beetle, corthylus punctatissimus Zimm. (coleoptera: Scolytidae).
The attraction of mosquitos by human or animal baits in relations to the transmission of disease.
Studies on Malayan vectors of malaria methods of trapping, and observations on biting cycles.
A whitefly-transmitted mosaic of Rhynchosia minima and its relation to tobacco leaf curl and other virus diseases of plants in Puerto Rico. 939
Insect and graft transmissions of alpha- and beta-curl viruses of raspberries.
Evidence for the simultaneous transmission of two viruses by the aster leafhopper (Macrosteles fascifrons). 1104
Electronmicrographs of rice dwarf and wound tumor virus in ultrathin sections of their respective arthropod and plant hosts.
Aphid transmission of potato virus A to the Katahdin variety.
Preparation of cucumber mosaic virus antiserum for use in vector transmission studies.
Ability of single whiteflies to transmit concomitantly a strain of infectious chlorosis of Malvaceae and of Leonurus mosaic virus.
Apparent eradication of mosaic of sweetpotatoes in Georgia aided by the disappearence of the insect vector. 1500
Aphid transmision of white clover mosaic virus. 1517
Re-examination of vector-specificity in the barley yellow dwarf virus in Washington. 1587
Horses protected from piroplasmosis by vector control.
INSECTICIDE APPLICATION Carabids collected in a DDT-sprayed peach orchard in Ontario (Coleoptera: Carabidae). 847
Growth of red pine trees after chemical suppression of the European pine shoot moth. 899
Laboratory evaluation of DDT and phosphamidon on the west- ern hemlock looper, Lambdina fiscellaria lugubrosa (Hulst). 2351
Insecticide tests on the Douglas-fir cone midge, Contarinia oregonemis Foote. 2366

INSECTICIDE RESISTANT INSECTS
Laboratory and field observations on two predators of the pear psylla in british Columbia. 861

In-covering soil fungicides, nematocides, and insecticides for disease control in cotton. $$919\$

Systemic insecticides for indirect control of bean yellow mosaic virus in seed fields of yellow lupine. 1222

INSECTICIDES
Joint action in insecticides.

Reduction of aster yellows in flax via systemic insecticides.	1373
Natural insect control measures are grossly inadequate a today s farming.	for 1595
Multicatheterization of blood vessels of sheep for metal studies of insecticides.	oolic 1 7 92
Problems associated with the use of the newer insecticit for livestock pests.	ies 1 7 93
A comparison of equine piroplasmosis in South Africa and the United States.	1 1892
Oximes for treatment of coumaphos poisoning in cattle.	4006
	1996
Control of chemical, drug, and biological residues in me	2334
Response of cotton seedlings to combinations of preemers herbicides and systemic insecticides.	gence 2335
The effect of some insecticides on the growth of Vertici lium albo-atrum.	1 1- 2460
Nicotinoids as insecticides.	2511
Correlation between biological activity and molecular structure of the cyclodiene insecticides.	2513
INSECTS Notes on the Volterra equations.	7 95
A note on the pterostigma in insects.	809
INTERPACIAL TENSION	
Surface tension lowering, wettability of paraffin and colleaf surfaces, and herbicidal enhancement of dalapon by seven surfactants.	1745
	1743
INTERFERENCE PHENOMENON Quantitative analysis of interference produced by relate strains of TMV compared with noninfectious TMV component	
INTERNAL CORK (CONVOLVULACEAE)	
Susceptibility of certain convolvulaceae to internal control tobacco ringspot, and cucumber mosaic viruses.	1247
<pre>INTERNAL CORK (SWEETPOTATOES) Evaluation of sweetpotato breeding stocks for susceptible to internal cork virus.</pre>	11ity 1393
INTERNATIONAL COOPERATION Prospective fruits of international cooperation in tropi plant pathology.	cal 1438
INTESTINES	
Infection of an isolated intestinal loop by Newcastle disease virus.	1988
Incidence of intestinal parasites in german shepherd dog	2109
Canine histoplasmosis with intestinal involvements.	2196
INULIN The excretion of inulin, creatinine and ferrocyanide by fowl.	the 2534
IODINE	
A preliminary report on the serum protein-bound iodine i dairy cattle.	n 1770
Equine sporotrichosis.	1871
Thyroxine utilization rate and some other indicies of peripheral iodine metabolism in sucking pigs.	1898
Serum protein-bound iodine concentrations in cows, with particular reference to hypomagnesaemia.	2099

Control of barley yellow dwarf in winter oats by a systemic insecticide. 1335

IONS			
IONS The effect of adsorption of organic cations to plant on their use as systemic fungicides.	tissue 1209		1944
Inhibition of polygalacturonase by cations.	1309	JOWL ABSCESSES Swine jowl abscesses introduced by throat infection.	1894
Stimulation of spore germination and growth of Glomer cingulata by copper and other heavy metal ions.	ella 2404	JUNIPERUS VIRGINIANA Influence of environmental factors on Phomopsis junipero vora.	o- 154 0
Effect of fungicides on permeability of yeast cells t pyruwate ion.	o the 2485	KANSAS Chemotherapeutic studies of gastrointestinal parasites o	
Penetration of living and non-living surfaces by 2,4-influenced by ionic additives.	D as 2497	beef cattle and bison in Kansas. KEEL	2293
IRIS Crown rot disease of iris.	1093	Salmonella infections in white Pekin duck. A short summary of the years 1950-1960.	1964
Two virus diseases of irises in Israel.	1183	KENAF Effects of Meloidogyne incognita acrita on kenaf and use	e of
IRRADIATION On the attempted induction of resistance in oats to crust race 264 by artificial irradiation.	rown 1368	photoperiodism in selecting for resistance. KERATOCONJUNCTIVITIS	1643
X-ray exposure of swine.	1844		2092
IRRIGATION Control of barnyardgrass (Echinochloa crusgalli) in w	estern	Keratoconjunctivitis associated with infectious.bovine rhinotracheitis.	215 1
irrigated cotton.	1712	KETOSIS Some observations on bovine acetonaemia.	1899
Competition of forage species with Canada thistle, as affected by irrigation and nitrogen levels.	1717	Acetate utilization and carbon dioxide production in nor and ketotic sheep pregnant with twins.	mal 1900
Effect of overhead and furrow irrigation on performan preemergence herbicides.	ce of 1729	Liver glycogen in normal and ketotic cows.	2144
Movement of herbicides in soil with simulated furrow gation.	irri- 1744	Metabolic aspects of ruminant ketosis.	2240
ISOLEUCINE Influence of isoleucine isomers on development of the fect stage of Fusarium solani f. curcurbitae, race 2.	-	KIDNEY BEANS The effect of gibberellic acid on the parasitism of Rhiz tonia solani on beans and cotton.	20 c- 97 1
ISQUERS	2468	Etiological studies on the ash die-back disease. Leaf ag and susceptibility.	је 1320
Influence of isoleucine isomers on development of the fect stage of Fusarium solani f. curcurbitae, race 2.	per- 2468	Influence of virus and fungus lesions on plant exudation chlamydospore germination of Fusarium solani f. phaseoli	
ISBAEL Isolates of oat stem rust race 6 virulent on variety in Israel.	Saia 1354	Distribution of ribonuclease in subcellular fractions of treated, wounded, and TMV infected Pinto bean leaves.	2445
IXODES RICINUS Louping-ill: The red deer (Cervus elaphus) as an alte native host of the virus in Scotland.	r- 2191	Effect of monuron on C1402 fixation by red kidney bean leaves.	247 1
IXODIDES Equilibrium humidities and survival of some tick larv.		Respiratory metabolism of Phaseolus vulgaris infected wi alfalfa mosaic and southern bean mosaic viruses.	1th 2492
Horses protected from piroplasmosis by vector control	797	<pre>KIDNEYS Growth of foot-and-mouth disease virus in bovine kidney suspensions.</pre>	cell 2114
A comparison of equine piroplasmosis in South Africa the United States.	1855 and 1892	Plaque formation of avian encephalomyelitis virus in a chicken embryo kidney cell culture system.	2177
JAPAN	1052	KUDZU Eradication of kudzu.	1682
Notes on flies of medical importance in Japan, part X Seasonal fluctuation of flies in the Imperial Palace Grounds, Tokyo.	9 0 8	LABORATORY ANIMALS Neurotropism of equine influenza-abortion virus in infanexperimental animals.	nt 2210
Relationship between turnip mosaic virus and the radi virus of Japan.	sh P 1551	LACTATION	
Biyagawanellosis of cattle in Japan.	2028	Observations on the epidemiology of mastitis due to Streptococcus mberis in a laboratory herd during a complete lactation.	1941
JOHNE S DISEASE Arteriosclerosis in cattle with Johne s disease.	1916	Nutritional muscular dystrophy in lambs- importance of t	
Vaccination against Johne s disease.	1944	ewe s diet at certain stages of gestation and lactation.	

Fasting metabolism of the lactating cow.

LADINO CLOVER
Effect of virus infection on persistence of ladino clover.
1388

Pathogenicity of Pratylenchus penetrans on strawberry and Ladino clover seedlings. 1608

A killed vaccine against paratuberculosis (Johne s disease) in sheep. 2192

Studies on the pathology of Johne s disease in sheep. III. Pathologic changes in sheep with naturally occuring infections. 2254

			LEAVES
		pectinata and Ostertagia osteragi.	2301
Influence of dieldrin and methyl bromide soil treatments subsequent populations of stylet-bearing nematodes assoc ed with roots of Ladino clover.		LATE BLIGHT (CELERY)	1474
MBS Electrocardiographic and phonocardiographic patterns of normal lambs.	1 7 76	<pre>LATE BLIGHT (POTATOES) Epidemiological potentials of potato varieties in relati to late blight.</pre>	on 1535
Hygromycin B for removing Thysanosoma actinioides, fring tapeworms from feedlot lambs.	1802		2565
Pathogenesis of rift valley fever in lambs.	1837	LATENT VIRUS (APPLES) Flowering crab apple varieties as quick indicator hosts latent apple viruses.	for 975
Susceptibility of haemonchus contortus to phenothiazine.	1857	Comparison of one- and two-year-old wood as inoculum in	in-
Haemonchosis in artificially infected lambs.	1890	dexing for a latent apple virus. The prevalence of latent viruses in commercial apple var	1020 :ie-
Serum enzyme changes in lambs with experimentally-induce acute muscular dystrophy.	ed 1957	ties.	1072
Studies on Trichostrongylus axei Cobbold, 1879). VI. Total serum protein, blood and plasma volume, and		Detection and identification of latent viruses in apple.	1113
electrophoretic serum fractionation in infected and uninfected lambs.	1994	LATENT VIRUS (STRAWBERRIES) Evidence that beta-propiolactone can inactivate latent A strawberry virus in Fragaria vesca plants.	96 1
Nutritional muscular dystrophy in lambs- effect of admin tering selenium to pregnant ewes.		LEAD	1764
Nutritional muscular dystrophy in lambs- importance of t we s diet at certain stages of gestation and lactation.		Traces of lead in liver and feces of chickens.	
	2023	The effects of calcium carbonate, lead acetate and coppe supplements on blood and liver copper concentrations of	E
Serum transaminase in the blood of lambs given preventiv treatments for white muscle disease.	re 2049	young sheep.	2518
Prevention of white muscle disease in lambs by oral and subcutaneous administration of selenium.	2231	Effects of daily administration of lead acetate and zinc sulphate during pregnancy on the copper, lead and zinc status of ewes and their lambs.	2519
Experimental Trichostrongylosis (axei) in lambs, with a discussion of recent research on this disease in ruminan		LEAF BLIGHT (CORN) Does the corn leaf blight fungus survive Wisconsin winters.	137 2
Serum protein changes in lambs with naturally acquired nematode infections.	2313	Inheritance of chlorotic-lesion resistance to Helminthos rium turcicum in seedling corn.	spo- 1511
Effects of daily administration of lead acetate and zinc sulphate during pregnancy on the copper, lead and zinc status of ewes and their lambs.	2519	LEAF CRUMPLE (COTTON) Intranuclear inclusion bodies in the leaves of cotton pl infected with leaf crumple virus.	ants 1488
MPS Experimental strongyloidiasis in sheep and goats. IV. Migration of Strongyloides papillosus in lambs and accompanying pathologic changes following percutaneous infection.	2120	LEAF CURL (TOBACCO) A whitefly-transmitted mosaic of Rhynchosia minima and i relation to tobacco leaf curl and other virus diseases o plants in Puerto Rico.	
ND Inactivation of simazine and atrazine in the field.	1752	LEAF RUST (WHEAT) Chemotherapeutic control of wheat leaf rust with phenyl- hydrazones.	1268
RVAE		Wheat leaf rust resistance combinations.	1331
Observations on the migration of larvae of Neodiprion swainei Midd. (Hymenoptera: Tenthredinidae).	818	LEAF SPOT (CORN) Effect of the Helminthosporium leafspot disease on organ	ic
The fine structure of synapses tight junction in the cennervous system of the blowfly larva.	832		1477
Effects and interactions of varied levels of temperature amino acids, and a vitamin on the rate of larval develop in the fly Pseudosarcophaga affinis.	e, ement 854	Leaf spot of sesame caused by Cylindrosporium sesami.	1323
Developmental rates of larch sawfly (Pristiphora erichso (Htg.)) larvae in an insectary and in field shelters.	onii	The uptake of C14 and P32 from leaves by two species of leafhopper vectors.	84 3
The effect of temperature, anoxia, or injection of vario substances on haemolymph composition and super cooling i		Histological differentiation of fungal, chemical, mechanical, and insect damage to holly leaves.	i- 941
larvae of Anagasta kuehniella (Zell.).	88.5	An apparently virus-free leaf of a systematically invade plant.	ed 958
Cutaneous larva migrans.	1848	Inhibitors of potato virus X in potato leaves with dif-	
Hypoderma and parturition complicate sweet clover poison	ning. 1867	ferent types of virus resistance.	96 0
Diabetes insipidus attributed to visceral larva migrans dog.	in a 1884	A fluorescent-antibody study of progressive distribution southern bean mosaic virus antigen in bean leaves.	1039
Lungworms enhance severity of swine influenza.	1888	The relationship between leaf uncurling stages and infection patterns on banana leaves caused by Cercospora musae.	tion 1112

Survival on pasture of infective larvae of Cooperia

LECITHINS

Calcium content of leaves from stubborn and non-stubbor diseased Washington Navel Orange trees.	n 1146	Experimental leptospirosis. VII. Re-exposure of pregnant sows with Leptospira pomona.	2008
Fhenol content in rust infected and nitrogen fertilized wheat leaves.	1152	Leptospires isolated from prepuce of boars.	2044
Control of berry and leaf abscission and mold control in packaged mistletoe.	n 1401	Prevalence of leptospiral agglutinating antibodies in Allegheny county, Pennsylvania, dogs.	2052
Measurement of spray-oil volatility and its relation to Sigatoka fungus disease control and phytotoxicity on bar	nana	Leptospirosis in hamsters on diets containing various le of riboflavin.	2215
leaves.	1415	Agglutinins for 11 types of leptospires in serum from ca tle in northeastern Texas.	2247
Significance of morphological barriers and osmotic pres in resistance of mature peach leaves to powdery mildew.	1476	Problems in treatment and control of leptospirosis.	2266
Effect of spray gallonage and leaf character on deposit and retention of copper-containing fungicides.			1447
Histopathological changes associated with external leaf symptoms on pea enation mosaic virus (PEMV).	2388		1742
Effect of tobacco mosaic virus on the mineral content of tomato leaves. $% \left(1\right) =\left(1\right) \left(1\right) \left($		Evidence of an energy requirement for absorption of carb	2489
Changes in the DNA content of leaves collected from hea and virus-infected cherry.	lthy 2393	LEUCOCYTOZOON DISEASE Studies on leucocytozoonosis of turkeys, with notes on schizogony transmission, and control of Leucocytozoon	
The role of surfactants in the foliar absorption of ind 3-acetic acid (IAA).	2429	Smithi. LEUKEMIA	212
Distribution of ribonuclease in subcellular fractions o treated, wounded, and TMV infected Pinto bean leaves.		Leukemia and related neoplasms in the cat. II. MALIGNANC	1838
Effect of monuron on C1402 fixation by red kidney bean leaves.	2471	Leukemia and related neoplasms in the cat. I.Lymphoid malignancies.	1922
Evidence of an energy_requirement for absorption of car			1986
-labeled streptomycin and leucine by apple leaves. A plastic leaf-cage for rearing insects on whole attach	2489 ed	Acute myelogenous leukemia with histopathologic studies, following total body irradiation of a dog.	200 €
leaves.	2550		2058
ECITHINS Bloat prevention.	1895	LEUKOCYTES Variations in uterine response to experimental infection to the hormonal state of the ovaries. I. The role of	du e
ECHORN CHICKENS Mortality in White Leghorn females on a farm in souther Alberta.	n 1937		1807
Evidence of genetic susceptibiliy to Hjarre,s disease.	2105	The bactericidal properties of uteri and uterine exudate	
EGISLATION		·	1903
Senator Humphrey introduces bill to expand veterinary medical facilities. EGUMES	1768	LEUKOPENIA The effect of an induced state of leukopenia on the uter bactericidal activity in rabbits.	ine 1806
Factors affecting sporulation, spore size, and pathogen of several legume cercosporae.	icity 1008	LIFE CYCLE Spore stages and life cycle of Puccinia carthami.	2457
Bloat prevention.	1895	LIGHT The need for direct observation of behaviour in studies	of
EMONS Effect of high doses of D-D on soil organisms and the		temperature effects on light reactions.	866
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka	1136	Pre- and postinoculation effects of light quality on inf tion intensity of stem rust of wheat.	1537
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citrumelo rootstock.	1136	Pre- and postinoculation effects of light quality on inf tion intensity of stem rust of wheat. The effect of light on sexual and asexual sporulation of	1537
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka		Pre- and postinoculation effects of light quality on inftion intensity of stem rust of wheat. The effect of light on sexual and asexual sporulation of species of Phytophthora. Effects of light intensity and quality on the growth of	1537 2387
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citrumelo rootstock. BETOSPIROSIS Studies on a skin test for leptospirosis. Evaluation of a plate test for the detection of Leptosp antibodies in bovine serum.	1486 1909 iral 1933	Pre- and postinoculation effects of light quality on inftion intensity of stem rust of wheat. The effect of light on sexual and asexual sporulation of species of Phytophthora. Effects of light intensity and quality on the growth of odea densa and Heteranthera dubia. Effects of reduced sunlight on water stargrass (Heteran-	1537 2387 E1- 2400
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citrumelo rootstock. BETOSPIROSIS Studies on a skin test for leptospirosis. Evaluation of a plate test for the detection of Leptosp	1486 1909 iral 1933 ith	Pre- and postinoculation effects of light quality on inftion intensity of stem rust of wheat. The effect of light on sexual and asexual sporulation of species of Phytophthora. Effects of light intensity and quality on the growth of odea densa and Heteranthera dubia. Effects of reduced sunlight on water stargrass (Heteranthera dubia). Relation of light quality to effects of 2,4-D on chloro-	1537 2387 21- 2400
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citrumelo rootstock. BETOSPIROSIS Studies on a skin test for leptospirosis. Evaluation of a plate test for the detection of Leptosp antibodies in bovine serum. Culture and serologic studies on four dogs inoculated w two leptospiral serotypes, Leptospira pomona and Leptos	1486 1909 iral 1933 ith pi- 1959	Pre- and postinoculation effects of light quality on inftion intensity of stem rust of wheat. The effect of light on sexual and asexual sporulation of species of Phytophthora. Effects of light intensity and quality on the growth of odea densa and Heteranthera dubia. Effects of reduced sunlight on water stargrass (Heteranthera dubia). Relation of light quality to effects of 2,4-D on chlorophyll and CO2 exchange.	1537 2387 21- 2400
growth and yield of lemon trees. Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citrumelo rootstock. BETOSPIROSIS Studies on a skin test for leptospirosis. Evaluation of a plate test for the detection of Leptosp antibodies in bovine serum. Culture and serologic studies on four dogs inoculated w two leptospiral serotypes, Leptospira pomona and Leptos ra canicola. Epidemiology of leptospirosis in the United States and	1486 1909 iral 1933 ith pi- 1959	Pre- and postinoculation effects of light quality on inftion intensity of stem rust of wheat. The effect of light on sexual and asexual sporulation of species of Phytophthora. Effects of light intensity and quality on the growth of odea densa and Heteranthera dubia. Effects of reduced sunlight on water stargrass (Heteranthera dubia). Relation of light quality to effects of 2,4-D on chlorophyll and CO2 exchange.	1537 2387 E1- 2400 2464 2493

LIMA BEANS Viability of the downy mildew fungus of lima beans.	934	a low-calcium diet and high concentrations of chlorotetracycline on the isolation of Mycoplasma from experimentally infected chicks. 2269
Colonization of lima bean plants by Phytophthora phaseo as affected by temperature and age of plants.	982	LIZARDS
Occurrence on Phyllosticta leaf spot in beans in 1963.	1394	Fleas feed on lizards in the laboratory in Puerto Rico. 837
LIMING		Observations on the incidence, pathology and aetiology of Spirocerca lupi infestation in Nyasaland. 1955
Effect of liming of soil on barley powdery mildew.	1470	LOLIUM PERENNE
LINDANE Horses protected from piroplasmosis by vector control.	1855	Control of Gloeotinia temulenta in seed fields of Lolium perenne by cultural methods. 1407
Festicide storage in human fat tissue.	1874	LONGEVITY Effects of pollens on fecundity and longevity of adult Scambus buolianae (Htg.) (Hymenoptera: Ichneumonidae).
NECTORS OF the tail in the buffalo. a deficiency disea		856
LINT COTTON	1968	Growth, reproduction and longevity in one biotype of the pea aphid, Acyrthosiphon pisum (Harr.) (Homoptera: Aphidi- dae). 860
Dr. Thomas Taylor and the delinting of cotton seed.	1389	Cultivated soil.
LIQUIDAMBAR Changes in degree of polymerization of holocellulose du		longevity of seeds of wild oats, winter rye, and wheat in. 929
decay of sweetgum sapwood by white- and brown-rot fungi	2512	Longevity of Radopholus similis under field conditions.
LIRIODENDRON TULIPIFERA Yellow-poplar butt rot infection from dead ancillary st	ens. 954	Precocious sporulation and longevity of conidia of Helmin- thosporium sativum in soil. 2491
LISTERIOSIS A possible link in the relationship between silage feed and listeriosis.	ing 2021	LOOSE SMUT (BARLEY) Effect of cyanide in anaerobic treatment of barley for control of loose smut. 1195
LIVER Dietetic liver cirrhosis of pigs in Ghana.	1998	Naturally occurring quinones in wheat and barley and their toxicity to loose smut fungi. 1291
The distribution of copper in bovine and ovine foetuses with reference to their age and maternal liver copper concentrations.	2241	LOOSE SMUT (OATS) Temperature in relation to loose smut in barley and wheat. 1519
LIVER DISEASES Evidence of genetic susceptibiliy to Hjarre,s disease.	2105	LOOSE SMUT (WHEAT) Naturally occurring quinones in wheat and barley and their toxicity to loose smut fungi. 1291
LIVER GLYCOGEN Liver glycogen in normal and ketotic cows.	2144	Some histological and genetic relationships of resistance of wheat to loose smut.
LIVESTOCK Froblems associated with the use of the newer insectici for livestock pests.	.des 1793	LOUISIANA Phytophthora cinnamomi associated with Lawson cypress mortality in Louisiana. 1408
Seromucoid levels in normal and hospitalized domestic a exotic animal species.	nd 1796	Isolation and identification of Leptospira :ardjo from cattle in Louisiana. 2004
Crooked calf syndrome.	1847	LOUPING ILL VIRUS
Toxicity of Helenium microcephalum (Smallhead sneezeweed).	2091	Louping-ill: The red deer (Cervus elaphus) as an alternative host of the virus in Scotland. 2191
Persistence of chloramphenicol levels in farm animals.	2255	LOW-TEMPERATURE RESEARCH Factors influencing survival of red and white clover plants exposed to low temperatures. 2450
Survey of insects affecting livestock in southwestern O tario.	2278	LUNGS Primary pulmonary tumors of the dog a report of sixteen
LIVESTOCK DISEASES		cases. 2054
The programme for the eradication of bovine tuberculosi	.s. 1819	LUPINE Systemic insecticides for indirect control of bean yellow mosaic virus in seed fields of yellow lupine. 1222
Oxalate formation in moldy feedstuffs as a possible fac in livestock toxic disease.	tor 1825	mosaic virus in seed fields of yellow lupine. 1222 Crooked calf syndrome. 1847
The early control of bovine tuberculosis.	1831	LUPINUS ANGUSTIPOLIUS Referent and interaction of temperature and best games on
${\tt A}$ report on broilers from parents free of Mycoplasma callisepticum.	2002	Effect and interaction of temperature and host genes on growth and pathogenicity of Glomerella cingulata on Lupinus angustifolius. 998
Bovine endometritis: A review.	2012	Lupine, another legume host of the wilt Pusarium from U. S. cotton. 1156
Avian tuberculosis.	2014	LYCOPERSICON
Action by poultry inspection to help reduce condemnatio losses.	n 2134	Host-specific sycopersicon strains of tobacco mosaic virus. 1516

Control of chronic respiratory disease. IV. The effect of

LYMPH		
LYMPE		MANITOBA
Leukemia and related neoplasms in the cat. I.Lymphoid malignancies.	1922	Host plant records and biology of aphids on cereal grains and grasses in Manitoba (Homoptera > Aphididae). 898
LYMPH NODES Demodex found in variety of internal tissues.	1862	MANNITOL Production of mannitol by the onion pink-root organism. 2482
LYMFHOCYTOSIS Bovine lymphosarcoma.	1882	MASTITIS
LYMPHOMA A case report lymphoblastic lymphoma N a bovine fetus	; .	The effect of diethylstilbestrol and progesterone on the growth of four mastitis-producing bacteria. 2047
LYMPHOSABCOMA	2211	MASTOCYTOMA Mast cell leukemia in three dogs. 2058
Bovine lymphosarcoma.	1882	MATHEMATICAL ANALYSIS
LYSINE		Symposium on chemical control: theoretical consideration of soil fumigation. 1220
Changes in free amino acid and amide content of resista and susceptible beans after infection with the halo bli organism.		MAZZARD CHEBRIES Mode of infection of sweet cherry by Pseudomonas syringae. 1308
MACROPHOMINA PHASEOLI Time-temperature relationships in thermal inactivation	of	An attempt to detect virus-free buds in latent virus-
sclerotia of Macrophomina phaseoli.	1367	infected sweet cherry. 1586
MACROSTELES PASCIFEONS The uptake of C14 and P32 from leaves by two species of leafhopper vectors.	843	MCPA Factors influencing the tolerance of peas to MCPA 1749
Leafhopper vector cells in vitro.	849	MBASLES VIRUS Simian giant-cell pneumonia with coexistent B virus
Evidence for the simultaneous transmission of two virus	ses by 1104	infection. 1875
the aster leafhopper (Macrosteles fascifrons). MAGNESIUM	1104	The canine distemper-measles complex. I. Immune response of dogs to canine distemper and measles viruses. 1946
The calcium, phosphorus, magnesium, carotene, and vitam content of the blood of range cattle in eastern Montana		Antigenic relationship between canine distemper and measles viruses, the epidemiologic significance of. 1995
The influence of the magnesium content of the blood-ser on the electrocardiogram in milk cows.	2000	MEAT Chronology relating to use of diethylstilbestrol in poultry and meat animals. 1836
The kinetics of magnesium distribution within the sheep	2097	Further studies on the survival of foot-and-mouth disease virus in meat. 2126
MAGNETS Rumen magnets reduce hardware disease in cows.	1993	Control of chemical, drug, and biological residues in meats. 2334
MAINE		MEAT INSPECTION
Survey of biota associated with Monochamus (Coleoptera: Cerambycidae) in Maine.	826	Meat inspection a local necessity. 2315
MATTER.		Control of chemical, drug, and biological residues in meats.
MALAKIA Studies on Malayan vectors of malaria methods of trapp and observations on biting cycles.	ing, 909	233 4 MEDICAL ENTOHOLOGY
MALABIA CONTROL		Notes on flies of medical importance in Japan, part XXIII. Seasonal fluctuation of flies in the Imperial Palace
In vitro studies on the effect of some antimalarial dru Pasciola worms in buffaloes, cattle, and sheep.	2288	Grounds, Tokyo. 908 MEDICINE
MALAYA Studies on Malayan vectors of malaria methods of trapp	ing.	Control of chemical, drug, and biological residues in meats. 2334
and observations on biting cycles.	909	Industry toxicologists to discuss poisoning symptoms with
MALLOPHAGA A field survey of arthropod parasites of birds in Taiwa		medical groups. 2569
	798	MELANOBLASTOMA Melanoblastic tumors in the dog. 2169
MALUS		MITT & MOCTO
Metabolism of DL- and L-phenylalanine in Malus related susceptibility and resistance to Venturia inaequalis.	1326	MELIANOSIS Malignant melanoma in sheep. 2015
41,100		MELOIDOGYNE
MAMEB Quantitative in amino acids in mycelium of Colletotrich capsici following exposure to lethal amounts of maneb.	um	effect of Pratylenchus penetrans, Meloidogyne incognita acrita, and Meloidogyne sp. on Porsythia intermedia. 1611
	2514	Reaction of cereals and sudan grass to Meloidogyne spp. and the relation of soil temperature to M. javanica popula-
MANGANESE High manganese requirements and deficiency symptoms in	cer-	tions. 1627
tain fungi.	2505	Chemical dips for eradication of root-knot nematode from plant roots. 1640
MANGE Cattle scabies and mange reported at 1961 livestock sho	ws. 2280	Reactions of sweetpotato breeding lines to Meloidogyne spp. when inoculated by an improved method. 1656

MELOIDQGYNE HAPLA In vitro hatching of Meloidogyne hapla eggs as affected temperature, moisture, and age of egg mass.	by 2431	METABOLITES The effect of metabolites produced by Pusarinm oxysporum f. lycopersici (Sacc.) Snyd. and Hans. on root elongation of tomato seedlings.
MELOIDOGYNE INCOGNITA Stability of pathogenicity of B biotypes of the root-knownematode Meloidogyne incognita on tomato.	ot 1281	METHIONINE Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight
MELOIDOGYNE INCOGNITA ACRITA Interrelationship of tobacco ringspot virus and Meloidogyne incognita acrita in nematode resistant and susceptsoybeans.		organism. 2498 METHYL BROWIDE Influence of dieldrin and methyl bromide soil treatments on subsequent populations of stylet-bearing nematodes associat-
Infection relationship between Meloidogyne incognita act and Fusarium oxysporum f. vasinfectnm in cotton.	rita 921	ed with roots of Ladino clover. 2344
Pathogenicity of a root-knot nematode (Meloidogyne inconita acrita) and a root-lesion nematode (Pratylenchus potrans) on pepper (Capsicum frutescens).		METHYLENE BLUE A simple and rapid method for staining blood films with new methylene blue. 2158
effect of Pratylenchus penetrans, Meloidogyne incognitacrita, and Meloidogyne sp. on Forsythia intermedia.	a 1611	METRITIS Bovine endometritis: A review. 2012
Use of root-knot resistant tobaccos to assess injnry car by root-lesion nematodes.		The interrelationship of diabetes mellitus, obesity, and pyometra in the dog. 2082
Effectiveness of application methods with several nematorides for control of root-knot nematode.	o- 1641	MEXICO Ergot of maize in Mexico. 1110
Effects of Meloidogyne incognita acrita on kenaf and use photoperiodism in selecting for resistance.		Evaluation of multigenic field resistance of the potato to Phytophthora infestans in 10 years of trials Tolnca, Mexico.
Effect of temperature on growth of root-knot nematodes soybeans and tobacco.	in 1645	MICE Experimental edema disease (hemolytic Escherichia coli toxemia) in pigs and in mice. 1811
Pathogenicity of Meloidogyne incognita acrita and its relation with Pythium graminicola on sugarcane in Hawaii.	e- 1666	Eradication of the tropical rat mite Ornithonyssus bacoti (Hirst, 1913) from a colony of mice.
MELOIDOGYNE INCOGNITA INCOGNITA Leaf galls on Siderasis fuscata caused by the root-knot nematode, Meloidogyne incognita incognita.	1224	Determination of the optimal age range of mice for use in experimental studies with foot-and-mouth disease wirus. 2130
MELOIDOGYNE JAVANICA Reaction of cereals and sudan grass to Meloidogyne spp. the relation of soil temperature to M. javanica popula-	and	The histopathology of foot-and-mouth disease in pregnant and lactating mice. 2131
tions.	1627	Transfer of immunity to foot-and-mouth disease virus from maternal mice to offspring. 2132
Toxicity of mixtures of 1,2-dibromo-3-chloropropane and 1,2-dibromoethane to the root-knot nematode, Meloidogyno javanica.	e 2369	The use of mice for the assay of erythropoietin in sheep plasmas.
MENINGO-ENCEPHALITIS Infections meningo-encephalitis in cattle, cansed by a haemophilus-like organism.	2149	Cultural characters of scrapie mouse brain. 2232
MENTHA		A new look at tuberculosis eradication in Michigan. 2087
Pathogenicity and population dynamics of Paratylenchus atus Thorne and Allen, on Mentha spp.	ham- 1096	MICROBIOLOGY Isolation and serologic typing of avian plenropneumonia-like organisms (PPLO). 217 2
Reproduction of Verticillinm in the rhizospere and subsequent root infection of resistant and susceptible mint species.	e- 1166	Measurement of microbiological effects of herbicides.
Influence of soil temperature, isolates, and method of inoculation on resistance of mint to Verticillinm wilt.	1380	MICROPLORA Internal microflora of stored soybean seeds. 1148
MERCURY Vapor action of organic mercurials against seed-borne of diseases.	ereal 1092	MICHOORGANISMS The effects of four herbicides on microorganisms in nine Oregon soils. 1701
		Bacteria and fnngi pathogenic to man and animals. 1891
A mechanism for mercury tolerance in fungi. Biological breakdown of two organic mercurial fungicide:	2362 s.	Structural characterization of Anaplasma marginale in alute and carrier infections. 2186
	2475	MICROSCOPY
MERCURY CHLORIDE Inactivation of tobacco mosaic virus infectious ribonucle acid by HgCl2 and the reversal of this effect with cys-	leic	The gross and microscopic pathology of an ornithosis virus of low virnlence for thrkeys. 2045
teine.	1099	MICROSOMES The degradation of isolated microsomes from cucnmber and
METABOLISM Metabolism of atrazine by susceptible and resistant plan		corn seedlings. 2462
	2329	MILK Inhibition of sugarcane mosaic virus by milk. 1251
The metabolism of phenothiazine in chickens.	2524	The problem of adulterated milk and how it affects the
Pasting metabolism of the lactating cow.	2531	veterinarian. 1765

MILK	FEVER
------	-------

Presence of blood-serum albumin in mastitic milk.	1851	Ovalate formation in moldy foodstuffs as a nessible for	ctor
Young calves grow faster without hay.	1886	Oxalate formation in moldy feedstuffs as a possible fac in livestock toxic disease.	1825
The influence of the magnesium content of the blood-se on the electrocardiogram in milk cows.	erum 2000	MOLLUSKS Molluscs and arthropods from cardinal nests at London, tario.	On- 839
Interpretation of the California Mastis Test results of milk from individual mammary quarters, bucket milk, as herd milk.		MOLYBDENUM Molybdenum nutrition of Nicotiana tabacum in relation t multiplication of tobacco mosaic virus.	
The catalase, California, and cell count tests for deing abnormalities in milk.	tect- 2322	MONILIASIS	1330
Relative importance of persistence, transfer, and mill technique to antibiotic residue contamination of milk.		Effect of mycostatin on candidiasis in chickens on a high-glucose diet.	1949
	2331	Cutaneous candidiasis in a dog.	2237
A reverse-phase disk assay test for antibiotics in mi	1k. 2552	MONKEYS Response of hemoglobin and cellular elements of blood a hypervitaminosis D in monkeys.	after 1804
MILK FEVER Vitamin D prevents milk fever but may be toxic.	1877	Intestinal mucormycosis in the monkey.	1863
NINEBAL OIL Mineral oil adjuvant vaccine for bacillary hemoglobing		Simian giant-cell pneumonia with coexistent B virus infection.	1875
MINDEALC	1839	Generalized staphylococcic infection in a monkey.	1910
MINERALS Effects of mineral fertilizers on damping-off of table beets.	e 1305	Studies on a pox disease of monkeys. II. Isolation of tetiologic agent.	the 2007
Mineral fortification of feeds.	1868	Studies on a pox disease of monkeys. I. Pathology.	2235
Basal mineral requirements for the growth and sporular Alternaria tomato.	tion of 2390	MONTANA The calcium, phosphorus, magnesium, carotene, and vitam content of the blood of range cattle in eastern Montana	
MINKS Faracin treatment of gray diarrhea in mink.	1824	,	1783
Mink and rabbit diseases important.	1841	MONURON Substituted urea herbicides in the control of undesirab	
Infectious canine hepatitis virus infects mink.	1854	hardwoods.	1695
MINNESOTA Cylindrocladium root rot of conifer seedlings in Minne	eseta	Response of cotton seedlings to combinations of preemer herbicides and systemic insecticides.	2335
Cylindrociadium foot for of confret seedlings in minne	984	Effect of monuron on C1402 fixation by red kidney bean leaves.	247 1
MITES Competition between two species of mites. II. factors fluencing intensity.	in- 805	MORPHOLOGY Morphological studies of avian PPLO in semi-solid media	a.
Tetranychus sinhai Baker (Acarina: Tetranychidae) a ne pest of cereals varietal reaction of barley.	ew 862	MORTALITY	2263
Essential amino acids determined in the two spotted spatie, Tetranychus urticae Koch (Acarina, Tetranychidae with glucose U C14.	pider	The role of certain gram-negative bacteria and temperat in larval mortality of the armyworm, Pseudaletia unipun (Haworth).	
Demodex found in variety of internal tissues.	1862	Mortality in White Leghorn females on a farm in souther ${f A}{f l}$	rn 193 7
The subcutaneous mite of chickens: An incidence report	t. 22 7 9	The effect of nutrition on mortality from leukosis in chickens inoculated with strain RPL-12 avian leukosis	2104
Cattle scapies and mange reported at 1961 livestock sl	hows. 2280	virus. Morus	2104
il t osis		Stemphylium twig and stem canker of Morus.	1076
Free amino acid changes associated with diapause in the of the field cricket Teleogryllus.	he egg 88 7	MOSAIC (ALFALFA) Inactivation of alfalfa mosaic virus by pancreatic ribo lease.	onuc- 988
MIYAGAWANELLA GROUP VIRUSES Miyagawanellcsis of cattle in Japan.	2028	Two new strains of alfalfa mosaic virus systemically	
Isolation of the virus of enzootic abortion of ewes for california and oregon sheep.	rom 2153	infectious to bean. Respiratory metabolism of Phaseolus vulgaris infected w	
Ovine viral abortion - incidence and distribution in :	Idaho. 2193	alfalfa mosaic and southern bean mosaic viruses. MOSAIC (BEANS)	2492
HODE A kinetic investigation of the mode of TMV attachment		New types of primary necrotic lesions produced by common bean mosaic virus.	950
infectible sites.	981	A new strain of common bean mosaic virus.	1055
MOLDS Control of berry and leaf abscission and mold control packaged mistletoe.	in 1401	Systemic insecticides for indirect control of bean yellomosaic virus in seed fields of yellow lupine.	1222
Moisture content, mold invasion, and seed viability of ed soybeans.	f stor- 1530	Two new types of local lesions produced on beans by the common bean mosaic virus.	138 2

A new severe symptom-inducing strain of common bean mos	saic 1387	virus and potato virus X.	1141
Respiratory metabolism of Phaseolus vulgaris infected w	ith	Characteristics of proteinless mutants of tobacco mosaic virus.	1143
alfalfa mosaic and southern bean mosaic viruses.	2492	Further evidence on systemic resistance induced by locali	
OSAIC (COWPERS) Field occurence and properties of the cowpea strain of southern bean mosaic virus.	1231	Inactivation of tobacco mosaic virus by volatile chemical	
Three cowpea mosaic viruses from Gladiolus.	1399		1186
Identity of mosaic virus of cowpea.	1431	Cell-associated virus infectivity of tissue cultures deri from susceptible and resistant sources.	ived 1265
OSAIC (CUCUMBERS) Preparation of cucumber mosaic virus antiserum for use vector transmission studies.	in 1194	Relative ihibitory power of juices from various plants of tobacco mosaic virus.	n 1290
Susceptibility of certain convolvulaceae to internal co	ork. 1247	Succulent-type plants as sources of plant virus inhibitor	rs. 1343
Inheritance of resistance to tobacco ringspot and cucum mosaic virus in black cowpea crosses.		A virus inhibitor from tobacco. Quantitative analysis of interference produced by related	1450 a
Watermelon mosaic virus in washington.	1582	strains of TMV compared with noninfectious TMV components	
OSAIC (FIGS) Additional hosts of the fig mosaic virus.	1227	A characteristic form of tobacco mosaic virus in tomato a Chenopodium murale.	and 1482
OSAIC (OATS)		Host-specific sycopersicon strains of tobacco mosaic viru	us.
Reactions of winter oats to soil-borne mosaic.	1370		1516
OSAIC (PEACHES) Increased production of geminate buds on peach mosaic-i ted peach trees.	infec- 973	Molybdenum nutrition of Nicotiana tabacum in relation to multiplication of tobacco mosaic virus.	1556
Peach mosaic virus in horticultural plum varieties.	1425	An improved method for assaying infectivity of tobacco moic virus.	osa- 1577
OSAIC (RADISHES) Radish mosaic virus.	1471	A stable, dense, infective form of tobacco mosaic virus.	1578
OSAIC (ROSA) Isolation and identification of tomato ring spot virus associated with rose plants and rose mosaic virus.	1313	An inhibitor of TMV infection produced by tobacco leaf cells.	2383
OSAIC (SUGARCANE)		Effect of tobacco mosaic virus on the mineral content of tomato leaves.	2392
Inhibition of sugarcane mosaic virus by MC-2 and bromin	ne. 1014	Effect of virus infection on peroxidase activity and C6-C	C1 2398
Electron microscopic demonstration of sugarcane mosaic particles in cells of Saccharum officinarum and Zea may		MOSAIC (TURNIPS) Relationship between turnip mosaic virus and the radish B	
Bluebonnet 50 rice susceptible to strain h of sugarcane mesaic virus.	1246	MOSAIC (WATERMELONS)	1331
Inhibition of sugarcane mosaic virus by milk.	1251	A ringspot of watermelon fruit in Georgia associated with	h 1200
OSAIC (SWEETPOTATOES)		Relations of 10 isolates of watermelon mosaic virus (WMV))
Apparent eradication of mosaic of sweetpotatoes in Georaided by the disappearence of the insect vector.	rgia 1500	Symptoms associated with watermelon mosaic virus in south	1384 h
OSAIC (TOBACCO) Fruit breakdown of peppers following late season infect with tobacco mosaic virus.	tion 932		1433
Distribution pattern and persistence of the systemic re	esis-	virus.	1448
tance induced in hypersensitive tobacco plants by tobac mosaic virus.	964	Watermelon mosaic virus in washington. MOSAIC (WHEAT)	1582
A kinetic investigation of the mode of TMV attachment tinfectible sites.	981	Precipitation of plant viruses by polyethylene glycol.	2425
An analysis of a new phenomenon of TMV abortive infecti	ions. 985	MOSAIC (WHITE CLOVER) Aphid transmision of white clover mosaic virus.	1517
Interference studies with mixed inocula of related and lated strains of plant viruses.	unre- 1043	MOTHS A fruit-piercing moth of Samoa and the South Pacific islands.	846
Biosynthesis of infections tobacco mosaic virus ribonuc acid in a cell-free medium.	cleic 1056	MOTTLE (SOYBEANS)	
Photodynamic inhibition of tobacco mosaic virus.	1057	Transmission of bean pod mottle virus in soybeans by beet	tles* 1364
Inactivation of tobacco mosaic virus infectious ribonuc acid by HgCl2 and the reversal of this effect with cysteine.		MOUTH A clinical and pathologic study of 130 neoplasms of the mouth and pharynx in the dog.	1803

Inhibition of callus and root growth in tomato stems excised from plants inoculated with a combination of tobacco mosaic

HOUTH

MOWING	
MOWING Growth of ironweed as affected by mowing and storage root removal. 17	NATURAL CONTROL (INSECTS) Natural insect control measures are grossly inadequate for today's farming. 1595
Toxicity of Helenium microcephalum (Smallhead sneezeweed). 20	NATURAL FIBERS 91 Effects produced in cotton fiber by Rhizopus, a boll rot fungus. 1390
	NECROSIS Bacterial necrosis and isolation frequency of Rhizoctonia
WUCOSAL DISEASE Agar gel diffusion studies with a mucosal disease of cattl Ipreliminary results with the technique. 19	from rhizospheres under several cropping sequences. 968 e 38 Heat adaptation in a rust and a virus. 1466
Agar gel diffusion studies with a mucosal disease of cattl	1968
MUCOUS MEMBRANE	Pocal necrosis in the mucosa of the gallbladder in pigs with hog cholera. 2064
Focal necrosis in the mucosa of the gallbladder in pigs wi hog cholera.	64 Fat necrosis in man and animals. 2115
	NECROSIS (TOBACCO) 94 Serological evidence that Olpidium zoospores carry tobacco necrosis virus. 1179
MUSCULAR DYSTROPHY Serum enzyme changes in lambs with experimentally-induced acute muscular dystrophy. 19	Necrotic symptoms of tobacco necrosis virus in roots. 1460
MUSKMELONS Resistance in muskmelon to a strain of watermelon mosaic virus. 14	NECROTIC RING SPOT (CHERRIES) Variation among isolates of necrotic ringspot and prune dwarf viruses isolated from sour cherry. 1549
Watermelon mosaic virus in washington. 15	82 NECROTIC RING SPOT (PRUNUS) Relationships among Prunus viruses of the necrotic ringspot type. 994
Overwintering capabilities of uredospores and mycelium of	type. 994 61 NEMATOCIDES Comparison of the fungicidal and nematocidal properties of
Quantitative in amino acids in mycelium of Colletotrichum capsici following exposure to lethal amcunts of maneb. 25	a number of compounds in field soil. 911 Control of soil-borne fungi and incidence of Pratylenchus penetrans. 916
SYCOLOGY Sclerotium rolfsii, history, taxonomy, host range, and dis tribution. 12	- In-covering soil fungicides, nematocides, and insecticides
Complementary strains of Phytophthora palmivora from Ceylon rubber. 13	Some aspects of nematode control in the equatorial Kenya 34 Highlands.
Special contributions from the tropics to phytopathologica mycology.	Influence of nonhost crops alone or in combination with a nematocide on the longevity of the soybean cyst nematode in soil. 1628
Inheritance of pathogenicity in oat and barley smuts.	
A rapid technique for fixing and mounting growing fungi. 24	
MYCOPLASMA GALLISEPTICUM ANTIGENS A report on broilers from parents free of Mycoplasma callisepticum. 20	A simple laboratory technique for determining the diffusion rates and patterns of nematocides in soil. 2348
A sensitive whole blood test for Mycoplasma gallisepticum. 21	
Control of experimental Mycoplasma gallisepticum infection in young chickens with tylosin and other antibiotics. 22	Toxicity of some halogenated hydrocarbon mixtures to larvae
MYCOPLASHOSIS Experimentally induced mycoplasmosis of adult turkeys. 18	The response of Norway spruce to soil fumigation for the control of nematodes. 2385
MYCOBBHIZA The endotropic mycorrhiza of Acer saccharum Marsh. 11	NEMATODE CONTROL The response of Norway spruce to soil fumigation for the
TYCOTOXICOSIS Mycotoxicoses. III. Antifungal and antimycotoxic activity of 8-hydroxyquinoline under laboratory and simulated field	NEMATODE POPULATION Pathogenicity and population dynamics of Paratylenchus ham- atus Thorne and Allen, on Mentha spp. 1096
The pathology of mycotoxicosis of certain fungi in chicken	NEMATODE VECTORS Direct recovery of tobacco rattle virus from its mematode
MYZUS PERSICAE Aphid transmission of potato virus A to the Katahdin var- iety. 11	NEMATODES A study of the role of some nematodes in the incidence and severity of southern bacterial wilt of tomato. 913

Effects of soil amendments on nematodes and subsequent

NEWCASTLE DISEASE VIRUS

Verticillium wilt.	918	Clinical and pathological features of some tumours of the central nervous system in dogs. 2086
Observations on the biology and pathogenicity of Dityle chus radicicola. $ \label{eq:chus_pathogen} % \begin{array}{c} (x,y) & (x,y) \\ (x$	n- 1597	Melanoblastic tumors in the dog. 2169
Some aspects of nematode control in the equatorial Keny Highlands. $\label{eq:control}$	a 1601	NEOPLASTIC DISEASES Multicentric neurofibrosarcoma in a Canada goose, Branta canadensis. 2062
New hosts and crop plants resistant to the remiform nem tode. $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left($	a- 1609	NERIUM
Stylet-bearing nematodes associated with various plants South Carolina, 1959-1962.	in 1621	Expressions of virulence among isolates of Pseudomonas savastanonoi from olive and oleander. 1125
Nematodes in nursery plants in Pennsylvania.	1633	NERVOUS SYSTEM DISEASES Neuropathology of canine toxoplasmosis. 2057
The effect of four species of plant parasitic nematodes hairy wetch.	on 1638	Clinical and pathological features of some tumours of the central nervous system in dogs. 2086
A synergistic Fusarium-nematode interaction in carnatio	ns. 1644	NEUROBLASTOMAS Two cases of neuroblastomas in dogs. 2252
Survival of root-knot nematodes in excised grape roots moist soil fumigated with ethylene dibromide.	in 1654	NEUROPIBROMATOSIS Neurofibromatosis in a turkey. 2178
Phytopathological notes. infesting citrus seedlings with the citrus nematode, Tylenchulus semipenetrans.	1657	NEUROLOGY Neural mechanisms in sexual behavior. III. Preputial muscles and their reflexes in bull calves and rams. 1801
Parasitism and pathogenesis of the cultivated highbush berry by the stubby root nematode. $% \left\{ 1\right\} =\left\{ 1\right\} =$	blue- 1663	Neuropathology of ovine and bovine toxoplasmosis. 2059
Nematodes associated with red clover growing on favorab and unfavorable sites.	le 1667	NEUROTROPIC VIRUSES Grass sickness in horses. 1845
Distribution of carbon-14 in Ascaridia galli and the ho chicken.	st 1856	NEUTRAL RED Photodynamic inhibition of tobacco mosaic virus. 1057
Effectiveness of thiabendazole against Haemonchus conto in sheep.	rtus 1859	NEW BRUNSWICK A new birch aphid from central New Brunswick (Homoptera: Aphididae). 803
Haemonchosis in artificially infected lambs.	1890	A new pest of apple in New Brunswick. 804
The seasonal variations of Strongyle infestations in Nigerian Zebu cattle.	1969	NEW YORK Evidence suggesting a grape nematode problem in New York vineyards. 1613
The nematode genus Strongyloides grassi, 1879 in Indian livestock. I. Observations on natural infections in the donkey (equus asinus).		NEWCASTLE DISEASE The production and properties of Newcastle disease vaccine
The use of the haemagglutination technique for the dete of antibodies in gastro-intestinal nematode infections sheep.		(Komarov strain) in Nigeria. 1970 Nature of immunity to Newcastle disease in vaccinated chickens. Z. Influence of residual resistance upon the level and duration of immunity following revaccination.
Serum protein changes in lambs with naturally acquired nematode infections.	2313	2157
Cell-wall degrading enzymes in some plant-parasitic, my iophagus, and free living nematodes.	cel- 2510	Research note- A rapid macroscopic plate agglutination test for Newcastle disease- A preliminary report. 2159
EHATOLOGY		Studies on an adjuvant Newcastle disease vaccine. 2257
Host range of Tylenchorhynchus claytoni on some forrest nursery seedlings.	1668	NEWCASTLE DISEASE VACCINES The production and properties of Newcastle disease vaccine (Komarov strain) in Nigeria. 1970
EQDIPRION SWAINEI Observations on the migration of larvae of Neodiprion swainei Midd. (Hymenoptera: Tenthredinidae).	818	Immunity study of a new diluted formalin-inactivated Newcastle disease vaccine. 2001
EONYCIN Generalized staphylococcic infection in a monkey.	1910	Studies of Newcastle disease. II. Evaluation of two killed Newcastle disease vaccines. 2123
EOPLASMS A clinical and pathologic study of 130 neoplasms of the mouth and pharynx in the dog.	1803	The immunological antigenicity of rapid heat inactivated viruses. I. Newcastle disease virus. 2217
Pathology of the cetacea. A veterinary study on whales Part I.		NEWCASTLE DISEASE VIRUS International Symposium on Newcastle Disease Virus as an Evolving Pathogen. 1812
Pathology of the Cetacea. a veterinary study on whales Part II.	- 1972	Persistence of Newcastle disease virus. 1917
Nodular lesions in the omentum of goats.	1978	Evaluation of a tisse-culture Newcastle disease vaccine.
Cutaneous epithelial neoplasms of the dog a report of cases.	153 2055	Infection of an isolated intestinal loop by Newcastle disease virus.
Spontaneous tumors in primates—a report of two cases w notes on the apparent low incidence of neoplasms in sub primates.		Studies of Newcastle disease virus strains in various cell cultures. 2065
P. 1. 11 (1) (1)	2007	The immunological antigenicity of rapid heat inactivated

	SUBJECT	INDEX	
NE WFOUNDLAND			
viruses. I. Newcastle disease virus.	2217	The emerging classification of animal viruses- A review.	012
A comparison of the effects of four strains of Newcast disease virus on a strain of human epithelial-like cel (Maben) and strain L mouse fibroblasts.		Report of the committee on nomenclature and reporting of diseases northeastern conference on avian diseases June	9 1 2
Sequential changes in the titer of Newcastle disease ${\bf v}$ in tissuesa measure of the defense mechanism of the chicken.	irus 2249	NORTH AMERICA Leucania comma in North America (Lepidoptera, Noctui-	829
An in vitro method for the identification of strains of Newcastle disease virus.	f 2251	NORTH AMERICA The natural groups of species in the genus Ips De Geer	323
Comparison of the pathogenesis of Newcastle disease visuand influenza B in chicken embryos.	rus 2273	(Coleoptera : Scolytidae) in North America.	820
NEWFOUNDLAND The occurrence of Nemobius fasciatus (DeGeer) in Newfoundland (Orthoptera: Gryllidae: Nemobiinae).	827	The potential value of synthetic tolerant or multiline varieties for control of cereal rusts in North America. 10 NUCLEIC ACIDS	030
NICKEL Control of wheat stem rust with nickel and carbamate s		The effect of single and multiple virus infection upon nuc	c- 138
*	1132	The structure of animal viruses.	199
NICOTIANA GLUTINOSA Relative ihibitory power of juices from various plants tobacco mosaic virus.	on 1290	NURSERIES The use of vermiculite cover as a possible means of increating dwarf bunt in winter wheat test nurseries. 15	as- 579
NIGERIA The seasonal variations of Strongyle infestations in Nigerian Zebu cattle.	1969	* * * * * * * * * * * * * * * * * * * *	633
The production and properties of Newcastle disease vaco (Komarov strain) in Nigeria.	cine 1970	NUTRIENT SOLUTIONS (PLANTS) Relation of nutrients in inoculum and inoculum concentrati to severity of spring black stem of alfalfa. 19	ion 528
NITRIFICATION The effect of high nitrogen fertilizer on the control of bacterial leafspot of peppers caused by Xanthomonas vesicatoria and the yields of marketable fruit.	of 1255	Influence of different plant nutrients upon brown tip of gladioli. 1! Stimulation of spore germination of Phoma herbarum war.	539
NITEQBENZENE Fungistatic and phytotoxic properties of some derivati	ves of	medicaginis and Colletotrichum trifolii. Effects of various factors on the growth and sporulation	408
nitrobenzene.	2370		440
NITROFURANS Salmonellosis in parakeets and canaries treated with noting the drinking water.	itro- 1975	NUTRITION The relationship of nutrition to the development of bacterial spot of pepper.	943
Therapeutical experiments with a new nitrofuran compout (Tiafur) in salmonellosis of chicks.	2083	NYASALAND Observations on the incidence, pathology and aetiology of Spirocerca lupi infestation in Nyasaland.	955
The activity of nihydrazone in Eimeria tenella infection Laboratory trials.	ons- 2117	NYLON Use of nylon mesh in studies of soil fungi.	529
NITEOFURAZONE Treatment of canine coccidiosis using nitrofurazone and fonamides.	d sul- 1826	OATS Effect of crop rotation on yields of corn, oats, and wheat	t 033
A 3,800 bird trial of a new coccidiostats.	1835	Changes in the nitrogen metabolism of victorin-treated oat	
NITEGEN The influence of nitrogen on the root disease of beam		varieties. 1	172
by Fusarium solani f. phaseoli. Phenol content in rust infected and nitrogen fertilized	940 a		275 303
wheat leaves.	1152	Pathogenicity of Helminthosporium victoriae and related	303
Changes in the nitrogen metabolism of victorin-treated varieties.	oat 1172		436
The comparative fungicidal properties of acidic nitrogoderivatives of polyhalo-alkyl sulfenyl chlorides.	en 1180	barley and flax.	520
Effect of nitrogen fertilizers on germination and stanwild oats.	d of 1671	-	725
Competition of forage species with Canada thistle, as affected by irrigation and nitrogen levels.	1717	Factors affecting the pattern of respiratory changes in vi	
Utilization of inorganic nirogen sources by species of tophtora.	Phy- 2382	OBESITY	4 1 8

OBESITY
The interrelationship of diabetes mellitus, obesity, and pyometra in the dog. 2082

OESTRIDAE
The effect of dimethoate on Dermatobia hominis in cattle.
2283

NITROGEN COMPOUNDS
Influence of glucose, cellulose, and inorganic nitrogen compounds on biological control of bean root rot. 1202

NOMENCLATURE
Report of the terminology committee, Weed Society of America. 1678

Kabatiella caulivora, a seed-borne pathogen of Trifolium Susceptibility of certain Verticillium-resistant tomato varieties to an Ohio isolate of the pathogen. incarnatum in Oregon. 1306 1301 Symposium on pathogen free stock: invitational papers presented June 15, 1960 at the meetings of the Pacific Division of The American Phytopathological Society for Treatment of cattle bloat. 1850 Horticultural Science, western region, at Eugene, Ore-1895 qon. Introduction. Bloat prevention. The effects of four herbicides on microorganisms in nine Expressions of virulence among isolates of Pseudomonas savastanonoi from olive and oleander. 1125 Isolation of the virus of enzootic abortion of ewes from Pathogenicity of an isolate of Verticillium albo-atrum from california and oregon sheep. ORGANIC COMPOUNDS OLPIDIUM ERASSICAE Influence of organic amendments on survival of Fusarium Evidence for the survival of the big-vein virus within Oloxysporum f. cubense in the soil. ridium resting sporangia. Organic constituents in conidia of Erysiphe graminis hor-Serological evidence that Olpidium zoospores carry tobacco Effect of the addition of organic amendments to soil on root knot of tomatoes. ii. relation of soil temperature, moisture Nodular lesions in the omentum of goats. 1978 and pH. OMPHALITIS ORNITHINE Chick mortality and the contamination of yolks by members of the enterobacteriaceae. 2 Changes in free amino acid and amide content of resistant and susceptible beans after infection with the halo blight organism. 2498 ONIONS Development and survival of the onion maggot under field and artificial conditions on attractive and non-attractive onion ORNITHONYSSUS BACOTI Eradication of the tropical rat mite Ornithonyssus bacoti (Hirst, 1913) from a colony of mice. _ 2010 A report on the testing of onion varieties for resistance ORNITHOSIS to lesion nematodes. Transmission of ornithosis from sheep to turkeys. 1876 An automatic suction-impaction type spore trap and its use with onion blotch alternaria. 25 The comparative effects of chlortetracycline and oxytetracycline in the treatment of turkeys with ornithosis. 2553 1897 ONTABIO The gross and microscopic pathology of an ornithosis virus of low virulence for turkeys. Larvae of pine needle miners in Ontario. Molluscs and arthropods from cardinal nests at London, On-Characteristics of an ornithosis virus strain of low virulence in turkeys. 2046 Carabids collected in a DDT-sprayed peach orchard in Ontario (Coleoptera: Carabidae). 2154 Ecologic considerations in turkey ornithosis. Experimental ornithosis in turkeys. 2160 Life history and ecology of Pulvinaria vitis (L.) (Hemiptera: Coccoidea), the cottony scale attacking peach in On Thermal inactivation studies on a turkey ornithosis virus. tario-2161 Survey of insects affecting livestock in southwestern On-OSMOTIC PRESSURE Significance of morphological barriers and osmotic pressure in resistance of mature peach leaves to powdery mildew.

1476 tario. COSPORES Artificial inoculation of pearl millet plants with Sclerospora graminicola. OVARTES Variations in uterine response to experimental infection due to the hormonal state of the ovaries. I. The role of cervical drainage, leukocyte numbers, and noncellular factors in uterine batericidal activity. Oospore production by single-zoospore isolates of Phytophthora fragariae in culture. -1381 OPOSSUNS. Resistance of the opossum to rabies virus. 2195 A fully formed and functional right oviduct in a Single Comb White Leghorn pullet. Controlling Penicillium decay of oranges with certain aliphatic amines. OVIPOSITION Note on oviposition in plant stems by grasshoppers (Or-Calcium content of leaves from stubborn and non-stubborn diseased Washington Navel Orange trees. thoptera : Acrididae). 85 1 1146 Cover selection by adults of Hypolithus bicolor Eschscholtz (Coleoptera: Elateridae). Effect of excortis on Satsuma orange. 1248 85.8 Thielaviopsis basicola associated with declining sweet OVIPOSITORS orange seedlings in Florida. 1418 The functional morphology and interpretation of the insect ovipositor. 892 Response of navel orange trees to a postplanting application of DBCP for control of the citrus nematode. OXALATES Oxalate formation in moldy feedstuffs as a possible factor Influence of Tylenchulus semipenetrans on the growth and in livestock toxic disease. 1825 chemical composition of sweet orange seedlings in soils of various exchangeable cation ratios. Equine piroplasmosis. 2027 OREGON

OXIDASES

Inter-relationships among fungi associated with strawberries

in Oregon.

CIDASES
Symptoms of Fusarium wilt in relation to quantity of fungus
1353

OXIDASES

OXIDATION-REDUCTION POTENTIAL		
Glycolic acid oxidasa, catalase and peroxidase of cotton tissue.	n 252 1	PARASITIC NEMATODES Pathogenecity of Helicotylenchus nannus and its relation with Pythium graminicola on sugarcane in Hawaii. 1575
OXIDATION-REBUCTION POTENTIAL Effect of N-(3,4-dichlorophenyi.methacrylamide on the orderion of ascorbic acid by corn.	xi- 2415	Nematodos associated with maple dieback and maple blight.
OXIMES Oximes for treatment of commaphos poisoning in cattle.	1996	PARASITIC PLANTS The effect of gibberellic acid on the parasitism of Rhizoctonia solani on beans and cotton. 971
ONTGEN The effect of atmospheric envolrment upon the growth of Mycoplasma gallisepticum.	2032	Penetration and nutrition of Striga asiatica. 1699 PARASITISM A field survey of arthropod parasites of birds in Taiwan.
OXYTETRACYCLINE Zoonotic aspects of vibriosis.	1849	798
Canary pox.	1866	Taxonomy of cocoons and puparia, and their contents, of Ca- nadian parasites of some native Diprionidae (Hymenoptera).
The comparative effects of chlortetracycline and oxytetr cycline in the treatment of turkeys with ornithosis.	ra- 1897	802 Some ecological attributes of a pteromalid parasite and its housefly host. 817
OZQNE Some effects of ozone on tobacco leaf metabolism.	914	Life history and habits of a spruce needlo-miner, Eucordy- lea ducharmei Free. (Lepidoptera: Gelechiidae). 876
Ozone, a possible cause of white pine emergence tipburn.	925	Physiology of Sclerotium rolfsii, with omphasis on para-
Antizonant treated cloth controls tobacco fleck.	1023	sitism. 1351
Ozone injury to vegetation in the northeastern U.S	2324	Relation of parasitic nematodes to postemergence damping-off of cotton.
PACIFIC NORTHWEST	2521	An ectoparasitic root nematode on lowbush blueberry (Vaccinium spp.). 1620
fungi which provide some local biological control of Arc thobium spp. in the Pacific Northwest.	1017	The offect of four species of plant parasitic nomatodes on hairy vetch.
Overwintering capabilities of uredospores and mycelium of Puccinia graminis tritici in the Pacific Northwest.	of 1061	A synergistic Pusarium-nematode interaction in carnations.
Pathogenic races of Tilletia controversa in the Pacific Northwest.	1371	1644 Attraction of parasitic nematodes by plant root emanations.
PANCREAS	1371	1653
Pancreatic atrophy and absorption failure in a Boxer.	1930	Parasitism and pathogenesis of the cultivated highbush blue- berry by the stubby root nematode.
PANCREATIC JUICE A method for collection of pancreatic juice in the conscious sheep.	2539	Pailure of witchweed to parasitize Smooth Cayenne pine- apple. 1719
PANTOTHENIC ACID		Observations on the incidence, pathology and aetiology of Spirocerca lupi intestation in Nyasaland. 1955
Effects and interactions of varied levels of temperature amine acids, and a vitamin on the rate of larval develop in the fly Pseudosarcophaga affinis.		Pathology of the cetacea. A veterinary study on whales - Part I.
influence of vitamins and other compounds on the degree infection of wheat by Puccinia graminis tritici.	of 1402	Pathology of the Cotacea. a veterinary study on whales - Part II. 1972
PARAPPINS SUBface tension lowering, wettability of paraffin and colear surfaces, and herbicidal enhancement of dalapon by	orn	Incidence of intestinal parasites in german shepherd dogs. 2109
seven surfactants.	1745	Vesical schistosomiasis in the domestic pig. 2141
PARALYSIS Cage layer fatigue (cage paralysis).	2096	Effect of grazing intensity on parasitism of beef cattle. 2285
PARASITIC INSECTS Causes of variations in effectiveness of Bracon cephi (Gahan) (Hymenoptera: Braconidae) as a parasite of the		Incidence and treatment of parasites in a zoological garden. 2296
wheat siem eawfly. Some ecological attributes of a pteromalid parasite and		PARASITOLOGY Nost range of Tylenchorhynchus claytoni on some forrest nursery seedlings. 1668
housefly host. Habituation and associative learning in Drino bohemica Mosn. (Diptera: Tachinidae).	817 855	PARATYLENCHUS HAMATUS Pathogenicity and population dynamics of Paratylenchus hamatus Thorne and Allen, on Mentha spp. 1096
Biology of the mountain pine beetle, Dendroctonus monti- colae Hopkins, in the East Kootenay Region of British		PARESIS Hypocalcemia without paresis in cows. 2239
Columbia. III. Interaction between the beetle and its host, with emphasis on brood mortality and survival.	868	PARTICLE SIZE DETERMINATION
First North american record of Bufolucilia silvarum (Mei	i-	Calibration of agar columns for particle size determination. 2535

Jet stream atomization.

2557

First North american record of Bufolucilia silvarum (Meigen) (Diptera : Calliphoridae) parasitizing Bufo terrestris americanus Holbrook. 884

PELARGONIUM HORTORUM

ARTURITION	stem rot. 970
Hypoderma and parturition complicate sweet clover poisoning. 1867	Strains of Pseudomonas solanacearum differing in pathogen- icity to tobacco and peanuts. 1288
PASTEURELLA BACTERINS Therapy of atrophic rhinitis. 1885	Absorption, diffusion, and translocation of C14-labeled
Studies on pasteurellosis V. Two immunogenic types of	triazine herbicides by peanut leaves. 1710
Pasteurella multocida associated with fowl chorera. 2124 ASTEURELLOSIS	Herbicides and herbicide mixtures for weed control in peanuts.
Studies on pasteurellosis V. Two immunogenic types of Pasteurella multocida associated with fowl cholera. 2124	PEARLMILLET Artificial inoculation of pearl millet plants with Sclerospora graminicola. 1236
Biological assays of extracts of alfalfa samples from bloat- producing pastures. 2018	Tolyposporium smut, a new disease on pearl millet, Pennisetum glaucum in the United States. 1432
ATHOGENESIS	PEARS
Effect and interaction of temperature and host genes on growth and pathogenicity of Glomerella cingulata on Lupinus angustifolius. 998	A graft-transmissible factor associated with pear decline. 927
Amino acids in relation to pathogenicity of two wild-type lines of Venturia inaequalis to two apple varieties.	Inhibition of Erwinia amylovora by tissues, extracts, and ash from resistant and susceptible pears. 986
williams, b j. 1025	A virus disease of pear caused by chlorotic leafspot of apples.
Physiology of selective pathogenicity in Fusarium oxy- sporum. 1082	Bud union anatomy of pear (Pyrus) decline trees. 1115
The role of naturally occurring fungitoxicants in selective pathogenicity of Fusarium oxysporum. 1084	Susceptibility of pear roots to Phytophthora. 1310
Pathogenicity and population dynamics of Paratylenchus hamatus Thorne and Allen, on Mentha spp. 1096	Behavior of pear decline disease on different stock-scion combinations. 1583
Pathogenic races of Tilletia controversa in the Pacific Northwest. 1371	PEAS Penetration and infection of pea roots by zoospores of Aphanomyces euteiches. 972
A synthetic hybrid of two varieties of Puccinia graminis.	A strain of bean virus 2 that overcomes resistance in pea conditioned by the mo mo genotype. 1123
Pathogenicity of Helminthosporium victoriae and related species on oats and barley. 1436	Increased susceptibility to root rots in virus infected peas. 1263
Pathogenecity of Helicotylenchus nannus and its relation with Pythium graminicola on sugarcane in Hawaii. 1575	Interactions of two pea Fusaria in soil and associated host responses.
Pathogenicity of Pratylenchus scribneri to crop plants.	Attraction of Aphanomyces eutiches zoospores to pea and other plant roots.
Inheritance of pathogenicity in oat and barley smuts.	Pactors influencing the tolerance of peas to MCPA. 1749
A root observation box and tecniques for studying infection and pathogenesis by nematodes. 2540	Histopathological changes associated with external leaf symptoms on pea enation mosaic virus (PEMV). 2388
ATHOGENICITY	Anatomical changes in the stem of Pisum sativum infected with pea enation mosaic wirus (PEMV) infected peas. 2395
Factors affecting sporulation, spore size, and pathogenicity of several legume cercosporae.	PECTASE Symptoms of Pusarium wilt in relation to quantity of fungus
Syntrophism in Venturia inequalis in relation to pathogeni- city.	and enzyme activity in tomato stems.
PEACHES	PECTINASE Inhibition of polygalacturonase by cations. 1309
Life history and ecology of Pulvinaria vitis (L.) (Hemip-	
tera: Coccoidea), the cottony scale attacking peach in On tario.	The role of pectic substances in chemically induced resis-
Control of Western X-disease of peach. 951	tance to Pusarium wilt of tomato. 1622
Gilbertella fruit rot of peaches in California. 969	PECTOLYTIC ENZYMES Relationship of pectolytic and cellulytic enzyme production by strains of Pellicularia filamentosa to their pathogeni-
Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker. 1078	city. 1548 pectolytic and cellulolytic enzymes produced by Erwinia
Infection of lychee and peach seedlings with cultures of Clitochbe tabescens.	carotovora. 2384 PEKIN DUCKS
Relative merits of shirofugen and peach trees as indicators for Frunus ringspot virus in prune trees. 1506	Studies with eastern encephalitis in white Pekin ducklings. 2033
The role of amygdalin breakdown in the peach replant prob- lem. 2474	Beta-aminopropionitrile toxicity in the white pekin duck. 2355
PRANUTS Use of specific pesticides in determining probable cause of peanut pod rot. 938	PELARGONIUM HORTORUM Whitefly transmission of Xanthomonas pelargonii and histo- logical examination of leafspots of Pelargonium hortorum.
Reaction of five peanut varieties to cultural control of	1525

PELLICHLARIA PILAMENTOSA PELLICULARIA FILAMENTOSA PESTICIDES Relationship of pectolytic and cellulytic enzyme production by strains of Pellicularia filamentosa to their pathogeni-Use of specific pesticides in determining probable cause of peanut pod rot. 1548 city. Pesticide storage in human fat tissue. 1874 PENDULOUS CROP Pesticides: their properties, uses and disadvantages. II. fungicides and herbicides. Pesticides in relation to Pendulous crops in turkeys--an anatomic and pathologic 2246 study. animals. 2364 Pendulous crop in the chicken- a pathologic study. 2248 1962 pesticide exports show gain during first half. 256.8 PENICILLIN Use of pimaricin, penicillin, and polymyxin in isolating Phytophthora spp. from root tissues. The impact of pesticides on public health and recreation 2570 Generalized staphylococcic infection in a monkey. 1910 PETROLEUM effect of environment on the comparative resistance of 1992 1685 Penicillin-resistant staphylococci common in dogs. petiole parenchyma to petroleum oils. Relative importance of persistence, transfer, and milking technique to antibiotic residue contamination of milk. PHARMACOLOGY Studies on the pharmacology of N-(ethylmercuri)-p-toluenesulfonamide. 2331 1785 PENTCHLITTE A clinical and pathologic study of 130 neoplasms of the mouth and pharynx in the dog. Controlling Penicillium decay of oranges with certain ali-989 1803 chatic amines. Inter-relationships among fungi associated with strawberries PHEASANTS Clinical manifestations of eastern equine encephalomyelitis in Oregon. 1304 in pheasants. PENICILLIUM PUNICULOSUM Penicillium core rot of gladiolus. 1499 PHENOL COMPOUNDS Relation between phenol metabolism and stem rust resistance PENNISETUM CLANDESTINUM Control of Pennisetum clandestinum, kikuvugrass, 1746 Phenol content in rust infected and nitrogen fertilized PENNSYLVANIA wheat leaves. evalence of leptospiral agglutinating antibodies in Allegheny county, Pennsylvania, dogs. 2052 PHENOLASES Tyrosinase formation by Strobilomyces strobilaceous. PENTACHLORONTTROBENZENE On the genetics of Hypomyces solani f. cucurbitae to PCNB and TCNB. 1116 Relation of histochemical tests for phenols to Verticillium wilt resistance of potatoes. Tolerance to PCNB and pathogenicity correlated in natural occurring isolates of Rhizoctonia solani. PHENOTHIAZINE IBNOTHIAZINE
Susceptibility of haemonchus contortus to phenothiazine.
1857 Inoculum potential relationships of Rhizoctonia solani measured with soil microbiological sampling tubes. 1204 Effectiveness of thiabendazole against Haemonchus contortus Tolerance among naturally occuring isolates of Rhizoctonia solani to pentachloronitrobenzene. 12 1250 Haemonchosis in artificially infected lambs. 1890 Peanut yields and quality increased by delayed harvest and Resistance to haemonchosis in sheep following phenothiazine treatment of a previous infestation. 202 1322 2025 Fungicidal control of big vein in the irrigated lettuce 1449 2524 crop. The metabolism of phenothiazine in chickens. PERENNIAL PLANTS
Control of field bindweed and other perennial weeds with benzoic and phenylacetic acids. PHENYLACETIC ACID

Control of field bindweed and other perennial weeds with benzoic and phenylacetic acids. PERIODICALS PHENYLHYDRAZINE LENYLHYDRAZINE
Chemotherapeutic control of wheat leaf rust with phenyl1268 Avian diseases- Official organ of american association of avian pathologists, inc. 1820 PEROXIDASES PHLORIZIN Phloridzin-its metabolism and role in resistance to Ventur-Effect of virus infection on peroxidase activity and C6-C1 ia inaequalis, incitant of apple scab. 1173 Glycolic acid oxidase, catalase and peroxidase of cotton 2521 PHOMOPSIS JUNIPEROVORA OMOPSIS JUNIPEROVORA
Influence of environmental factors on Phomopsis junipero1540 PEST CONTROL Dynamic programming, look ahead programming, and the strategy of insect pest control. PHONOCARDIOGRAMS Electrocardiographic and phonocardiographic patterns of normal lambs. Attack and brood production of ambrosia beetles in logging 869 Response of cotton seedlings to combinations of preemergence Lethal time-temperature relation for Heterodera glycines. herbicides and systemic insecticides. 2453 Efficacy of phorate as a fungicide. PESTICIDE RESIDUES Control of chemical, drug, and biological residues in meats

2334

(Hulst).

Laboratory evaluation of DDT and phosphamidon on the western hemlock looper, Lambdina fiscellaria lugubrosa

2351

Effect of spray gallonage and leaf character on deposition and retention of copper-containing fungicides. $\hfill 23$

PHOSPHATES The effect of pH and phosphate on virus infection.	2375	Symposium on pathogen free stock: invitational papers pre-
PHCSPHORUS Increased bacterial populations in soybean roots due to	o 1068	sented June 15, 1960 at the meetings of the Pacific Div- ision of The American Phytopathological Society for Horticultural Science, western region, at Engene, Ore- gon. Introduction. 1462
<pre>rhosphorus. Calcinm and phosphorus absorption and its relationship</pre>		A review of problems in teaching tropical plant pathology.
growth in the dog.	1775	1492
The calcium, phosphorus, magnesinm, carotene, and vitage content of the blood of range cattle in eastern Montane		Special contributions from the tropics to phytopathological mycology. $$\sf 156.0$$
The inflnence of dietary calcinm-phosphorns and terephacid on antibiotic control of experimental infectious		The effect of four species of plant parasitic nematodes on hairy vetch. 1638
synovitis.	1945	High manganese requirements and deficiency symptoms in certain fungi. 2505
Phosphorus nptake as influenced hy associated plants.	2426	PHYTOPHTHORM Techniques in isolation of pythiaceons fungi from soil and
PHOSPHORUS COMPOUNDS Organic phosphorus compound poisoning in livestock.	1852	diseased pineapple tissne. 980
PHOTOCHEMISTRY Photochemical alteration and inactivation of amihen.	1733	Use of pimaricin, penicillin, and polymyxin in isolating Phytophthora spp. from root tissnes. 987
Photodecomposition of triazines.	2528	Effect of hydrogen ion concentration on growth rates of Phtophthora sp. 1046
Photodecomposition of snbstitnted phenylnreas.	2530	Phytophthora wilt of carnation. 1130
PHOTOMICROGRAPHY		Phytophthora crown rot of Petunia. 1205
A rapid technique for fixing and mounting growing fung	i. 2459	Snsceptibility of pear roots to Phytophthora. 1310
PHQTOPERIODISM Effects of Meloidogyne incognita acrita on kenaf and no		A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots.
photoperiodism in selecting for resistance.	1643	Utilization of inorganic mirogen sonrces by species of Phytophtora. 2382
Intravenous treatment of whipworm infection in dogs.	2297	The effect of light on sexual and asexual sporulation of
PHYSIOLOGY Physiology of Sclerotium rolfsii, with emphasis on para sitism.	1351	species of Phytophthora. 2387 PHYTOPHTHORA CINNABONI
PHYTOFATHOLOGY		Phytophthora cinnamomi associated with Lawson cypress mortality in Lonisiana. 1408
Abstracts of papers accepted for presentation at the fisixth annual meeting of the american phytopathological ety, lafayette, ind., august 23, 24, 25, 26, 1964.		PHYTOPHTHORA CRYPTOGEA Variation in Phytophthora cryptogea from alfalfa. 1094
Report and abstracts of the 1964 annual meeting of the tomac Division of The American Phytopathological Soci-		PHYTOPHTHORA DEECHSLERI Selective pathogenesis within Phytophthora drechsleri.
ety.	912	PHYTOPHTHORA FRAGARIAE
Report and abstracts of the 1962 annual meeting of the omac Division of The american Phytopathological Society.	930	Oospore production by single-zoospore isolates of Phytoph- thora fragariae in culture. 1381
Abstracts of papers accepted for presentation at the fifourth annual meeting of The American Phytopathological		Physiologic specialization in Phytophthora fragariae. 2455
Society, Corvallis, Ore., Angust 26, 27, 28, 29, 1962.	936	PHYTOPHTHORA INFESTANS Evaluation of multigenic field resistance of the potato to
Report and abstracts of the 1961 meeting of the Nortea: Division of The American Phytopathological Society.	stern 1015	Phytophthora infestans in 10 years of trials Tolnca, Mex- ico.
Symposinm on tropical plant pathology: invitational paperesented December 11, 1961 at the meeting of The Amer:		Infrared photography of potato late blight. 2565
can Phytopathological Society at Biloxi, Mississippi.	1031	PHYTOPHTHORA PALMIVORA Complementary strains of Phytophthora palmivora from Ceylon ruhher. 1334
Symposium on plant disease losses.	1184	Complementary isolates of Phytophthora palmivora from cacao
Recovery of aster yellow virns from carrot tissne cultinocnlated in vitro.	1189	and ruhher, and their taxonomy. 1589
Plant disease losses as they occur worldwide.	1228	PHYTOPHTHORA PARASITICA Evaluation of tolerance to root rot caused by Phytophthora
Effects produced in cotton fiber by Fbizopns, a boll refingns.	ot 1390	parasitica in seedlings of citrus and related genera. 1359
A dependable local lesion assay for thrnip yellow mosa: virns (TYMV)	ic 1392	Oxygen requirement of three root-rotting fungi in a liquid medium. 2478
The role of plant pathology in tropical plantation agriture.	icul- 1419	PHYTOPHTHORA PARASITICA VAR. NICOTIANAE The relationship between certain chemical soil factors and the inocnlnm potential of Phytophthora prasitica var.
Prospective fruits of international cooperation in tropplant pathology.	pical 1438	nicotianae. 1287

SUBJEC	T INDEX
PHYTOTOXICITY	
PHYTOTOXICITY	Colonization of pine stem sections by Fomes annosus and
Effect of phytotoxic substances from decomposing plant residues on root rot of bean. 1464	other fungi in two slash pine stands. 1498
The effect of environment on the comparative resistance of petiole parenchyma to petroleum oils. 1685	PINUS ELLIOTTII Effect of certain chemical treatments on colonization of slash pine stumps by Fomes annosus. 1242
Toxicity of simazine to seedling oat plants. 2367	Further data on borax as a control of surface infection of
Fungistatic and phytotoxic properties of some derivatives of nitrobenzene. 2370	slash pine stnmps by Fomes annosus. 1243 Black root rot in Florida sandhills. 1417
PICEA	Pomes annosus root rot of shortleaf, loblolly, and slash
Life history and habits of a sprnce needle-miner, Eucordy- lea ducharmei Free. (Lepidoptera: Gelechiidae). 876	pine in Arkansas. 1453
Artificial infection of small spruce roots with Polyporus tomentosus.	Red root and butt rot in a Georgia slash pine plantation. 1496
PICEN ABIES	Colonization of pine stem sections by Fomes annosus and other fungi in two slash pine stands. 1498
The response of Norway spruce to soil fumigation for the control of nematodes. 2385	Histology of Cronartium fnsiforme in slash pine seedlings. 2456
PIGEONPOX VACCINE	DING DIGENTS
The response of chickens to vaccination with different concentrations of pigeon pox and fowl pox viruses. 1901	PINUS PALUSTRIS Artificial inoculation of longleaf pine with Scirrhia aci- cola. 1229
PIGEONPOX VIRUS The response of chickens to vaccination with different	PINUS RESINOSA
concentrations of pigeon pox and fowl pox viruses. 1901	Growth of red pine trees after chemical suppression of the European pine shoot moth. 899
PICEONS Recovery of western equine encephalomyelitis virus from crop washings of experimentally infected pigeions. 2138	Effects of herbicides on red pine nursery stock. 1758
PIGMENTATION Abnormal pigmentation and fluorescence in canine teeth. 2164	PINUS TAEDA Fomes annosus root rot of shortleaf, loblolly, and slash pine in Arkansas. 1453
PIGMENTS Pactors affecting pigmentation by two wood-inhabiting fungi. 1412	PIPER NIGRUM Effect of some single element deficiencies on pathogenicity of Pratylenchus penetrans to pepper plants. 1336
PIGMENTS (PLANT) Pigmentation of soybean seed coats associated with bacteria. dunleavy, j. 1070	PIPERAZINE A review of piperazine and piperazine compounds as ponltry ascaracides. 2084
PIMARICIN	Field studies comparing piperazine-carbon disulfide complex with carbon disulfide for parasite control in the horse.
Use of pimaricin, penicillin, and polymyxin in isolating Phytophthora spp. from root tissues. 987	2295
Effect of streptomycin and pimaricin on growth and respiration of Pythium spp. 1128	PIROPLASMOSIS Horses protected from piroplasmosis by vector control. 1855
PINEAPPLES Techniques in isolation of pythiaceous fungi from soil and	A comparison of equine piroplasmosis in South Africa and the United States. 1892
diseased pineapple tissue. 980	Equine piroplasmosis. 2027
Failure of witchweed to parasitize Smooth Cayenne pine- apple. 1719	PISUM SATIVUM
PINK ROOT (ONIONS) Ristology of roots of susceptible and resistant varieties of	Anatomical changes in the stem of Pisum sativum infected with pea enation mosaic virus (PEMV) infected peas. 2395
cnion in relation to the pink root fungus. 1365	PLACENTA Oxygen uptake by maturing bovine placenta. 1766
Production of mannitol by the onion pink-root organism. 2482	PLANT ADAPTATION Adaptation and sensitization of bean leaves to heat. 2466
PINUS	
Larvae of pine needle miners in Ontario. 825	PIANT ANATOMY Pathological anatomy of leaf spots of holly. 923
Dwarf fascicle abnormality of short leaf pine. 1349	Bud union anatomy of pear (Pyrus) decline trees. 1115
Colonization of pine stem sections by Fomes annosus and other fungi in two slash pine stands. 1498	Pathological anatomy of rapid decline of Spy 227 apple.
PINUS BANKSIANA Stalactiform rust on jack pine. 996	Anatomical studies of soybean roots artificially inoculated with Heterodera glycines. 1605
	•

1706

2395

Anatomical studies of Euphorbia esula L.

Phytotoxicity of s-triazine herbicides to corn and weeds as related to structural differences. 2365

Anatomical view of the life history of the strawberry rootlet. 2467

Anatomical changes in the stem of Pisum sativum infected with pea enation mosaic virus (PEMV) infected peas.

PINUS ECHINATA

PINUS ELLIQITI

Inoculation and colonization of stnmps of Pinns echinata by Fomes annosns. 1164

Fomes annosus root rot of shortleaf, loblolly, and slash pine in Arkansas. \$1453\$

Formes annosns root rot of shortleaf, loblolly, and slash pine in Arkansas. 1453

PLANT DISEASE RESISTANCE

PLANT BIOCHEMISTRY Objectives in chemotherapy. 12	
Disease development, disease intensity, and carbohydrate levels in rusted bean plants. 15	Reactions of sweetpotato breeding lines to Meloidogyne spp. when inoculated by an improved method. 15
Relationship of pectolytic and cellulytic enzyme production by strains of Pellicularia filamentosa to their pathogenicity.	
Absorption, diffusion, and translocation of C14-labeled triazine herbicides by peanut leaves.	PLANT CUTTINGS The influence of Tylenchulus semipenetrans on growth of
Production of extracellular enzymes by four pathogens of apple fruit.	PLANT DECAY 76 Penicillium decay of garlic. 1558
pectolytic and cellulolytic enzymes produced by Erwinia carotowora.	
Antibiotic production by Streptomyces sp. in unamended soil.	
Quantitative studies on possible competition of silver, ce rium and dodine for receptor sites in fungus spores. 24	
Effect of N-(3,4-dichlorophenyl.methacrylamide on the oxidation of ascorbic acid by corn.	without herbicide for tomato fruit disease control. 997 15 Preconditioning and placement of organic materials in con-
Fffects of N-(3,4-dichlorophenyl) methacrylamide on growth and certain respiratory enzymes of corn. 24	trol of bean root rot. 1040 Control of black rot by prehedding heat treatment of sweet-
Biochemical changes in seedlings of beam infected with Col	potato roots. 1273
Production of extracellular enzymes by Cladiosperium cucum	
The fate of long chain esters of 2,4-D in plants.	37 methods. 1416 38 Thermotherapy of planting material. 1456
Distribution of ribonuclease in subcellular fractions of utreated, wounded, and TMV infected Pinto bean leaves. 24	sented June 15, 1960 at the meetings of the Pacific Div-
The sulfur-depletion of cells by captan. 24	48 gon. Introduction. 1462
Carbohydrate metabolism of Johsongrass as influenced by seasonal growth and herbicide treatments.	Cause and prevention of the rapid spread of the Ascochyta disease of Chrysanthemum. 1481
Effect of monuron on C1402 fixation by red kidney bean leaves.	Failure to control corn stalk rots with above ground appli- 71 cations of protectant fungicides. 1509
Biochemical changes in the water-insoluble material of mat uring apple fruit and their possible relationship to disea resistance. 24	
Ascorbic acid oxidase and tyrosinase activities in relation to crown-gall development.	PLANT DISEASE RESISTANCE n Relation between phenol metabolism and stem rust resistance 96 in wheat. 944
Changes in proteins and several enzymes in susceptible bea leaves by the bean rust fungus.	
Amino acid and amide content of healthy and disease-affect strawberry plants.	Distribution pattern and persistence of the systemic resistance induced in hypersensitive tobacco plants by tobacco mosaic virus. 964
Quantitative in amino acids in mycelium of Colletotrichum capsici following exposure to lethal amounts of maneb.	Resistance to cucurbit viruses in Cucumis melo. 966
Glycolic acid oxidase, catalase and peroxidase of cotton tissue.	Inhibition of Erwinia amylovora by tissues, extracts, and ash from resistant and susceptible pears. 986
The activities of certain enzymes from cotton treated in cotyldon stage with N-(3,4,-diclorophenyl)methacrylamide.	Temperature effects on host predisposition and development of blackspot. 1001
25	22 Seedling versus mature plant reactions of wheat to stripe rust. 1013
	33 Histological structure of corn stalks in relation to field resistance to stalk rot. 1026
PLANT BREEDING Complementary strains of Phytophthora palmivora from Ceylon rubber. 13	The potential value of synthetic tolerant or multiline varieties for control of cereal rusts in North America. 1030
Evaluation of sweetpotato breeding stocks for susceptibili to internal cork virus.	Hop downy mildew reaction in selected progeny of a susceptible variety. 1065
Effect of recurrent phenotypic selection on resistance of alfalfa to two physiological races of Uromyces striatus medicaginis.	Susceptibility of certain citrus rootstocks to Thielaviopsis basicola. 1067
Differential reaction of stocks of the same long-time inbr	Reaction of grass to stripe rust at Pullman, Wash. 1074

PLANT DISEASE TRANSMISSION

Effect of D-D and various dichloropropenes on the resistance of peach seedlings to bacterial canker.	1078	Verticillium wilts.	1427
	1083	Resistance in musk melon to a strain of watermelon mosaic virus.	1448
Linkage of genes conditioning resistance to rust in flax	1100	Immunity to race 2 of spinach downy mildew.	1454
Relation of chlorogenic acid in potato to resistance to		Influence of nonsusceptible plants on the survival of Fu arium solani f. phaseoli in soil.	145 8
A strain of bean virus 2 that overcomes resistance in per		Systemic resistance induced by localized virus infection beans and cowpeas.	1459
Expression of the monogenic chlorotic-lesion resistance	to 1126	Significance of morphological barriers and osmotic press in resistance of mature peach leaves to powdery mildew.	ure 1476
Resistance of barley to Ustilago nuda.	1133	Differential reaction of stocks of the same long-time in	
Inheritance of chlorotic-lesion resistance to Helminthosperium turcicum in corn seedlings.	1140	Chemotherapeutic suppression and exaggeration of Cytospo	
The mechanism of resistance to infection with potato vir \mathbf{Y} in Italian El pepper (Capsicum anuum).	us 1147	canker disease in peach trees. Inheritance of chlorotic-lesion resistance to Helminthos	
Reproduction of Verticillium in the rhizospere and subsequent root infection of resistant and susceptible mint species.	- 1166	rium turcicum in seedling corn. Resistance to the wildfire disease in relation to the ge chromosome set ratio in tobacco.	151 ° ne- 151 3
Evaluation of multigenic field resistance of the potate Phytophthora infestans in 10 years of trials Toluca, Mex-		Interrelated effects of environment and age of alfalfa a red clover seedlings on susceptibility to Pythium debary anum.	nd
Loss of wildfire resistance in tobacco due to chromosome fragmentation.	1171	Histology of watermelon anthracnose.	1562
		Resistance in red clower to five viruses.	1564
Further evidence on systemic resistance induced by local necrotic virus infections in plants.	1182	Inheritance of resistance to halo blight of bean.	157 1
Susceptibility of certain convolvulaceae to internal corptobacco ringspot, and cucumber mosaic viruses.	k. 1247	Solanum pennellii, a possible source of tomato curly-topsistance.	re-
Increased susceptibility to root rots in virns infected peas.	1263	Inheritance of reaction to Puccinia hordei in barley. I. Genes for resistance among North American race different iating varieties.	
Susceptibility of certain Verticillium-resistant tomato varieties to an Ohio isolate of the pathogen.	1301	Expression of black shank resistance in leaves of flue-tobacco.	
Susceptibility of pear roots to Phytophthora.	1310	Resistance to snow mold of winter wheat.	1585
Metabolism of DL- and L-phenylalanine in Malus related to susceptibility and resistance to Venturia inaequalis.	o 1326	The role of pectic substances in chemically induced resitance to Fusarium wilt of tomato.	
Some histological and genetic relationships of resistance wheat to loose smut.	e of 1327	Resistance of alfalfa to two species of root-knot nemato	des.
Wheat leaf rust resistance combinations.	1331	Use of root-knot resistant tobaccos to assess injury cau by root-lesion nematodes.	sed 1632
Succulent-type plants as sources of plant virus inhibitor	rs. 1343		1646
The mechanics of resistance to potato virus Y infection		Effect of temperature on resistance of alfalfa to the st	
Evaluation of tolerance to root rot caused by Phytophthon parasitica in seedlings of citrus and related genera.		The nature of locus Rp1 conditioning resistance to rust	
Histology of roots of susceptible and resistant varieties	1359 s of 1365	Uptake of cycloheximide by a sensitive and a resistant yeast.	2486
Influence of soil temperature, isolates, and method of inoculation on resistance of mint to Verticillium wilt.		Biochemical changes in the water-insoluble material of m uring apple fruit and their possible relationship to dis resistance.	
Evaluation of sweetpotato breeding stocks for susceptibi:	1380 lity 1393	Changes in free amino acid and amide content of resistan and susceptible beans after infection with the halo blig organism.	
Hypocotyl reaction to rust infection as a measure of restance of safflower.	is- E 1414	PLANT DISEASE TRANSMISSION A study of the role of some nematodes in the incidence a severity of southern bacterial wilt of tomato.	nd 913
Effect of recurrent phenotypic selection on resistance of alfalfa to two physiological races of Uromyces striatus medicaginis.	f 1422	Mechanical transmission of two strains of sweet cherry r gose mosaic, mild rusty mottle, and rasp leaf viruses.	u-
A synthetic hybrid of two varieties of Puccinia graminis	1426	Relationship of the iris borer (Macronoctua onusta) to t	
Comparative reactions of certain cottons to Fusarium and		spread and development of soft rot.	978

Acquisition and transmission of asters yellows virus. Crop value and disease. 1465 993 Influence of different plant nutrients upon brown tip of Transmission of viruses to strawberry by excised leaf grafts from plants other than strawberry. 1028 The necessarily broad view in studying tropical plant di-Insect dissemination-a newly discovered mode of spread of 1032 bacterial wilt of banana. Comparison of three stem diseases of Melilotus and their Transmission of potato spindle tuber virus to tomato. causal agents. 1041 Stylet-bearing nematodes associated with various plants in South Carolina, 1959-1962. Insect and graft transmissions of alpha- and beta-curl vir-1060 The effect of four species of plant parasitic nematodes on Transmission of unstable viruses from liquid-nitrogen-frozen hairy wetch. plant tissue. 1095 PLANT DWARFING Chlorotic leaf spot and dwarfing, as possible contaminants of stem-pitting virus, and their over-all influence on the growth habit of apples. Evidence for the simultaneous transmission of two viruses by the aster leafhopper (Macrosteles fascifrons). Aphid transmission of potato virus A to the Katahdin variety. 1193 PLANT ECOLOGY Kendall s itau coefficient as an index of similarity in comparisons of plant or animal communities. Soil transmission of tobacco ringspot virus. 1286 Colonization of plant debris in soil by Verticillium dahli-Mode of infection of sweet cherry by Pseudomonas syringae. 1308 Nematodes associated with red clover growing on favorable Chlorotic leaf spot from a mechanically transmissible virus from apple. 1330 and unfavorable sites. Isolation of tobacco vein distorting virus from tobacco plants infected with aphid-transmissable bushy-top. An ecological study of lens- and globe-podded hoary cresses 1358 1698 in Saskatchewan. Relation of seed position and pod location to tobacco ring-spot virus seed transmission in soybean. 1363 PLANT EXTRACTS Inhibition of Erwinia amylovora by tissues, extracts, and ash from resistant and susceptible pears. Transmission of bean pod mottle virus in soybeans by beetles* 1364 A variant culture of Xanthomonas malvacearum obtained from weed roots. Aphid transmision of white clover mosaic virus. 1517 A selective antibiotic medium for isolation of Phytophthora Virus cause of blue dwarf of oats and its transmission to and Pythium from plant roots. 1520 tarley and flax. Determination of 2,4-D residues in soybeans. 1689 Re-examination of vector-specificity in the barley yellow dwarf virus in Washington. 1587 Biological assays of extracts of alfalfa samples from bloatproducing pastures. 2018 PLANT DISEASES Abstracts of papers accepted for presentation at the fifty-sixth annual meeting of the american phytopathological soci-ety, lafayette, ind., august 23, 24, 25, 26, 1964. 910 Root moisture extraction profiles of various weeds. 2443 Non-enzymatic detoxification of 2-chloro-4,6-bis(ethylamino)-s-triazine(simazine) by extracts of Zea mays. 2517 Report and abstracts of the 1964 annual meeting of the Po-tomac Division of The American Phytopathological Soci-PLANT GALLS ety. 912 A study of noninsect galls on Carya, Quercus, and Salix. Pathological anatomy of leaf spots of holly. 923 grass root-gall nematode found on annual bluegrass Pathogenicity and systemic development of Sphacelotheca roots in Oregon. reiliana in sorghum species. 933 Lethal effect of temperature extremes on Anguina tritici.
1634 Penetration and infection of pea roots by zoospores of Aphanomyces euteiches. 972 A method of obtaining Meloidgyne spp. in aseptic cultures Pathogenicity of Monosporic versus polysporic cultures of Urocystis colchici. 2441 The effect of soil fertility on the development of Kentucky 990 PLANT GENETICS Effect and interaction of temperature and host genes on growth and pathogenicity of Glomerella cingulata on Lupinbluegrass diseases. us angustifolius. Relations of disease development and intensity to carbohy-Studies on genetic control of rust reaction in Puccinia drate levels in rusted bean plants. sorghi. Symposium on plant disease losses. 1184 Inheritance of resistance to common bunt, Tilletia caries, in a cross of P.I. 178383 x Elgin wheat. 1085 Local infection of rice florets by the rice kernel smut organism, Tilletia horrida. 1185 Linkage of genes conditioning resistance to rust in flax. 1100 1228 Plant disease losses as they occur worldwide. Diseases affecting production of certified tomato plants in Georgia during 1942-1963. On the genetics of Hypomyces solani f. cucurbitae to PCNB and TCNB. . 1230 A strain of bean virus 2 that overcomes resistance in pea conditioned by the mo mo genotype. 1123 1352 Weather, space, time, and chance of infection. Applanomyces root rot of peas as affected by organic and mineral soil amendments. Inheritance of chlorotic-lesion resistance to Helmintho-1386 1140 sporium turcicum in corn seedlings.

PLANT GENETICS

PLANT GRAFTING

	DYAND DARDINGC
Evaluation of multigenic field resistance of the potato to Phytophthora infestans in 10 years of trials Toluca, Mexico.	PLANT HARDINESS Factors influencing survival of red and white clover plants exposed to low temperatures. 245
Some histological and genetic relationships of resistance of wheat to loose smut.	Winter survival of Digitaria sanguinalis in subtropical climates. 247
Butations for virulence in Puccinia coronata. 1329	PLANT HISTOLOGY Histological differentiation of fungal, chemical, mechanical, and insect damage to holly leaves. 94
Effect of recurrent phenotypic selection on resistance of alfalfa to two physiological races of Oromyces striatus medicaginis. 1422	Pathological histology of young sour orange plants bud-inoc ulated with four citrus viruses. 125
A synthetic hybrid of two varieties of Puccinia graminis. 1426	Some histological and genetic relationships of resistance o wheat to loose smut.
Immunity to race 2 of spinach downy mildew. 1454	Histology of roots of susceptible and resistant varieties o
Genetics of response in pepper to three strains of potato virus Y. 1495	onion in relation to the pink root fungus. 136 Histology of watermelon anthracnose. 156
Resistance to the wildfire disease in relation to the gene-	Anatomical studies of Euphorbia esula L. 170
chromosome set ratio in tobacco. 1513 Somatic recombination in Puccinia graminis war. tritici.	Histopathological changes associated with external leaf symptoms on pea enation mosaic virus (PEMV) 238
1526	Histology of Cronartium fusiforme in slash pine seedlings.
Inheritance of resistance to halo blight of bean. 1571	245
Comparative pathology of three tropical corn rusts. 1572 Inheritance of reaction to Puccinia hordei in barley. I. Genes for resistance among North American race different-	PLANT HOSTS Causes of variations in effectiveness of Bracon cephi (Gahan) (Hymenoptera: Braconidae) as a parasite of the wheat stem sawfly. 79
iating varieties. 1580 Inheritance of pathogenicity in oat and barley smuts.	The feeding of normal and aster yellows-inoculated corn leafhoppers. 84
2405 Influence of some environmental factors on hereditary varia-	A strain-host combination for studying tomato spotted wilt virus inclusion.
tion in monospore cultures of Verticillium albo-atrum.	Four new hosts of Cristulariella pyramidalis. 99
The nature of locus Rp1 conditioning resistance to rust in corn. $$2484$$	Temperature effects on host predisposition and development of blackspot. 100
LANT GRAFTING	Host range and bioassay of field soil for Cylindrocladium
A graft-transmissible factor associated with pear decline. 927	scoparium. 103
Transmission of viruses to strawberry by excised leaf grafts from plants other than strawberry.	Importance of nonhosts in maintaining the inoculum potentia of Verticillium. 105 Host ranges and races of the corn rusts. 137
Insect and graft transmissions of alpha- and beta-curl viruses of raspberries. 1060	Interactions of two pea Pusaria in soil and associated host
Bud union anatomy of pear (Pyrus) decline trees. 1115	responses. 155 New hosts and crop plants resistant to the reniform nema-
Root grafting of city-planted American elms. 1235	tode 160
Advantages of determining the tolerance of strawberries by grafting with leaves infected with a virus complex. 1405	Suitability of various cover crops as hosts for the lesion nematode, Pratylenchus penetrans.
Incompatibility of Price and Cook Nucellar Eureka lemon trees on No. 1452 citrumelo rootstock. 1486	Growth response of several isolates of Fusarium in rhizo- spheres of host and nonhost plants. 243
Inoculation with Cronartium ribicola by bark-patch graft-ing.	PLANT INJURIES A new pest of apple in New Brunswick. 80
LANT GROWTH INHIBITORS Radial increment reduction in American beech caused by a freeze. 915	Development and survival of the onion maggot under field an artificial conditions on attractive and non-attractive onio varieties.
Growth reduction of citrus seedlings by Fusarium solani as influenced by the citrus nematode and other soil factors.	Electronmicrographs of rice dwarf and wound tumor virus in ultrathin sections of their respective arthropod and plant hosts.
The effect of growth regulators on oak wilt development.	Prevention of Cytospora invasion of injured stems of prune trees with wound treatments. 123
Inhibition of callus and root growth in tomato stems excised from plants inoculated with a combination of tobacco mosaic virus and potato virus X.	Corn stalk rot symptoms induced by root injury. 134 Increased stalk rot susceptibility in corn following root
The effect of diethylstilbestrol and progesterone on the growth of four mastitis-producing bacteria. 2047	Apple scab III. Effect of serial applications of fungi-
Effect of 3-amino-1,2,4-triazole and L-histidine on rate of elongation of root hairs of Agrostis alba. 2409	cides on leaf lesions on previously unsprayed treesin- hibition of conidial germination, removal(suppression) of the organism, and subsequent development of late terminal infection. 149

Ozone injury to vegetation in the northeastern U.S 2324	Intraspecific variation in pathogenicity in the genus Hel- minthosporium to Graminus species. 1423
Distribution of ribonuclease in subcellular fractions of untreated, wounded, and TMV infected Pinto bean leaves. 2445	New hosts and crop plants resistant to the reniform nematode. 1609
LANT METABOLISM	A method for separation and sterilazation of Pratylenchus brachyurus from mixed populations of nematodes. 1635
Some effects of ozone on tobacco leaf metabolism. 914 Relation between phenol metabolism and stem rust resistance	Reactions of sweetpotato breeding lines to Meloidogyne spp. when inoculated by an improved method. 1656
in wheat. 944	PLANT NEMATODES
Changes in the nitrogen metabolism of victorin-treated oat varieties.	Infection relationship between Meloidogyne incognita acrita and Pusarium oxysporum f. vasinfectum in cotton. 921
Phloridzin-its metabolism and role in resistance to Venturia inaequalis, incitant of apple scab. 1173	A factor in root sap of citrus rootstocks associated with resistance to citrus nematode. 1154
Metabolism of DL- and L-phenylalanine in Malus related to susceptibility and resistance to Venturia inaequalis.	Stability of pathogenicity of B biotypes of the root-knot nematode Meloidogyne incognita on tomato. 1281
Studies on the germination and metabolism of teliospores of	Thielaviopsis basicola associated with declining sweet orange seedlings in Florida. 1418
	Relation of parasitic nematodes to postemergence damping-off
The metabolism of C14 chain-and-ring labeled simazine by corn and the effect of atrazine on plant respiratory systems.	of cotton. 1424 Reduction of soil populations of the citrus nematode by
The uptake, translocation and metabolism of simazine and at-	the addition of organic materials. 1484
razine by corn plants. 2428	Helicotylenchus nannus, a spiral nematode associated with declining gardenias.
The sulfur-depletion of cells by captan. 2448	Evidence suggesting a grape nematode problem in New York
Carbohydrate metabolism of Johsongrass as influenced by seasonal growth and herbicide treatments. 2452	vineyards. 1613
Oxygen requirement of three root-rotting fungi in a liquid medium. 2478	Reaction of bermuda grass varieties and lines to root-knot nematodes. 1617
Respiratory metabolism of Phaseolus vulgaris infected with alfalfa mosaic and southern bean mosaic viruses. 2492	Relation of physiological age of root-knot larvae to infectivity. 1618
A rapid cultural test for relative cellulolytic activity of fungi. 2507	An ectoparasitic root nematode on lowbush blueberry (Vaccinium spp.). 1620
LANT MORPHOLOGY	Relationship of Pratylenchus penetrans to roots of corn in New York. 1623
Significance of morphological barriers and osmotic pressure in resistance of mature peach leaves to powdery mildew. 1476	Resistance of alfalfa to two species of root-knot nematodes.
Morphological effects of colletotin on tomato and Digitalis foliage. 1533	Control of the soybean cyst mematode by crop rotation.
Morphological and herbicide susceptibility differences among strains of hoary cress. $$1684$$	Treatment of propagating stock with chemicals at different temperatures for root-knot control.
Characteristics and herbicidal control of flat pea. 1727	The grass root-gall nematode found on annual bluegrass roots in Oregon. 1631
Variation in morphological characteristics and dalapon susceptibility within the species Setaria lutescens and Setaria faberii. 2420	Lethal effect of temperature extremes on Anguina tritici. 1634
Morphology and respiration of diseased and normal Helmin- thosporium victoriae. 2435	A method for separation and sterilazation of Pratylenchus brachyurus from mixed populations of nematodes. 1635
Anatomical view of the life history of the strawberry rootlet. 2467	A report on the testing of onion varieties for resistance to lesion nematodes.
Growth and differentiation of geranium apical meristems in vitro. 2499	The effect of four species of plant parasitic nematodes on hairy wetch.
LANT MUTATION	Chemical dips for eradication of root-knot nematode from
Streptomycin resistant mutants in Streptomyces scabies. 1059	plant roots. 1640
Butations for virulence in Puccinia coronata. 1329	Host-parasite relations of Rotylenchus reniformis on Gossypium hirsutum. 1642
LABT NEMATORE RESISTANCE Interrelationship of tobacco ringspot virus and Meloido- gyne incognita acrita in nematode resistant and susceptible	Effect of temperature on growth of root-knot nematodes in soybeans and tobacco. 1645
soybeans. 917	Effect of temperature on resistance of alfalfa to the stem nematode (Ditylenchus dipsaci). 1652
A factor in root sap of citrus rootstocks associated with resistance to citrus nematode. 1154	Attraction of parasitic nematodes by plant root emanations.
Susceptibility of cotton and relatives to reniform nematode in Louisiana. 1376	Phytopathological notes.

PLANT NUTRITION

infesting citrus seedlings with the citrus nematode, Tylenchulus semipenetrans.	1657	ation of Pythium spp.	12
Influence of Tylenchulus semipenetrans on the growth an chemical composition of sweet orange seedlings in soils		Effect of high doses of D-D on soil organisms and the growth and yield of lemon trees.	13
various exchangeable cation ratios.	1659	Influence of organic amendments on survival of Fusarium oxysporum f. cubense in the soil.	20
Ecological relationships of predacious fungi associated the citrus nematode.	1 with 1660	Bypocotyl reaction to rust infection as a measure of resistance of safflower.	s- 41
The status of bindweeds, Mikania spp. as possible hosts the citrus-root nematode, Tylenchulus semipenetrans.	of 1662	Water relations in banana plants infected with Pseudomonas solanacearum.	s 44
Influence of the stubby-root nematode on growth of sugain Hawaii.	arcane 1665	Relation of vascular occluding reactions in banana roots	to
Influence of dieldrin and methyl bromide soil treatment subsequent populations of stylet-bearing nematodes asso ed with roots of Ladino clover.		Induced tolerance to fungicides in three species of fungi-	50
A root observation box and tecniques for studying infectand pathogenesis by nematodes.	ction 2540	Mode of action of Septoria linicola.	52
LANT NUTRITION		Barley seedling response to covered smut infection.	55
Nutrition in relation to root and top growth of Trifoli pratense and severity of Pusarium root rot.	ium 1052	Influence of the stubby-root nematode on growth of sugarcatin Hawaii.	66
Nutrient studies on Leucostoma persoonii and a Zythiace species pathogenic on Prunus domestica.	eae 1117	Effect of nitrogen fertilizers on germination and stand of wild oats. 10°	f 67
Influence of organic amendments on survival of Fusarium oxysporum f. cubense in the soil.	n 1206	Penetration and nutrition of Striga asiatica.	69
Molybdenum nutrition of Nicotiana tabacum in relation	to	Uptake and distribution of simazine by oat and cotton seed lings.	d- 72
multiplication of tobacco mosaic virus. Relation of air temperature and age and nutrition of the host to the development of halo and common bacterial blooms.	lights	Effects of different densities of downy brome (Bromus tec- torum) on growth and survival of crested wheatgrass (Agro- pyron desertorum) in the greenhouse.	
of bean. In vitro nutrition of the tomato bacterial spot organis	1568 sm. 1569	Otilization of inorganic nirogen sources by species of Ph tophtora.	y- 38:
Penetration and nutrition of Striga asiatica.	1699	The response of Norway spruce to soil fumigation for the control of nematodes.	38
Utilization of inorganic nirogen sources by species of tophtora. $ \\$	Phy- 2382	Basal mineral requirements for the growth and sporulation Δl ternaria tomato.	39
High manganese requirements and deficiency symptoms in tain fungi. $\label{eq:constraint}$	cer- 2505	Studies on the germination and metabolism of teliospores σ	o f 39
PLANT NUTRITIONAL DEFICIENCIES Effect of some single element deficiencies on pathogeni of Pratylenchus penetrans to pepper plants.	icity 1336	Effect of high concentrations of cycloheximide on bud differentiation in Montmorency sour cherry.	f- 39
High manganese requirements and deficiency symptoms in tain fungi.	cer- 2505	Stimulation of spore germination and growth of Glomerella cingulata by copper and other heavy metal ions.	40
PLANT PEST CONTROL Susceptibility of cotton and relatives to reniform nemain Louisiana.	atode 1376	Influence of some environmental factors on hereditary variation in monospore cultures of Verticillium albo-atrum.	ia 43
PLANT PHYSIOLOGY		Growth response of several isolates of Fusarium in rhizospheres of host and nonhost plants. 2^{l}	43
Radial increment reduction in American beech caused by freeze. Reaction of five peanut varieties to cultural control of the peanut varieties to cultural	915	Influence of isoleucine isomers on development of the perfect stage of Fusarium solani f. curcurbitae, race 2.	46
stem rot.	970	Organic constituents in conidia of Erysiphe graminis hor-	
Effect and interaction of temperature and host genes or growth and pathogenicity of Glomerella cingulata on Luj us angustifolius.			47
The effect of metabolites produced by Fusarium oxysportlycopersici (Sacc.) Snyd. and Hans. on root elongation	of	thosporium sativum in soil. 24 Growth and differentiation of geranium apical meristems in	49 n
tomato seedlings. Characterization of five qeranium virus isolates and in	1011 n	vitro. 21 The chemical composition of medusahead and downy brome.	49
vitro growth of geranium stem tips.	1049	2!	53:
Nutrition in relation to root and top growth of Trifoli pratense and severity of Pusarium root rot.	ium 1052	PLANT PROTECTION Maintenance of pathogen-free planting stock. 1	19
Physiology of selective pathogenicity in Fusarium oxysporum.	1082	Prevention of Cytospora invasion of injured stems of prune trees with wound treatments.	e 23:
The effect of rust on the weight, growth rate, and P32 content of bean. $$	1118	Duration of protective activity in wheat seedlings of various compounds against stem rust.	- 53
Effect of streptomycin and pimaricin on growth and resp	pir-		

	1015011
LANT REGULATORS Growth of red pine trees after chemical suppression of the European pine shoot moth. 899	PLANTS Note on oviposition in plant stems by grasshoppers (Orthoptera: Acrididae). 851
The effect of plant growth regulators on five genera of bacteria. 2410	Phosphorus uptake as influenced by associated plants.
ANT REPRODUCTION The effect of light on sexual and asexual sporulation of species of Phytophthora. 2387	PLASTER OF PARIS The experimental replacement of segmental defects in bone with a plaster of paris-epoxy resin mixture. 2226
LANT RESIDUES Effect of phytotoxic substances from decomposing plant residues on root rot of bean. 1464	PLATANUS The relationship between severity of anthracnose of sycamore and temperature. 1157
LANT RESPIRATION The metabolism of C14 chain-and-ring labeled simazine by corn and the effect of atrazine on plant respiratory systems. 2401	PLEUROPNEUMONIA Antigenicity of Mycoplasma mycoides. Iexamination of body fluids from cases of contagious bovine pleuropneumonia. 1966
Factors affecting the pattern of respiratory changes in victorin-treated oat tissue. 2418	Serotypes of avian pleuropneumonia-like organisms. 2187
Respiratory and enzymatic changes in victoria blight of oats. 2419	PLEUROPNEUMONIA-LIKE ORGANISMS Evaluation of tylosin in preventing egg transmission of Mycoplasma gallisepticum in chickens. 1985
Morphology and respiration of diseased and normal Helmin- thosporium victoriae. 2435	A report on broilers from parents free of Mycoplasma callisepticum. 2002
Oxygen requirement of three root-rotting fungi in a liquid medium. $$2478$	Pleuropneumonia-like organisms associated with synovitis in fowls.
Respiratory metabolism of Phaseolus vulgaris infected with alfalfa mosaic and southern bean mosaic viruses. 2492	Effect of dipping eggs in antibiotic solutions on PPLO transmission in chickens. 2037
ANT SENESCENCE Colonization of lima bean plants by Phytophthora phaseoli as affected by temperature and age of plants. 982	Survival of PPLO injected into eggs previously dipped in antibiotic solutions. 2038
The relation of plant maturity, temperature, and soil moisture to charcoal stalk rot development in grain sorghum.	An evaluation of PPLO agglutination antigens for the detection of PPLO agglutinins in turkey sera, 1957-60.
Interrelated effects of environment and age of alfalfa and red clover seedlings on susceptibility to Pythium debary-anum.	The lymphofollicar nodules in turkey tissues associated with Mycoplasma gallisepticum infection. 2041 Dipping of hatching eggs for control of Mycoplasma galli-
	septicum. 2093
CANT TAXONOMY Complementary isolates of Phytophthora palmivora from cacao and rubber, and their taxonomy. 1589	Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO) 2172
A taxonomic study of the genus Sclerophthora. 2396	A previously unreported serotype of avian Mycoplasma.
LANT TEMPERATURE Rhizoctonia fragariae sp. nov. in relation to strawberry degeneration in Southwestern Ontario. 1546	Morphological studies of avian PPLO in semi-solid media.
LABT TRANSLOCATION The hull rot disease of almond and the pathway for translocation of a toxin involved in symptom development. 963	Cultivation of the infectious-synovitis-type pleuropneumonia -like organisms. 2267
Factors determining the rate of bean yellow mosaic virus transmission by the aphid Myzus persicae. 977	PLUMS Peach mosaic virus in horticultural plum varieties. 1425
Transmission of the ringspot virus of stone fruits from squash to squash by foliage contact. 1307	Toxicity and translocation characteristics of six fungicidal compounds in plum and prune trees. 2354
Translocation of dalapon in yellow nutsedge (Cyperus esculentus). 2407	PNEUMONIA XI pneumonia of pigs. 2043
The uptake, translocation and metabolism of simazine and atrazine by corn plants. 2428	POA The grass root-gall nematode found on annual bluegrass roots in Oregon. 1631
LANT WATER RELATIONS Water relations in banana plants infected with Pseudomonas solanacearum. 1441	POA PRATENSIS The effect of soil fertility on the development of Kentucky bluegrass diseases. 990
LANTATIONS The role of plant pathology in tropical plantation agricul-	Herbicides on bluegrass. 2412
ture. 1419	POD MOTTLE (BEANS) The growth curve of bean pod mottle virus during systemic
LANTING Thermotherapy of planting material. 1456	infection. 1333
Interrelations of row spacings, cultivations and herbicides for weed control in soybeans. 1715	POISONING Organic phosphorus compound poisoning in livestock. 1852
1713	Nitrite intoxication in cattle. 1864

The pathology of chicks fed histamine.

2150

POISONOUS PLANTS	
Industry toxicologists to discuss poisoning symptoms with medical groups. 2569	POTATORS Inhibitors of potato virus X in potato leaves with different types of virus resistance. 960
POISQNOUS PLANTS Toxicity of Helenium microcephalum (Smallhead sneezeweed). 2091	Relation of chlorogenic acid in potato to resistance to in- fection by Verticillium albo-atrum. 1107
POISONS Sporidesmin poisoning in the rat. Ichemical changes. 2140	Evaluation of multigenic field resistance of the potato to Phytophthora infestans in 10 years of trials Toluca, Merico.
POLLER Effects of pollens on fecundity and longevity of adult Scambus buolianae (Htg.) (Hymenoptera : Ichneumonidae).	Aphid transmission of potato virus A to the Katahdin variety. $$1193$$
856	Chemical control of Puccinia pitteriana on potatoes in Ecuador. 1270
POLLINATION Seed and pollen transmission of Prunus ringspot virus in buttercup squash. 949	Relation of histochemical tests for phenols to Verticillium wilt resistance of potatoes. 1366
POLYBUTENES Control of powdery mildew of cucumbers with polybutene emulsions. 1197	Epidemiological potentials of potato varieties in relation to late blight. 1535
POLYETHYLENE GLYCOL	Serological studies of a virus that produced spindle tuber in potatoes. 1536
Precipitation of plant viruses by polyethylene glycol. 2425	Yields and flavor of potatoes and carrots on plots receiving annual soil treatments.
POLYHEDROSES Stess and nuclear polyhedrosis in crowded populations of Trichoplusia ni (Hubner). 857	Weeds as carriers of two potatoe pathogens in Colorado.
Infection of the jack pine budworm, Choristoneura pinus Freeman, with a nuclear polyhedrosis virus of the spruce budworm, Choristoneura fumiferana (Clemens), (Lepidop-	a tractor-mounted potato sprayer designed for field plot studies. 2538
tera: Tortricidae). Progressive histochemical change in virus-infected fat body of the western oak looper. 864	POULTRY Abstracts of papers presented at the 9th annual western poultry disease conference, february 1, 1960, davis, california. 1814
POLYMERIZATION Changes in degree of polymerization of holocellulose during decay of sweetgum sarwood by white- and brown-rot fungi.	Chronology relating to use of diethylstilbestrol in poultry and meat animals.
2512 POLYMORPHISM	Observations on the incidence, pathology and aetiology of Spirocerca lupi infestation in Nyasaland. 1955
Dimorphism and interactions between the oak wilt fungus and associated fungi. 1315	Infection of an isolated intestinal loop by Newcastle disease virus. 1988
POLYMYXIB Use of pimaricin, penicillin, and polymyxin in isolating Phytophthora spp. from root tissues. 987	Pleuropneumonia-like organisms associated with synovitis in fowls. 2035
POLYPORUS TOMENTOSUS Red root and butt rot in a Georgia slash pine plantation. 1496	Propagation of hog cholera virus in tissue culture and its application to vaccine I. Propagation of the virus in tissue culture.
Artificial infection of small spruce roots with Polyporus	Killed and live vaccines plus management. 2068
tomentosus. 1574	Observations on avian aplastic anemia in Florida. 2069
POBCIEUS TRIFOLIATA Modification of immunity of Poncirus trifoliata to yellow- vein virus by the addition of vein-enation virus and	Is feed medication the answer to coccidiosis in poultry. 2075
susceptible tissue. 2381	Cage layer fatigue (cage paralysis). 2096
POPULATION Notes on the Volterra equations. 795	Influence of heat treatment on the number of ectopic lymphoid foci in chickens. 2113
POPULUS Cottonwood canker caused by Fusarium solani. 1428	Immunization against mycoplasma infections of poultry. 2156
POPULUS NIGRA Development of Fusarium canker of black poplars. 1006	Red spot in poultry. 2179
POPULUS TREMULOIDES Gloeosporium shoot blight and defoliation of trembling aspen. 1045	Report of the committee on nomenclature and reporting of diseases northeastern conference on avian diseases June 1960.
PORCINE ENTEROVIRUSES	Desiccated chicken sarcoma viable for twenty years. 2238
Studies on five porcine enteroviruses. 2053 POTASSIUM CHLORIDE	Sequential changes in the titer of Newcastle disease virus in tissues—a measure of the defense mechanism of the chicken.
The degradation of isolated microsomes from cucumber and corn seedlings. 2462	Comparison of the pathogenesis of Newcastle disease virus and influenza B in chicken embryos. 2273
POTASSIUM NITRATE Influence of vitamins and other compounds on the degree of infection of wheat by Puccinia graminis tritici. 1402	Preliminary trials with bithional against tapeworm infection in cats, dogs, sheep, and chickens. 2305

OULTRY FARM MANAGEMENT A review of piperazine and piperazine compounds as poultry ascaracides. 2084	PRECIPITIN TEST Preparation of cucumber mosaic virus antiserum for use in vector transmission studies. 1194
OGLIERY HATCHERIES Dipping of hatching eggs in erythromycin for the control of Mycoplasma. 2270	The diagnosis of infectious bronchitis of chickens by the agar gel precipitin test. 2036
COULTRY Action by poultry inspection to help reduce condemnation losses.	Differentiation of subtypes (variants) of foot-and-mouth disease virus by serologic methods Ii. Precipitin test in agar gel.
POWDERY MILDEW (BARLEY) Effect of liming of soil on barley powdery mildew. 1470	PREDACEOUS FUNGI Boological relationships of predacious fungi associated with the citrus nematode. 1660
CONDERY MILDEW (CUCUMBERS) Control of powdery mildew of cucumbers with polybutene emulsions. 1197	PREDACEOUS INSECTS The effect of low temperatures on some predacious phytoseiid mites, and on the brown mite Bryobia arborea M. and A 806
ONDERY MILDEW (PEACHES) Significance of morphological barriers and osmotic pressure in resistance of mature peach leaves to powdery mildew.	Laboratory and field observations on two predators of the pear psylla in british Columbia. 861
1476 OWDERY MILDEW (WHEAT) Studies on the germination of conidiospores of powdery mil-	A technique for maintaining acarine predator-prey populations. 2547
dew of wheat. 1153	PREGNANCY Immunization of sheep against ovine vibriosis. 1833
Studies on a pox disease of monkeys. II. Isolation of the etiologic agent. 2007	Nutritional muscular dystrophy in lambs- effect of administering selenium to pregnant ewes. 2022
Studies on a pox disease of monkeys. I. Pathology. 2235	Nutritional muscular dystrophy in lambs- importance of the ewe s diet at certain stages of gestation and lactation.
USE of root-knot resistant tobaccos to assess injury caused by root-lesion nematodes. 1632	PREPUCE Leptospires isolated from prepuce of boars. 2044
RATYLENCHUS BRACHYURUS A method for separation and sterilazation of Pratylenchus brachyurus from mixed populations of nematodes. 1635	PRESSURE Spiracular structure and water loss from Tribolium confusum
CONTROL OF SOIL-BORNE fungi and incidence of Pratylenchus	Jacq. and Sitophilus granarius (L.) under reduced pressures. 891
penetrans. 916 Evaluation of soil fumigants for the control of early	PREVENTIVE MEDICINE Prophylactic therapy against dirofilariasis in dogs. 2284
maturity wilt of potatoes on long island. 922 Relationship of meadow nematodes to Verticillium wilt of strawberries. 1007	PRINCE EDWARD ISLAND The barley jointworm, Harmolita hordei (Harr.) (Hymenoptera: Chalcidoidea), in Prince Edwards Island. 794
Interaction of Verticillium dahliae and Pratylenchus penetrans in tomato wilt.	PRISTIPHORA ERICESONII Developmental rates of larch sawfly (Pristiphora erichsonii (Htg.)) larvae in an insectary and in field shelters. 867
Nonpathogenicity of Pratylenchus penetrans to sterile low- bush blueberry seedlings. 1259	PROGESTERONE
Effect of some single element deficiencies on pathogenicity of Pratylenchus penetrans to pepper plants. 1336	The effect of diethylstilbestrol and progesterone on the growth of four mastitis-producing bacteria. 2047
Pathogenicity of a root-knot nematode (Meloidogyne incognita acrita) and a root-lesion nematode (Pratylenchus penetrans) on pepper (Capsicum frutescens).	PROPIONATES The action of propionate on wheat stem rust and sorghum head smut. 1403
Pathogenicity of Pratylenchus penetrans on strawberry and Ladino clover seedlings. 1608	PROTEIN HYDROLYSATES Field tests of some hydrolized proteins as lures for the apple maggot, Rhagoletis pomonella (Walsh). 1594
effect of Pratylenchus penetrans, Meloidogyne incognita acrita, and Meloidogyne sp. on Forsythia intermedia. 1611	PROTEINASES Safety of intravenous proteolytic enzymes (Varizyme) in
Relationship of Pratylenchus penetrans to roots of corn in New York.	PROTEINS 1779
Suitability of various cover crops as hosts for the lesion nematode, Pratylenchus penetrans.	Characteristics of proteinless mutants of tobacco mosaic virus. 1143
Penetration of roots of potato seedlings by Pratylenchus penetrans.	Changes in proteins and several enzymes in susceptible bean leaves by the bean rust fungus. 2501
Reaction of lesion nematodes, Pratylenchus penetrans, to cycloheximide and duazomycin A. 2349	PROTOZOA Bovine hepatitis associated with ruminal protozoa. 2063
PRATTLENCHUS SCRIBNERI Pathogenicity of Pratylenchus scribneri to crop plants.	PRUNE DWARF (CHERRIES) Variation among isolates of necrotic ringspot and prune dwarf viruses isolated from sour cherry. 1549
	PRUNES Prevention of Cytospora invasion of injured stems of prune trees with wound treatments. 1233

	N		

Toxicity and translocation characteristics of six fungicidal compounds in plum and prune trees. 2354 PRUNUS	PUCCINIA GRAMINIS TRITICI Overwintering capabilities of uredospores and mycelium of Puccinia graminis tritici in the Pacific Northwest. 1061
Relationships among Prunus viruses of the necrotic ringspot type. 994	Influence of vitamins and other compounds on the degree of infection of wheat by Puccinia graminis tritici. 1402
Affinities of viruses affecting fruit trees and raspberry. 1338 PRUNUS DOMESTICA	PUCCINIA HORDEI Inheritance of reaction to Puccinia hordei in barley. I. Genes for resistance among North American race different- iating varieties. 1580
Nutrient studies on Leucostoma persoonii and a Zythiaceae species pathogenic on Prunus domestica. 1117 PRUNUS MARALER	PUCCINIA RECONDITA Chemotherapeutic control of wheat leaf rust with phenyl-
The effect of single and multiple virus infection upon nuc- leic acid content in Prunus mahaleb seedlings. 1138	hydrazones. 1268 Wheat leaf rust resistance combinations. 1331
PSEUDOMONAS SAVASTANOI Serological and biochemical evidence of the similarity between Pseudomonas savastanoi and P. tonelliana. 1145	PUCCINIA SORGHI Studies on genetic control of rust reaction in Puccinia sorghi. 1010
PSEUDOMONAS SOLANACEARUM A study of the role of some nematodes in the incidence and severity of southern bacterial wilt of tomato. 913	Host ranges and races of the corn rusts. 1379 A second major gene locus in corn conditioning resistance to
Designation of races in Pseudomonas solanacearum. 1034	Puccinia sorghi. 1510
Strains of Pseudomonas solanacearum differing in pathogen- icity to tobacco and peanuts. 1288	PUCCINIA STAKMANII Factors influencing the telial and sporidial stages of Puccinia stakmanii. 1018
Water relations in banana plants infected with Pseudomonas solanacearum. 1441	PUCCINIA STRIIFORMIS Effects of preinoculation and postinoculation host temperatures on infection of wheat seedlings by Puccinia striifor-
PSEUDOMONAS SYRINGAE Mode of infection of sweet cherry by Pseudomonas syringae.	mis. 1131
1308	PUERTO RICO
PSEUDOPERONOSPORM HUMULI Factors affecting sporulation and infections by the hop downy mildew fungus, Pseudoperonospora humuli. 1155	A whitefly-transmitted mosaic of Rhynchosia minima and its relation to tobacco leaf curl and other virus diseases of plants in Puerto Rico. 939
Chemotherapeutic effects of streptomycin on establishment	Control of bamboo in Puerto Rico by herbicides. 1722
and progression of systemic downy mildew infection in hops. 1404	PULLORUM DISEASE Fourth annual meeting of the American Association of AvianPathologists. 1778
PSEUDOTSUGA MENZIESII A new species of Nepytia (Lepidoptera: Geometridae), of economic importance to Douglas fir in British Columbia. 813	Chick mortality and the contamination of yolks by members of the enterobacteriaceae. 2108
Botrytis sp. on Douglas fir seedlings. 1311	PUPAE Tryptophan and tyrosine metabolism in the pupa of papilionid
PSEUDOTUHERCULOSIS	butterflies. II The general pattern of tryptophan metabolism during the pupal stage of Papilio xuthus. 882
Serologic investigation of pseudotuberculosis in sheep. I Agglutination test. 2017	PUPAL CASES Taxonomy of cocoons and puparia, and their contents, of Ca-
PTERIDIUM Hatyl alcohol for bracken poisoning questioned. 1880	nadian parasites of some native Diprionidae (Hymenoptera). 802
PUBLIC HEALTH The impact of pesticides on public health and recreation. 2570	PURIFICATION Purification and serology of a virus associated with the grape yellow vein disease. 1478
PUBLIC OPINION Industry toxicologists to discuss poisoning symptoms with medical groups. 2569	PURPURA HEMORRHAGICA The aetiology of bovine petechial fever (Ondirt disease). 2259
The impact of pesticides on public health and recreation. 2570	PYRUVIC ACID Effect of fungicides on permeability of yeast cells to the pyruvate ion. 2485
PUCCINIA CARTHAMI Spore stages and life cycle of Puccinia carthami. 2457	PYTHIUM Techniques in isolation of pythiaceous fungi from soil and
PUCCINIA CORONATA Mutations for virulence in Puccinia coronata. 1329	diseased pineapple tissue. 980
Some factors affecting germinability of uredospores of Puc- cinia coronata. 2411	Effect of streptomycin and pimaricin on growth and respir- ation of Pythium spp. 1128
PUCCINIA GRAHINIS Isolates of oat stem rust race 6 virulent on variety Saia	A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots.
in Israel. 1354	PYTHIUM DEBARYANUM Interrelated effects of environment and age of alfalfa and
Inheritance of stem rust reaction in two durum varieties, Acme and Mindum. 1409	red clover seedlings on susceptibility to Pythium debary- anum. 1550
A synthetic hybrid of two varieties of Puccinia graminis. 1426	

		RAMS
YTHIOM ULTIMUM Determination of inoculum potential of infested soil.	RABIES Clinical sigus of rabies iu cattle.	1821
Respiratory activities of cell-free particles from Pythiu	992 Testiug aud marketiug of rabies vacciue, modified live m virus, chickeu-embryo origiu.	1828
ultimum, Rhizoctouia solaui, aud sugar beet seedliugs.	075 Diagnosis and incidence of rabies in domestic cats.	1846
Isolatiou of Pythium from soil particles.	297 Rabies of farm livestock iu Africa.	1981
32 The uptake of C14 and P32 from leaves by two species of leafhopper vectors.	Colostral autibody to rabies iu cattle vacciuated with E flury straiu of the virus. 843	HEP 2016
The effect of rust on the weight, growth rate, and P32	Isolatiou of Listeria mouocytogenes from foxes suspected having rabies. 118	of 2139
UAIL The efficacy of chemotherapeutic drugs in the coutrol of experimental ulcerative enteritis in quail. 2	RABIES VIRUS Testing and marketing of rabies vaccine, modified live virus, chicken-embryo origin.	1828
Susceptibility of Japauese quail (Coturuix coturuix japonica) to experimental infection with Haemophilus qalliuarum.	Resistance of the opossum to rabies virus. RADIATION 146 Acute myelogenous leukemia with histopathologic studies,	2195
Differentiation of quail broughitis virus and infectious	following total body irradiation of a dog.	2006
	261 Iouiziug radiation aud food hygieue.	2316
UAIL BRONCHITIS VIRUS The relatiouship between quail brouchitis virus aud chick embryo lethal orphau virus. 2	Physiological differences between a viruleut aud a weakl en viruleut radiatiou-iuduced strain of Erwiuia carotovora. 095	
Differentiation of quail brouchitis virus and infectious bronchitis virus by heat stability. 2	Quality of radiatiou inhibitory to sporulatiou of Alteru 261 aria tomato.	1- 2480
UANTITATIVE ANALYSIS Quautitative analysis of iuterference produced by related straius of TMV compared with uoniufectious TMV compoueuts		1772
UEBEC New apparatuses aud reariug techuiques for the study of wireworms (Coleoptera: Elateridae) iu organic soils of	RADIOACTIVE TRACERS The uptake of C14 and P32 from leaves by two species of leafhopper vectors.	843
	549 Effect of gibberellic acid ou development of hypocotyl lesious caused by Rhizoctonia solaui ou Red Kiduey beau.	1473
A study of uoniusect galls ou Carya, Quercus, aud Salix.	942 Absorption and distribution of EPTC- S35	2473
Inoculation of oaks with Uruala craterium (Schw.) Fr. produces caukers ideutical to Strumella cankers.	The use of fluoresceut tracers to study distribution of soil applied herbicides.	2561
Control of blackjack oak by basal spraying with 2,4,5-T.	 RADIOISOTOPES 716 Effect of gibberellic acid ou development of hypocotyl lesions caused by Rhizoctonia solani on Red Kiduey bean. 	-
UERCUS FALCATA LEUCOPHYLLA Site affects rate of decay iu cherrybark oak. 1	429 RADIOLOGY	1473
UERCUS PHELLOS New host relationships for some members of the genus Pome $1. \ $	Studies of the dention of sheep, IVRADIOLOGICAL studies	
UERCUS PRINUS Sporulation of Ceratocystis fagacearum in wounds on infected oak trees. 1	RADISHES Relatiouship betweeu turuip mosaic virus aud the radish virus of Japan.	P 1551
UINONES Naturally occurring quiuoues iu wheat and barley aud thei toxicity to loose smut fungi. 1	Races of clubroot in North America. r 291 RADIUM	1570
ABBITS Noucellular bactericidal factors in iuflammatory exudate	Eye chauges in beagles followiug iutraveuous iujectiou o radium 226.	1805
	RADOPHOLUS SIMILIS 769 Growth reduction of citrus seedlings by Fusarium solani influenced by the citrus nematode and other soil factors	5.
The effect of an induced state of leukopenia ou the uteri bactericidal activity iu rabbits.	ue 806 Longevity of Radopholus similis under field conditions.	928
Mink and rabbit diseases important.	841	1661
	of Comparison of free amiuo acids and amides in roots of healthy and Radopholus similis-infected grapefruit seedlings.	2479
The effect of green feed and ascorbic acid upou single experimental infections of Trichostrongylus axei (Cobbold 1879) in the laboratory rabbit.	RAMS 116 Neural mechanisms in sexual behavior. III. Preputial mus cles and their reflexes in bull calves and rams.	s - 180 1

RAPESEED	
RAPESEED Powdery mildew - a new disease of rapeseed and mustard in India. 1237	A relationship between vitamin B12 and reproduction, and a method of diagnosing vitamin B12 deficiency in individual swine. 193
RASP LEAF (CHERRIES) Mechanical transmission of two strains of sweet cherry rugose mosaic, mild rusty mottle, and rasp leaf viruses.	Some observations of the propagation of infectious laryngotracheitis virus in tissue culture. 224
967	Reproductive potential of Cyperus esculentus by tubers.
RASPBERRIES Insect and graft transmissions of alpha- and beta-curl viruses of raspberries. 1060	REPRODUCTIVE ORGANS Propagation of hog cholera virus in tissue culture and its application to vaccine I. Propagation of the virus in
RATS Ectoparasites from Rattus norvegicus (exerleben) on Iwo Jima, volcano islands. 793	tissue culture. 203
Studies of the effects of chlortetracycline, vitamin E, and Vitamin K on the nutrition of the rat. II. Reproduction.	Nature and effects of radioactive fallout on the farm. 177 RESISTANCE
Sporidesmin poisoning in the rat. Ichemical changes.	Strains of, resistance to, and antagonists of Sclerotium rolfsii.
RATTLE DISEASE (TOBACCO) Direct recovery of tobacco rattle virus from its nematode vector. 1091	RESPIRATION Respiratory activities of cell-free particles from Pythium ultimum, Rhizoctonia solani, and sugar beet seedlings. 107
RECREATION The impact of pesticides on public health and recreation.	RESPIRATORY DISEASES Mink and rabbit diseases important. 184
2570	Killed and live vaccines plus management. 206
RED CLOVER Fungi associated with red clover roots in West Virginia. 946	Haemophilus infections in chickens. II. The pathology of the respiratory tract.
Nutrition in relation to root and top growth of Trifolium pratense and severity of Fusarium root rot. 1052	Control of chronic respiratory disease. IV. The effect of a low-calcium diet and high concentrations of chlorotetracycline on the isolation of Mycoplasma from
Virus-fungus relationships in a root-rot complex in red clover. 1508	experimentally infected chicks. 226 RESPIRATORY SYSTEM
Interrelated effects of environment and age of alfalfa and red clover seedlings on susceptibility to Pythium debary-anum. 1550	Haemophilus infections in chickens. II. The pathology of the respiratory tract.
Resistance in red clover to five viruses. 1564	RRTICULUM Experimental production of frothiness of reticuloruminal
Red clover: A new host for potato virus X. 1573	contentsits significance as a possible cause of bloat. 227
Similarity of species of fungi isolated from roots of alfal- fa and red clover. 1590	RHAGOLETIS POMONELLA (WALSH) Field tests of some hydrolized proteins as lures for the apple maggot, Rhagoletis pomonella (Walsh). 159
Nematodes associated with red clover growing on favorable and unfavorable sites.	RHINOSPORIDIOSIS
A physiological disturbance in animals resulting from inges- tion of Rhizoctonia leguminicola infested red clover for-	RHIZOCTONIA
Factors influencing survival of red and white clover plants	Bacterial necrosis and isolation frequency of Rhizoctonia from rhizospheres under several cropping sequences. 96
exposed to low temperatures. 2450 REDPEPPERS (VEGETABLE).	A parasitic Rhizoctonia on species of Thallophytes (al- gae), Bryophytes, and Pteridophytes.
Fruit breakdown of peppers following late season infection with tobacco mosaic virus.	Cellulase and the Rhizoctonia disease of bean. 121
Genetics of response in pepper to three strains of potato virus Y. $$1495$$	Activity of Rhizoctonia in soil as affected by carbon di- oxide. 138
Pathogenicity of a root-knot nematode (Meloidogyne incog- nita acrita) and a root-lesion nematode (Pratylenchus pene- trans) on pepper (Capsicum frutescens). 1604	RHIZOCTONIA SOLANI Some considerations of strain variation in cotton seedling pathogens. 95
Delayed preemergence weed control in seeded tomatoes and peppers. 1726	The effect of gibberellic acid on the parasitism of Rhizoc- tonia solani on beans and cotton. 97
RENIFORM NEMATODES Susceptibility of cotton and relatives to reniform nematode in Louisiana. 1376	Chemical control of Rhizoctonia brown patch of bentgrass. 103 Respiratory activities of cell-free particles from Pythium
REPRODUCTION	ultimum, Rhizoctonia solani, and sugar beet seedlings.
Growth, reproduction and longevity in one biotype of the pea aphid, Acyrthosiphon pisum (Harr.) (Homoptera: Aphididae).	Adapted tolerance to organic fungicides by an isolate of Rhizoctonia solani. 109
Studies of the effects of chlortetracycline, vitamin E, and Vitamin K on the nutrition of the rat. II. Reproduction. 1799	Tolerance to PCNB and pathogenicity correlated in natural occurring isolates of Rhizoctonia solani.

Inoculum potential relationships of Rhizoctonia solani

			ROOT R
measured with soil microbiological sampling tubes.	1204	RINDERPEST	1818
Tolerance among naturally occuring isolates of Rhizocto solani to pentachloronitrobenzene.	onia 1250	A rapid serologic test for rinderpest. Rinderpest in pigs of european origin.	1842
Infection of seedling cotton by an isolate of Rhizocton		Rinderpest.	1920
solani.	1254	A note on the prophylactic vaccination of wild animals.	
Losses caused by Rhizoctonia solani borne on bean seed.	1271		2005
Effect of gibberellic acid on development of hypocotyl lesions caused by Rhizoctonia solani on Red Kidney bear	n.	RING SPOT (PRUIT) Transmission of the ringspot virus of stone fruits from squash to squash by foliage contact.	m 1307
RHIZOMES	1473	Shock symptoms of the stone fruit ringspot virus compleapricot.	ex in 1360
Characteristics of Johnsongrass rhizomes.	2413	Preservation of activity of some fruit viruses.	1362
Morphology and development of Johnsongrass plants from seeds and rhizomes. An in vitro method of evaluating the activity of buds of		RING SPOT (TOBACCO) Interrelationship of tobacco ringspot virus and Meloidgyne incognita acrita in nematode resistant and suscep	tible
rhizomes of quackgrass (Agropyron repens).	2506	soybeans. Effect of deflowering and tobacco ringspot virus on the	917 e oc-
Effects produced in cotton fiber by Rhizopus, a boll ro	ot 1390	currence of Cercospora kikuchii on soybean.	1003
RHIZOPUS NIGRICANS Effects of 2,6-dichloro-4-nitroaniline on Rhizopus and		Susceptibility of certain convolvulaceae to internal control tobacco ringspot, and cucumber mosaic viruses.	1247
brown rot of peaches.	2341	Inheritance of resistance to tobacco ringspot and cucu mosaic virus in black cowpea crosses.	mber 1264
RHIZQSPHERE Reproduction of Verticillium in the rhizospere and subs quent root infection of resistant and susceptible mint	se-	Soil transmission of tobacco ringspot virus.	1286
species.	1166	Eucharis mottle strain of tobacco ringspot virus.	1324
Growth response of several isolates of Fusarium in rhiz spheres of host and nonhost plants.	zo- 2434	Soil transmission of the tobacco ringspot virus in the Grande valley.	Rio 1439
BHYNCHOSPORIUM SECALIS Effect of alternate wetting and drying on sporulation a survival of Rhynchosporium secalis.	and 1151	A rapid method for purifying tobacco ringspot virus and morphology by electron microscopy and negative staining	
RIBOFLAVIN Leptospirosis in hamsters on diets containing various l of riboflavin.	levels 2215	RING SPOT (TOMATOES) Isolation and identification of tomato ring spot virus associated with rose plants and rose mosaic virus.	1313
RIBONUCLEASE Inactivation of alfalfa mosaic virus by pancreatic ribolease.	onuc- 988	Relationship between tomato ringspot and peach yellow mosaic viruses.	bud 1337
Distribution of ribonuclease in subcellular fractions		RINGWORM Zoophilic microsporum.	1896
treated, wounded, and TMV infected Pinto bean leaves.	2445	Microsporum infections in cats.	1927
RIBONUCLEIC ACID Biosynthesis of infections tobacco mosaic virus ribonuc acid in a cell-free medium.	cleic 1056	RIO GRANDE VALLEY Soil transmission of the tobacco ringspot virus in the Grande valley.	Rio 1439
Inactivation of tobacco mosaic virus infectious ribonuc acid by HgCl2 and the reversal of this effect with cysteine.		RONNEL Lack of larvacidal action of Ronnel and Bayer 21-199 against migrating Ascaric suum in baby pigs.	2312
RICE		ROOT EXCRETIONS	
Local infection of rice florets by the rice kernel smut organism, Tilletia horrida.	t 1185	Effect of root exudates on germination of conidia and a sclerotia of Verticillium albo-atrum inhibited by the fungistatic principle.	
Electronmicrographs of rice dwarf and wound tumor virus ultrathin sections of their respective arthropod and plhosts.		ROOT HAIRS Effect of 3-amino-1,2,4-triazole and L-histidine on ratelongation of root hairs of Agrostis alba.	te of 2409
3,4-dichloropropionamilide for control of barnyardgrass rice.	s in 1738	ROOT KNOT (COTTON) Root knot and the seedling disease complex of cotton.	2403
RICE HULLS Influence of rice hull soil amendments on soil microfic	oral	decide.	1616
populations.	920	ROOT KNOT (TOMATOES) Stability of pathogenicity of B biotypes of the root-knowned Moledany of the root-knowned to the control of the con	
RICKETTSIAL DISEASES Rickettsial infection (heartwater) in sheep and goats i Sudan.	in the 2260	nematode Meloidogyne incognita on tomato. Effect of the addition of organic amendments to soil or	
RIPT VALLEY PEVER	1027	knot of tomatoes. ii. relation of soil temperature, modand pH.	isture 2495
Pathogenesis of rift valley fever in lambs. Rift valley fever.	1837 1921	ROOT ROT Nutrition in relation to root and top growth of Trifoli pratense and severity of Pusarium root rot.	ium 1052

Early references to Armillaria root rot in California.

ROCT ROT (BEANS)

1467	Pathogenicity of a root-knot nematode (Meloidogyne incog- nita acrita) and a root-lesion nematode (Pratylenchus pene-
ROCT ROT (BEANS) The influence of nitrogen on the root disease of bean caused	trans) on pepper (Capsicum frutescens). 1604
by Fusarium solani f. phaseoli. 940	ROOTS Fungi associated with red clover roots in West Virginia.
Preconditioning and placement of organic materials in control of bean root rot.	946
Influence of barley straw on the early stages of pathogenesis in Fusarium root rot of bean.	Penetration and infection of pea roots by zoospores of Aphanomyces euteiches. 972
Interrelation of bacterial necrosis of Fusarium to crop rotation, isolation frequency, and bean root rot. 1144	Use of pimaricin, penicillin, and polymyxin in isolating Phytophthora spp. from root tissues. 987
Influence of glucose, cellulose, and inorganic nitrogen com- pounds on biological control of bean root rot. 1202	The effect of metabolites produced by Fusarium oxysporum f. lycopersici (Sacc.) Snyd. and Hans. on root elongation of tomato seedlings.
Effect of host and nonhost plants upon populations of Thielaviopsis basicola in soil. 1219	Increased bacterial populations in soybean roots due to phosphorus. 1068
Effect of phytotoxic substances from decomposing plant residues on root rot of bean.	Seasonal population of rhizosphere fungi associated with corn roots.
ROCT ROT (CITRUS) Evaluation of tolerance to root rot caused by Phytophthora	Dynamics of the mycoflora of subterranean parts of winter wheat in the dryland area of Washington. 1134
parasitica in seedlings of citrus and related genera. 1359 Oxygen requirement of three root-rotting fungi in a liquid	Inhibition of callus and root growth in tomato stems excised from plants inoculated with a combination of tobacco mosaic virus and potato virus X. 1141
medium. 2478 BOCT ROT (CONIFERAE) Cylindrocladium root rot of conifer seedlings in Minnesota.	Reproduction of Verticillium in the rhizospere and subsequent root infection of resistant and susceptible mint species.
984	Root grafting of city-planted American elms. 1235
ROCT ROT (CORN) A root rot of corn caused by Helminthosporium pedicellatum. 1139	A variant culture of Xanthomonas malvacearum obtained from weed roots. 1274
Effect of host and nonhost plants upon populations of Thielaviopsis basicola in soil.	Susceptibility of pear roots to Phytophthora. 1310
ROOT ROT (PBAS). Increased susceptibility to root rots in virus infected	Histology of roots of susceptible and resistant varieties of onion in relation to the pink root fungus. 1365
peas. 1263 Effect of soil temperature, host variety, and fungus strain	Relation of vascular occluding reactions in banana roots to pathogenicity of root-invading fungi. 1442
on Thielaviopsis root rot of peas. 1266	Necrotic symptoms of tobacco necrosis virus in roots.
Aphanomyces root rot of peas as affected by organic and mineral soil amendments.	A selective antibiotic medium for isolation of Phytophthora and Pythium from plant roots. 1483
ROOT ROT (PINUS ECHINATA) Fomes annosus root rot of shortleaf, loblolly, and slash pine in Arkansas. 1453	Thielaviopsis basicola as a citrus root pathogen. 1487
ROOT ROT (PINUS TARDA):	Anatomical studies of soybean roots artificially inoculated with Heterodera glycines.
Fomes annosus root rot of shortleaf, loblolly, and slash pine in Arkansas. 1453	Nematodes in nursery plants in Pennsylvania. 1633
ROCT ROT (RED CLOVER) Virus-fungus relationships in a root-rot complex in red clover. 1508	Attraction of parasitic nematodes by plant root emanations. 1653
ROOT ROT (SAFFLOWER)	Survival of root-knot nematodes in excised grape roots in moist soil fumigated with ethylene dibromide. 1654
Selective pathogenesis within Phytophthora drechsleri. 1398	Growth of ironweed as affected by mowing and storage root removal.
FOCT NOT (SOYBEANS) Fusarium roct rot of soybean. 1106	Influence of dieldrin and methyl bromide soil treatments on subsequent populations of stylet-bearing nematodes associat-
ROCT ROT (WHEAT) Bffect of host and nonhost plants upon populations of Thielaviopsis basicola in soil. 1219	ed with roots of Ladino clover. 2344 Root moisture extraction profiles of various weeds. 2443
ROOT-KNOT NEMATODE Effect of temperature on growth of root-knot nematodes in	Anatomical view of the life history of the strawberry root- let. 2467
soybeans and tobacco. 1645	A root observation box and tecniques for studying infection
Toxicity of some halogenated hydrocarbon mixtures to the citrus and root-knot nematode. 2343	and pathogenesis by nematodes. 2540 ROOTSTOCK
ROQT-KHOT NEMATORES Relationship of root-knot nematodes to the development of Fusarium wilt in the sweetpotato. 1120	Behavior of pear decline disease on different stock-scion combinations. 1583
Leaf galls on Siderasis fuscata caused by the root-knot nematode, Meloidogyne incognita incognita. 1224	ROOTSTOCKS Susceptibility of certain citrus rootstocks to Thielaviopsis basicola. 1067

A factor in root sap of citrus rootstocks associated wiresistance to citrus nematode.	ith 1154	Disease development, disease intensity, and carbohydrate levels in rusted bean plants.	51 5
ROSA Control of rose black spot with fungicides.	1019		
ROT (APPLES)	1019	Changes in proteins and several enzymes in susceptible be- leaves by the bean rust fungus.	50 1
Apple rot caused by Pyrenochaeta mali n. sp.	1400	RUST (CORN) Studies on genetic control of rust reaction in Puccinia	010
ROT (GLADIOLUS) Penicillium core rot of gladiolus.	1499		010 3 7 9
ROI (STRAWBERRIES) The role of associated fungi in prevention of Botrytis of strawberries.	rot 935	A second major gene locus in corn conditioning resistance	
ROT (TOMATOES) Etiology of tomato fruit rot in the Red River walley of	f	Comparative pathology of three tropical corn rusts.	57 2
Texas.	1064	The influence of storage conditions on the longevity of urediospores of Puccinia polysora Underw. and Puccinia	
Mycosphaerella fruit rot of watermelon.	1225	sorgi Schw. 2	318
ROTYLENCHULUS RENIFORMIS New hosts and crop plants resistant to the remiform new tode.	na- 1609	The nature of locus Rp1 conditioning resistance to rust in corn.	n 484
ROUS SARCOMA		RUST (FLAX) Linkage of genes conditioning resistance to rust in flax.	
Rous sarcoma and its helper viruses. (a review).	2135		100
ROUS SARCOMA VIRUS Rous sarcoma and its helper viruses. (a review).	2135	RUST (GRAIN) The potential value of synthetic tolerant or multiline value ieties for control of cereal rusts in North America.	r- 030
RUBBER Complementary strains of Phytophthora palmivora from Ceylon rubber.	1334	RUST (PINUS) Stalactiform rust on jack pine.	996
Complementary isolates of Phytophthora palmivora from cand rubber, and their taxonomy.	1589	RUST (SAFFLOWER) The control of seed-borne safflower rust by steam.	95 9
RUFLENE Anthelmintics for ruminants. II. Anthelmintic activity toxicity of ruelene in sheep.	and 1787	Hypocotyl reaction to rust infection as a measure of resistance of safflower.	s- 414
Incidence of parasites in calves in Hawaii and the treament of Cooperia punctata, with special reference to the efficacy of ruelene.		RUST (WHEAT) Influence of vitamins and other compounds on the degree of infection of wheat by Puccinia graminis tritici.	f 402
RUGOSE MOSAIC (CHERRIES)		RYE Storage of fungi in seeds of small grains. 12	2 7 5
Mechanical transmission of two strains of sweet cherry gose mosaic, mild rusty mottle, and rasp leaf viruses.	ru- 967	SAFETY EDUCATION	555
RUMEN		SAFFLOWER	
Rumen magnets reduce hardware disease in cows.	1993	Selective pathogenesis within Phytophthora drechsleri. 1:	398
AND ANTIS Anthelmintics for ruminants. I. Studies on the toxicity and efficacy of Bayer 21-199 as an anthelmintic.	7 1786	Hypocotyl reaction to rust infection as a measure of resistance of safflower.	s- 414
Anthelmintics for ruminants. II. Anthelmintic activity toxicity of ruelene in sheep.	and 1787	A new form of Fusarium oxysporum.	479
Metabolic aspects of ruminant ketosis.	2240	Spore stages and life cycle of Puccinia carthami.	457
Experimental Trichostrongylosis (axei) in lambs, with a discussion of recent research on this disease in rumina	ì	SALIX A study of noninsect galls on Carya, Quercus, and Salix.	942
RUSSET RING (APPLES)		SALMONELLA BACTERINS Notes on Salmonella infections in animals in Ghana. 19	999
Green mottle virus produces russet ring symptoms on appropriate.	1278	The sensitivity to chemotherapeutic agents of salmonellae	098
RUST (BEANS) Relations of disease development and intensity to carbo drate levels in rusted bean plants.	hy- 1002	Incidence of Salmonella in the hog colon as affected by handling practices prior to slaughter.	168
Heat therapy of bean rust.	1047	SALMONELLOSIS	
The effect of rust on the distribution of C14-containing compounds in bean.	ng 10 51		956
The effect of rust on the weight, growth rate, and P32 content of bean.	1118		964
Longevity of urediospores of race 33 of Uromyces phased var. phaseoli in storage.	1312		975
Storage viability of bean rust uredospores.	1356	Therapeutical experiments with a new nitrofuran compound (Tiafur) in salmonellosis of chicks.	083
Heat adaptation in a rust and a virus.	1466	Studies on Salmonella contamination of environment and	

	20 DO PCT	INDEA	
SANDY SOILS			
product of rendering plants.	2320	rolfsii.	1284
Salmonella species contaminants in three animal by-prod	ucts. 2321	Control of Sclerotium rolfsii with chemicals.	1350
SANDY SOILS Black root rot in Florida sandhills.	1417	Physiology of Sclerotium rolfsii, with emphasis on para sitism.	135 1
SANITATION Incidence of Salmonella in the hog colon as affected by		SCOURS Observations on calf diseases in Kenya. Part II. Calf scours:coli-bacillosis of calves, with special reference vaccination.	
handling practices prior to slaughter. SAPROPHYTES Saprophytic growth of Fusarium oxysporum f. niveum in so		SCRAPIE Furthur experiments on the comparative potency of tissuextracts from mice infected with scrapie.	1962 ie 1905
SARCOMA Bilateral feline embryonal sarcoma.	1832	Nitrogenous constituents of serum and urine in normal a scrapie sheep.	
Desiccated chicken sarcoma viable for twenty years.	2238	Free and esterified cholesterol in the cerebrospinal fl	
SARCOSPORIDIOSIS New waterfowl host records for Sarcocystis rileyi and a		of goats affected with experimental scrapie. Cultural characters of scrapie mouse brain.	2024
review of sarcosporidiosis in birds.	2223	SEASONAL VARIATION	2232
SASKATCHEWAN The alfalfa plant bug, Adelphocoris lineolatus (Goeze) : northern Saskatchewan.	in 852	Seasonal variation of larval emergence from cysts of the soyboan cyst nematode, Heterodera glycines.	ne 1649
An ecological study of lens- and globe-podded hoary creatin Saskatchewan.	sses 1698	SEDATIVES SU-9064, a water-soluble tranquilizer for handling broi and replacement pullets.	lers 1947
SCAB (APPLES) Phloridzin-its metabolism and role in resistance to Venia inaequalis, incitant of apple scab.	tur- 1173	SEED COATS Pigmentation of soybean seed coats associated with bact dnnleavy, j.	eria. 1070
Effect of repeated applications of dodine and of captan apple scap foliage lesions.	on 1316	SEED DORMANCY Breaking wild oat dormancy with gases at high pressure.	
Apple scab II. effect of serial applications of fungicion on leaf lesions on previously unsprayed trees.	des 1445	Breaking dormancy in seeds of Cuscuta approximata.	1708 2504
Apple scab III. Effect of serial applications of fungi- cides on leaf lesions on previously unsprayed treesi: hibition of conidial germination, removal(suppression) the organism, and subsequent development of late termin	n - of al	SEED GERMINATION Rapid germination as a viability test for seed of Arceu bium spp.	ntho- 1009
infection.	1491	Studies on the germination of conidiospores of Botrytis cinerea.	11 58
SCABIES Cattle scabies and mange reported at 1961 livestock show	ws. 2280	The effect of grape washings on the germination of spor fungi associated with bunch rot of grapes.	es of 1160
SCARABAEIDAE Observations on the incidence, pathology and aetiology of Spirocerca lupi infestation in Nyasaland.	of 1955	Factors influencing germ tube development in conidia of Ceratocystis ulmi.	1163
SCHISTOSOMA Vesical schistosomiasis in the domestic pig.	2141	Apple scab III. Effect of serial applications of fungi- cides on leaf lesions on previously nnsprayed treesi hibition of conidial germination, removal(suppression) the organism, and subsequent development of late termin	n- of
SCHISTOSOMIASIS Vesical schistosomiasis in the domestic pig.	2141	infection.	1491
scion		Breaking wild oat dormancy with gases at high pressure.	1708
Behavior of pear decline disease on different stock-sci- combinations.	on 1583	The influence of temperature on the germination of wild seeds.	oat 2397
SCLEROTIA Ultrastructure of microsclerotia of Verticillium albo- atrum.	1149	Comments on the moisture requirements of fungus germina	tion. 2432
Sclerotium formation by Helminthosporium hawaiiense.	1444	Breaking dormancy in seeds of Cuscuta approximata.	2504
SCLEROTINIA PRUCTICOLA Induced tolerance to fungicides in three species of fungi	gi. 1505	SEED TREATMENT Mitigation of Pusarium wilt symptoms of tomato seedling seed inoculation with a species of Cephalosporium.	s by 1012
Toximetric studies of fungicides against the brown rot canisms, Sclerotinia fructicola and S. laxa.	org- 2373	Vapor action of organic mercnrials against seed-horne c diseases.	ereal 1092
SCLEROTINIA LAXA Toximetric studies of fungicides against the brown rot		Breaking dormancy in seeds of Cuscuta approximata.	2504
anisms, Sclerotinia fructicola and S. laxa. SCLEROTIUM ROLFSII	2373	SEED VIABILITY Moisture content, mold invasion, and seed viability of ed soybeans.	stor- 1530
Some gaps in our knowledge of Sclerotium rolfsii. Sclerotium rolfsii, history, taxonomy, host range, and o	1187 dis-	SEED-BORNE PLANT DISEASES Seed-borne aspects of Diaporthe phaseolorum in soybean.	
tribution.	1226		1063

Vapor action of organic mercurials against seed-borne cereal

Strains of, resistance to, and antagonists of Sclerotium

PAGE 160

SEROLOGICAL TESTS 1092 diseases. corn seedlings. 2462 Kabatiella caulivora, a seed-borne pathogen of Trifolium

incarnatum in Oregon. seedlings.

Anthracnose of Desmodium in Georgia.

Relation of seed- and soil-borne inoculum to epidemiology of angular leaf spot of cucumber in wisconsin.

Some considerations of strain variation in cotton seedling pathogens. 956

Cylindrocladium root rot of conifer seedlings in Minnesota

The effect of infection by Helminthosporium carbonum on some CO2 fixation and other enzymes in corn seedlings.

The effect of metabolites produced by Fusarium oxysporum f. lycopersici (Sacc.) Snyd. and Hans. on root elongation of tomato seedlings.

Seedling versus mature plant reactions of wheat to stripe 1013

Symptom retardation of Fusarium wilt of tomato seedlings by a Cephalosporium species.

Expression of the monogenic chlorotic-lesion resistance to Helminthosporum turcicum in corn seedlings. 1126

Effects of preinoculation and postinoculation host temperatures on infection of wheat seedlings by Puccinia striifor-1131

The effect of single and multiple virus infection upon nucleic acid content in Prunus mahaleb seedlings. 11 1138

Inheritance of chlorotic-lesion resistance to Helminthosporium turcicum in corn seedlings.

Evaluation of tolerance to root rot caused by Phytophthora parasitica in seedlings of citrus and related genera. 1359

Phytophthora cinnamomi associated with Lawson cypress mortality in Louisiana. 1408

Inoculating barley seedlings with Ustilago nuda and wheat seedlings with U. tritici. 1518

Duration of protective activity in wheat seedlings of var ious compounds against stem rust. 1531

Barley seedling response to covered smut infection. 1559

Pathogenicity of Pratylenchus penetrans on strawberry and 1608 Ladino clover seedlings.

Influence of soil-oxygen diffusion rates and temperature on the citrus mematode and sweet orange seedlings. 1612

Root knot and the seedling disease complex of cotton.

Influence of Tylenchulus semipenetrans on the growth and chemical composition of sweet orange seedlings in soils of various exchangeable cation ratios. 1659

Host range of Tylenchorhynchus claytoni on some forrest nursery seedlings. 1668

A technique for controlled exposure of emerging grass seedlings to soil-active herbicides. 1702

Response of cotton seedlings to combinations of preemergence herbicides and systemic insecticides. 2335

Toxicity of simazine to seedling oat plants. 2367

Biochemical changes in seedlings of bean infected with Colletotrichum lindemuthianum.

Histology of Cronartium fusiforme in slash pine seedlings.

The degradation of isolated microsomes from cucumber and

Comparison of free amino acids and amides in roots of healthy and Radopholus similis-infected grapefruit

2479

Cultivated soil. longevity of seeds of wild oats, winter rye, and wheat in. 929

Seed and pollen transmission of Prunus ringspot virus in buttercup squash.

1021 An antibacterial substance from cauliflower seeds.

Separation of certain stone fruit viruses in Mountmorency cherry seed.

Exudation patterns from bean seeds and hypocotyls and their effect on Fusarium solani f. phaseoli. 1127

Internal microflora of stored soybean seeds. 1148

Relation of seed position and pod location to tobacco ring-spot virus seed transmission in soybean. 1363

The influence of concentration of fumigant and time of exposure on the killing of dormant imbibed seeds. 1703

The influence of temperature on the germination of wild oat 2397

Morphology and development of Johnsongrass plants from seeds and rhizomes. 2463

SELENIUM

Nutritional muscular dystrophy in lambs- effect of adminis-tering selenium to pregnant ewes. 202

Prevention of white muscle disease in lambs by oral and subcutaneous administration of selenium. 2231

Carbon tetrachloride poisoning of ewes on a low selenium 2357 ration.

SEPTORIA LINICOLA

Mode of action of Septoria linicola. 1522

SERODIAGNOSIS

Research note- A rapid macroscopic plate agglutination test for Newcastle disease- A preliminary report. 215 2159

Isolation and serologic typing of avian pleuropneumonia-like organisms (PPLO).

Field trial with the complement-fixation test for anaplasmosis in a herd free of clinical evidence of infection.

SEROLOGICAL TESTS

16 16

Serological and biochemical evidence of the similarity between Pseudomonas savastanoi and P. tonelliana. 1145

Identification of two citrus virus diseases by serological 117.5 agglutination.

Serological evidence that Olpidium zoospore; carry tobacco

Purification and serology of a virus associated with the grape yellow vein disease. 1478

A rapid serologic test for rinderpest. 1818

Encephalomyelitis of swine caused by a haemagglutinating virus. III. Serological studies.

Agar gel diffusion studies with a mucosal disease of cattle serological relationship between a mucosal disease and swine fever.

Serologic survey for infectious bovine rhinotracheitis and bovine viral diarrhea antibodies. 20 2042

A study of infectious laryngotracheitis virus. I. Comparison of serologic and immunogenic properties.

2245

SERONUCOID

EROMUCOID Seromucoid levels in normal and hospitalized domestic a	n đ	2023
exotic animal species.	1796	Resistance to haemonchosis in sheep following phenothiazine treatment of a previous infestation. 2025
ERUB Detection of bovine tuberculosis by complement-fixation test.	1840	Neuropathology of ovine and bovine toxoplasmosis. 2059
Nitrogenous constituents of serum and urine in normal as scrapic sheep.		The kinetics of magnesium distribution within the sheep. 2097
Serum enzyme changes in lambs with experimentally-induce acute muscular dystrophy.	ed 1957	Studies of the dention of sheep, IVRADIOLOGICAL studies from investigations into the shedding of permanent incisor teeth by hill sheep. 2103
Serum transaminase in the blood of lambs given prevention treatments for white muscle disease.	ve 2049	Effects of certain antibiotics in the treatment of vibriosis in sheep. 2110
Serum protein-bound iodine concentrations in cows, with particular reference to hypomagnesaemia.	2099	Experimental strongyloidiasis in sheep and goats. IV. Migration of Strongyloides papillosus in lambs and accompanying pathologic changes following percutaneous
${\tt Agglutinins}$ for 11 types of leptospires in serum from catle in northeastern Texas.	at - 224 7	infection. 2120 The use of mice for the assay of erythropoietin in sheep
ERUM WEUTRALIZATION TEST A simplified technique for the serum-neutralization test infectious bronchitis.	t in 2031	plasmas. 2142 Hypocalcemia in ewes - a case report. 2147
An in vitro neutralization test with avian	2031	Isolation of the virus of enzootic abortion of ewes from
encephalomyelitis virus (AEV)	2174	california and oregon sheep. 2153
COmpetition of annual weeds and sugar beets.	1761	The use of the haemagglutination technique for the detection of antibodies in gastro-intestinal nematode infections in sheep. 2162
EX BEHAVIOR Neural mechanisms in sexual behavior. III. Preputial mus cles and their reflexes in bull calves and rams.	s- 1801	Evaluation of cyanacethydrazide for removal of lungworms from naturally infected sheep. 2188
HEEP The distribution of the virus of Aujeszky s disease in experimentally infected sheep.	1763	A killed vaccine against paratuberculosis (Johne s disease) in sheep. 2192
Anthelmintics for ruminants. II. Anthelmintic activity a toxicity of ruelene in sheep.		Ovine viral abortion - incidence and distribution in %daho. 2193
Multicatheterization of blood vessels of sheep for metal		The distribution of histamine in the sheep stomach. 2204
studies of insecticides.	1792	The distribution of copper in bovine and ovine foetuses, with reference to their age and maternal liver copper
Tuberculosis in domestic animals other than cattle. Immunization of sheep against ovine vibriosis.	1827 1833	concentrations. 2241 Chronic copper toxicosis in sheep fed dry feed. 2253
Zoonotic aspects of vibriosis.	1849	Chronic copper toxicosis in sheep fed dry feed. 2253 Studies on the pathology of Johne s disease in sheep. III.
Organic phosphorus compound poisoning in livestock.	1852	Pathologic changes in sheep with naturally occuring infections. 2254
Effectiveness of thiabendazole against Haemonchus conton in sheep.	rtus 1859	Rickettsial infection (heartwater) in sheep and goats in the Sudan. 2260
Transmission of ornithosis from sheep to turkeys.	1876	Sporadic ovine vibriosis in virginia. 2262
Acetate utilization and carbon dioxide production in non and ketotic sheep pregnant with twins.	rmal 1900	In vitro studies on the effect of some antimalarial drugs on Fasciola worms in buffaloes, cattle, and sheep. 2288
Rift walley fever.	1921	Studies on Trichostrongylus axei (Cobbold, 1879). V.
$\mbox{\tt Mitrogenous}$ constituents of serum and urine in normal as scrapic sheep.	nd 1923	Some quantitative and pathologic aspects of experimental infections with a horse strain in sheep. 2294
A note on the possible association of Muellerius capilla with enterotoxaemia.	aris 1925	A preliminary report on the variation in numbers of nematode eggs demonstrated in individual fecal pellets of sheep. 2300
Iron-dextran and vitamin $\ensuremath{\mathtt{B}}$ complex for the treatment of anemia in adult sheep.	1931	Preliminary trials with bithional against tapeworm infection in cats, dogs, sheep, and chickens.
Toxicity of carbamate, triazine, dichloropropionanilide, diallyactamide compounds to sheep.	, and 1997	The effect of cadmium compounds on Strongyloides papillosus in sheep. $$2309$
Malignant melanoma in sheep.	2015	A comparison of nematode egg counting techniques for cattle and sheep feces. 2310
Serologic investigation of pseudotuberculosis in sheep. Agglutination test.	I 2017	Carbon tetrachloride poisoning of ewes on a low selenium ration. 2357
A virus of ovine abortionisolation from sheep in the United States and characterization of the agent.	2020	Effects of daily administration of lead acetate and zinc sulphate during pregnancy on the copper, lead and zinc
Nutritional muscular dystrophy in lambs- effect of admin tering selenium to pregnant ewes.	nis- 2022	status of ewes and their lambs. 2519
Wutritional muscular dystrophy in lambs- importance of t ewe s diet at certain stages of gestation and lactation.		A method for collection of pancreatic juice in the conscious sheep. 2539

SOIL FUMIGATION

SHRUBS The effect of fenuron on four southwestern shrubs.	926	SNOW MOLD (GRASSES) Resistance to snow mold of winter wheat.	1585
SIGATOKA (BANANAS) The relationship between leaf uncurling stages and infect		SODIUM CHLORIDE Salt poisoning in Wisconsin wildlife.	1810
patterns on banana leaves caused by Cercospora musae.	1112	A simple and rapid method for staining blood films with methylene blue.	new 2158
Relationship between climatic factors and incidence of the sigatcka leaf-spot disease of bananas.		SODIUM FLUORIDE Alkaline bone phosphatase activity in cattle.	1915
Measurement of spray-oil volatility and its relation to Sigatoka fungus disease control and phytotoxicity on bana leaves.	ana 1415	SODIUM HYPOCHLORITE An evaluation of sodium hypochlorite soil applications f control of Dutch elm disease.	
SILICONES Bloat prevention.	1895	SODIUM NITRATE Nitrite intoxication in cattle.	1864
SILVER Quantitative studies on possible competition of silver, or rium and dodine for receptor sites in fungus spores.	ce- 2403	SODIUM SELENITE The effect of sodium selenite on cattle.	1774
SIMAZINE Simazine for controlling weeds in fruit tree and grape rlantings.	1696	SOIL ADSORPTION Effects of soil acidity on the adsorption, penetration, persistence of simazine.	and 2325
Uptake and distribution of simazine by oat and cotton see lings.	ed- 1725	SOIL AMENDMENTS Influence of rice hull soil amendments on soil microflor populations.	al 920
Forage crop establishment in soil containing atrazine or simazine residues.	1751	Aphanomyces root rot of peas as affected by organic and eral soil amendments.	min-
Inactivation of simazine and atrazine in the field.	1752	Mineral fortification of feeds.	1868
Simazine for annual weed control in cranberries.	1759	SOIL ANALYSIS	
Effects of soil acidity on the adsorption, penetration, a persistence of simazine.	and 2325	Distribution of cysts of Heterodera glycines in soil at different depths.	1599
Mode of action of atrazine and simazine in susceptible at resistant lines of corn.	nd 2330	Stylet-bearing nematodes associated with various plants South Carolina, 1959-1962.	in 1621
Dissipation of simazine from the soil.	2338	Nematodes in nursery plants in Pennsylvania.	1633
Toxicity of simazine to seedling oat plants.	2367	Direct assay of soils for fungistasis.	2422
Phytotoxicity of simazine.	2372	Determination of volatility losses of C14-CDAA from soil surfaces.	2523
The metabolism of C14 chain-and-ring labeled simazine by corn and the effect of atrazine on plant respiratory systems.	2401	SOIL CATION EXCHANGE Influence of Tylenchulus semipenetrans on the growth and chemical composition of sweet orange seedlings in soils	i
The uptake, translocation and metabolism of simazine and razine by corn plants.	2428	various exchangeable cation ratios.	1659
The adsorption of some s-triazines in soils.	2490	SOIL CHEMISTRY Influence of organic amendments on survival of Fusarium oxysporum f. cubense in the soil.	1206
Non-enzymatic detoxification of 2-chloro-4,6-bis(ethylamino)-s-triazine(simazine) by extracts of Zea mays.	i - 2517	Dissipation of simazine from the soil.	2338
SIFHONAPTERA Fleas feed on lizards in the laboratory in Puerto Rico.	0.75	An assay method for soil fungistasis and response of seled fungi to the principle.	2359
SKIB	837	Behavior and fate of chlorinated aliphatic acids in soil	s. 2509
	1893	The decomposition of amitrole in California soils.	2526
SKIN DISEASES Cutaneous aspergillosis in a cow.	2030	SOIL FERTILITY	
SKIN TESTS Studies on a skin test for leptospirosis.	1909	The effect of soil fertility on the development of Kentu bluegrass diseases.	990
SMOT (BARLEY) Inheritance of pathogenicity in oat and barley smuts.	2405	SOIL FUNIGATION In-covering soil fungicides, nematocides, and insecticid for disease control in cotton.	les 919
SHUT (QATS)		Evaluation of soil fumigants for the control of early maturity wilt of potatoes on long island.	922
Inheritance of pathogenicity in oat and barley smuts.	2405	The destruction of viruses by soil fumigants. mcKeen, c d.	1077
SMUT (RICE) Local infection of rice florets by the rice kernel smut organism, Tilletia horrida.	1185	Relationship of soil microbes to the widespread soil fun stasis.	g i- 1170
SNOW Soil-moisture retention and snow-holding capacity as affective and snow-holding capacity as affective snow and snow-holding capacity as affective snow and snow holding capacity as a snow holding capacity and capacity as a snow holding capacity and capacity as a snow holding capacity and capacity as a	ect-	Symposium on chemical control: theoretical consideration soil fumigation.	of 1220
ed by the chemical control of big sagebrush, (Artemisia tridentata Nutt.).	1760	Fungicidal control of big wein in the irrigated lettuce crop.	1449

	COTT ODCANIC NAMEDD
Use of root-knot resistant tobaccos to assess injury caused by root-lesion nematodes. $$\sf 1632$$	SOIL ORGANIC MATTER Effect of phytotoxic substances from decomposing plant residues on root rot of bean. 146
Survival of root-knot nematodes in excised grape roots in moist soil fumigated with ethylene dibromide. 1654	SOIL PERMEABILITY A simple laboratory technique for determining the diffusion rates and patterns of nematocides in soil. 234
Evaluation of applied soil fumigants with the soil microbiological sampling tube. $$2353$$	SOIL SAMPLING
Influence of soil type on the fungicidal activity of soil fumigants against Verticillium dahliae. 2358	Increasing relative frequency of specific fungus isolations with soil microbiological sampling tubes. 120
The response of Norway spruce to soil fumigation for the control of nematodes. 2385	Inoculum potential relationships of Rhizoctonia solani measured with soil microbiological sampling tubes. 120
DIL PUNGI	Evaluation of applied soil fumigants with the soil microbio logical sampling tube.
Control of soil-borne fungi and incidence of Pratylenchus penetrans. 916	SOIL SEPARATES Isolation of Pythium from soil particles. 129
Multiplication of Aphelenchus avenae on phytopathogenic soil fungi. $$\tt 1037$$	SOIL SERIES
Colonization of plant debris in soil by Verticillium dahliae.	Influence of soil type on the fungicidal activity of soil fumigants against Verticillium dahliae. 235
A laboratory method for testing the fungicidal effect of chemicals on fungal spores in soil. 2350	SOIL TEMPERATURE Influence of soil moisture and temperature on survival of Verticillium microsclerotia. 96
Direct assay of soils for fungistasis. 2422	Effect of soil temperature, host variety, and fungus strain on Thielaviopsis root rot of peas.
A technique for isolating pythiu aphanidermatum from soil. 2481	Influence of soil temperature, isolates, and method of inoculation on resistance of mint to Verticillium wilt.
OIL HYDROGEN-ION CONCENTRATION The relationship between certain chemical soil factors and	138
the inoculum potential of Phytophthora prasitica var. nicotianae. 1287	Influence of environmental factors on the development of wheat bunt in the Pacific Northwest. IV. Effect of soil temperature and soil moisture on infection by soil-borne
OIL INSECTS New apparatuses and rearing techniques for the study of wireworms (Coleoptera: Elateridae) in organic soils of	spores. 142 Reaction of cereals and sudan grass to Meloidogyne spp. and
southwestern Quebec. 2549	the relation of soil temperature to M. javanica popula- tions.
OIL MICROBIOLOGY Microbial stimulation of Phymatotrichum omnivorum. 1024	SOIL TESTING A simple laboratory technique for determining the diffusion
Host range and bioassay of field soil for Cylindrocladium scoparium. $$\tt 1036$$	rates and patterns of nematocides in soil.
Inoculum potential relationships of Rhizoctonia solani	Direct assay of soils for fungistasis. 242
measured with soil microbiological sampling tubes. 1204 Evaluation of applied soil fumigants with the soil microbio-	SOIL TREATMENT Effects of soil amendments on nematodes and subsequent Verticillium wilt. 91:
logical sampling tube. 2353	An evaluation of two fungicides as soil treatment with and without herbicide for tomato fruit disease control. 99
OIL MICROORGANISMS Relationship of soil microbes to the widespread soil fungi- stasis. 1170	without herbicide for tomato fruit disease control. 99' Effect of anaerobic fermentation in soil on survival of
DIL MOISTURE	sclerotia of Verticillium dahliae. 108
Influence of soil moisture and temperature on survival of Verticillium microsclerotia. 965	The use of Fusarium culture filtrate media in the isolation of Fusaria from soil. 145
The relation of plant maturity, temperature, and soil moisture to charcoal stalk rot development in grain sorghum. 1062	A technique for controlled exposure of emerging grass seed- lings to soil-active herbicides. 170
Effects of temperature, soil moisture, and time of inocu-	Penetration and persistance of diuron in soil. 171
lation on symptom development of sorghum charcoal rot. 1142	Soil-incorporated pre-planting herbicides for witchweed con- trol. 173
The effect of scil moisture on the development of Easter lily root rot. $$1178$$	Persistance of soil-incorporated EPTC and other carbamates. 2330
Influence of environmental factors on the development of wheat bunt in the Pacific Northwest. IV. Effect of soil temperature and soil moisture on infection by soil-borne spores.	Influence of dieldrin and methyl bromide soil treatments on subsequent populations of stylet-bearing nematodes associat- ed with roots of Ladino clover.
Postinfection development of flag smut of wheat in relation to controlled soil moisture. 1421	Assays of volatile fungitoxic effluents from soil treated with fungicides such as Mylone.
Soil moisture in relation to growth reduction of sweet orange seedlings by Thielaviopsis basicola. 1489	Fungicidal activity of air passed through columns of soil treated with fungicides.
Soil-moisture retention and snow-holding capacity as affect-	The use of fluorescent tracers to study distribution of soil applied herbicides. 256°
ed by the chemical control of big sagebrush, (Artemisia	A device for subsurface application of bethicides. 256

OIL-BORNE PLANT DISEASES	S	SORGHUM HALEPENSE	
Control of soil-borne fungi and incidence of Pratylenchus penetrans.	916	Effects of surfactant concentration on Johnsongrass control with dalapon. 16	
The control of seed-borne safflower rust by steam.	959	Characteristics of Johnsongrass rhizomes. 24	13
Evaluation of treatments for control of soil- borne pests in celery seedbeds.	198	SOUR CHERRIES Letter to the editor: Some synonyms of sour cherry yellows	
Reactions of winter oats to soil-borne mosaic. 13	370	virus. 12	.8 0
Relation of seed- and soil-borne inoculum to epidemiology of angular leaf spot of cucumber in wisconsin.	566	Variation among isolates of necrotic ringspot and prune dwarf viruses isolated from sour cherry. 15	
Weeds as carriers of two potatoe pathogens in Colorado.		Cycloheximide behavior in bean and cherry tissue. 23	4 0
16	588	Effect of high concentrations of cycloheximide on bud differentiation in Montmorency sour cherry. 23	
OILS Comparison of the fungicidal and nematocidal properties of a number of compounds in field soil.	E S	SOUR CHERRY YELLOWS (CHERRIES) Fruit set reductions in cherry trees pollinated by trees	
Antagonisms to nematode-trapping fungi in soil.	957	with sour cherry yellows.	110
Techniques in isolation of pythiaceous fungi from soil and diseased pineapple tissue.	1 980	Reductions in fruit sets on cherry trees pollinated with pollen from trees with sour cherry yellows. 12	
Determination of inoculum potential of infested soil.	992	Letter to the editor: Some synonyms of sour cherry yellows virus.	
Effect of coot exudates in overcoming the soil fungistatic principle.		COUR ORANGES Pathological histology of young sour orange plants bud-inoulated with four citrus viruses. 12	
Soil transmission of tobacco ringspot virus.	286 S	OUTH AFRICA A comparison of equine piroplasmosis in South Africa and	
Activity c Rhizoctonia in soil as affected by carbon dioxide.	883	the United States. 18	9 2
Influence of nonsusceptible plants on the survival of Fusarium solani f. phaseoli in soil.		Effect of deflowering and tobacco ringspot virus on the oc- currence of Cercospora kikuchii on soybean. 10	
Sapro hytic growth of Pusarium oxysporum f. niweum in soil	L. 501	Seed-borne aspects of Diaporthe phaseolorum in soybean.	63
An evaluation of sodium hypochlorite soil applications for control of Dutch elm disease. 15	592	Increased bacterial populations in soybean roots due to phosphorus. $$10\ensuremath{^{\circ}}$	16 8
Experiments with herbicides in soils.	80	Pigmentation of soybean seed coats associated with bacteria	
Fate of amitrole in soil.	743	dunleavy, j. 10'	
Movement of herbicides in soil with simulated furrow irrigation. $\ensuremath{\text{17}}$	144	Fusarium root rot of soybean. Effect of crop rotation on alfalfa and soybean stands. root	
Dissipation of amiben. 23	327	rots, and yields.	11
Effects of water evaporation, temperature and rates of		Internal microflora of stored soybean seeds.	48
application on the retention of ethyl-N,N-di-n-propyl-	132	Web blight -a severe disease of beans and soybeans in Mexico.	39
Measurement of microbiological effect; of herbicides.	378	A new bacterial disease of soybeans.	45
Antibiotic production by Streptomyces sp. in unamended	399	Relation of seed position and pod location to tobacco ringspot virus seed transmission in soybean.	
Precocious sporulation and longevity of conidia of Helmin-		$\ensuremath{\boldsymbol{\lambda}}$ vascular disease of soybeans caused by Corynebacterium sp. $$13^\circ$$	75
	508	Moisture content, mold invasion, and seed viability of stored soybeans.	
	526	Anatomical studies of soybean roots artificially inoculated	
ORCHUS ARVENSIS		with Heterodera glycines. 160	
Thistle control with cultivation, cropping, and chemicals.	04	Influence of nonhost crops alone or in combination with a nematocide on the longevity of the soybean cyst nematode in soil.	
ORGHUM Pathogenicity and systemic development of Sphacelotheca reiliana in sorghum species. 9	33	Control of the soybean cyst nematode by crop rotation.	
The relation of plant maturity, temperature, and soil mois ture to charcoal stalk rot development in grain sorghum.	;-)62	Effect of temperature on growth of root-knot nematodes in soybeans and tobacco.	45
Aerial and ground applications of preemergence herbicides		Penetration, infection, and development of Heterodera glycines in soybean roots and related anatomical changes. $$16^{\rm I}$	48
Residues in soil one year after herbicides were applied to sorghum.	39	Soybean leaf and stem infections by Phytophthora megasperma var. sojae.	

SPERMATOZOA

Pre-emergence weed control in soybeans with mixtures of herbicides.	E two 1686	rium and dodine for receptor sites in fungus spores.	240 3
Determination of 2,4-D residues in soybeans.	1689	An automatic suction-impaction type spore trap and its with onion blotch alternaria.	use 2553
Role of herbicides in soybean production.	1694	SPORIDESMIN	
Interrelations of cultivations, herbicides, and methods application for weed control in soybeans.	s of 1714	Sporidesmin poisoning in the rat. Ichemical changes.	2140
Interrelations of row spacings, cultivations and herbic for weed control in soybeans.	cides 1715	SPOROPHORE Sporulation and sporophore survival of Echinodontium t torum.	inc- 1325
Merial and ground applications of preemergence herbicide corn, sorghum, and soybeans.	les in 1754	SPOROTRICHOSIS Eguine sporotrichosis.	1871
Toxicity of benzoic acid herbicides to cotton and soybe	eans. 2446	SPORULATION The effect of near-ultraviolet irradiation on the spor	
The absorption, translocation, and fate of amiben in sobeans.	oy- 2483	tion of certain fungi. The relation of sporulation of Ascochyta pisi to wave	953
PERMATOZOA Migration of sperm in Ditylenchus destructor.	1603	length, intensity, and exposure length to monochromati traviolet radiation.	c ul- 955
PINACH Immunity to race 2 of spinach dcwny mildew.	1454	Effect of alternate wetting and drying on sporulation survival of Rhynchosporium secalis.	and 1151
PINDLE TUBER (POTATOES) Transmission of potato spindle tuber virus to tomato.		Factors affecting sporulation and infections by the ho ny mildew fungus, Pseudoperonospora humuli.	p dow-
Mechanical inoculation of the potato spindle tuber viru	1041	Sporulation and sporophore survival of Echinodontium t torum.	inc- 1325
the genus Solanum. Serological studies of a virus that produced spindle to	1514	The effect of light on sexual and asexual sporulation species of Phytophthora.	of 2387
in potatoes.	1536	Basal mineral requirements for the growth and sporulat ${ t Alternaria}$ tomato.	ion of 2390
PIRACLES Spiracular structure and water loss from Tribolium conjugates, and Sitophilus granarius (L.) under reduced pressures.		Quality of radiation inhibitory to sporulation of Alte aria tomato.	rn- 2480
PORE GERMINATION		Precocious sporulation and longevity of conidia of Hel thosporium sativum in soil.	min- 2491
Inhibition of spore germination of Alternaria tenuis by suffur dioxide.	1086	SPOTTED WILT (TOMATORS)	ui 1+
Sporangial germination of Sclerosporia graminicola and tificial infection of Pennisetum glaucum.	ar- 1588	A strain-host combination for studying tomato spotted virus inclusion.	976
Stimulation of spore germination of Phoma herbarum var. medicaginis and Colletotrichum trifolii.	2408	Frankliniella fusca, an additional vector for the toma spotted wilt virus, with notes on Thrips tabaci, anoth- vector.	
The effect of low temperature on germination of chlamyon spores of Ustilago avenae.	1o- 2487	SPRAYING Further considerations regarding the repellency of spr- components.	ay 842
PORES The effect of environment on the toxic action of sulfur	r di-	Influence of droplet size on effectiveness of low-volu	
oxide on the spores of Botrytis cinerea.	991	herbicidal sprays.	1711
Development of spring blackstem in alfalfa as affected nutrients added to spore suspensions at the time of inc lation.		Control of blackjack oak by basal spraying with 2,4,5-	1716
Pactors affecting sporulation, spore size, and pathoger of several legume cercosporae.	nicity 1008	Effects of surfactants on the herbicidal activity of sentencines in agueous spray systems.	evera 1 1732
Factors influencing the telial and sporidial stages of cinia stakmanii.	Puc- 1018	Aerial and ground applications of preemergence herbici- corn, sorghum, and soybeans.	des in 1754
Evidence for the survival of the big-vein virus within		Spray retention by bermudagrass.	2337
pidium resting sporangia. The effect of grape washings on the germination of spor	res of	Effect of spray gallonage and leaf character on deposition and retention of copper-containing fungicides.	2356
fungi associated with bunch rot of grapes. Longevity of urediospores of race 33 of Uromyces phases	1160 oli	Influence of nozzle size and type hardness of water, as wetting agents on spray drift.	na 2558
var. phaseoli in storage. Sporulation of Ceratocystis fagacearum in wounds on inforted ask trees.	1312	Circular plot designs for evaluation of multiple dosage agricultural chemicals applied with boom-type field speers in a single plot.	
infected oak trees.	1318	SPRAYING EQUIPMENT	1721
Turbulent transfer of fungus spores.	1369	Stationary sprayer components.	1731
Uredospore production by Uromyces phaseoli.	1463	A pendulum sprayer for pot cultures.	1747
A laboratory method for testing the fungicidal effect of chemicals on fungal spores in soil.	2350	a tractor-mounted potato sprayer designed for field postudies.	2538
Quantitative studies on possible competition of silver	, ce-	A variable dosage sprayer for treating small plots.	2548

STRAWBERRIES A small plot sprayer using disposable spray containers. Sterilization of wheat seed by ethylene oxide. 2319 2556 STINKING SHUT (WHEAT) 2557 Influence of environmental factors on the development of Jet stream atomization. wheat bunt in the Pacific Northwest. IV. Effect of soil temperature and soil moisture on infection by soil-borne Influence of nozzle size and type hardness of water, and wetting agents on spray drift. spores. 2563 STOMATA A two-gun) ground sprayer. Etiological studies of the ash die-back disease. Stomates A carbon dioxide pressured portable field sprayer. 1319 2564 as infection courts. SPRING BLACK STEM (ALFALFA) STORAGE Development of spring blackstem in alfalfa as affected by Maintenance of pathogen-free planting stock. 1191 nutrients added to spore suspensions at the time of inocu 1004 Artificial inoculation of pearl millet plants with Sclerospora graminicola. 1236 Relation of nutrients in inoculum and inoculum concentration to severity of spring black stem of alfalfa. 1528 Storage viability of bean rust uredospores. 1356 STALK ROT (CORN)
Histological structure of corn stalks in relation to field Relation of moisture content and length-of-storage period Relation of moisture content and family of the funder of the changes in the fungus flora and germination percentage of wheat.

1523 resistance to stalk rot. Effect of crop rotation on yields of corn, oats, and wheat Pesticide storage in human fat tissue. 1874 and on corn stalk rot. 1033 The influence of storage conditions on the longevity of urediospores of Puccinia polysora Underw. and Puccinia Corn stalk rot symptoms induced by root injury. sorgi Schw. 2318 Increased stalk rot susceptibility in corn following root and leaf injury. 1342 STORAGE DISEASES Influence of moisture content, temperature, and time of storage upon survival of certain microflora in barley ker Failure to control corn stalk rots with above ground appli 1509 1101 cations of protectant fungicides. STATISTICS Internal microflora of stored soybean seeds. 1148 Notes on the Volterra equations. 795 Factors influencing storage decay of sugar beets by Phoma betae and other fungi. The control of seed-borne safflower rust by steam. 959 Relation of moisture content and length-of-storage period to changes in the fungus flora and germination percentage of 1523 Reaction of five peanut varieties to cultural control of wheat. stem rot. STORAGE INJURIES STEE RUST (OATS)

Isolates of oat stem rust race 6 virulent on variety Saia in Israel. Pactors influencing storage life of Hemicycliophora arenaria, Pratylenchus scribneri, and Trichodorus christiei. 1598 A synthetic hybrid of two varieties of Puccinia graminis. The use of vermiculite cover as a possible means of increasing dwarf bunt in winter wheat test nurseries. 1579 STEE RUST (WHEAT) Relation between phenol metabolism and stem rust resistance in wheat. The role of associated fungi in prevention of Botrytis rot of strawberries. Control of wheat stem rust with nickel and carbamate sprays. Relationship of meadow nematodes to Verticillium wilt of strawberries. Phenol content in rust infected and nitrogen fertilized Transmission of viruses to strawberry by excised leaf graft from plants other than strawberry. The action of propionate on wheat stem rust and sorghum head Obtaining virus-free strawberries by excision and culturing of apical meristems of plants infected with the yellow edge, crinkle, and veinbanding viruses and certain other virus Inheritance of stem rust reaction in two durum varieties, 1105 complexes. Pre- and postinoculation effects of light quality on infec-Advantages of determining the tolerance of strawberries by grafting with leaves infected with a virus complex. 1405 tion intensity of stem rust of wheat. whole-leaf clearing and staining technique to demonstrate Angular leaf spot of strawberry caused by Manthomonas frahost-pathogen relationships of wheat stem rust. 1545 gariae sp. nov. STEEPHYLTHE Rhizoctonia fragariae sp. nov. in relation to strawberry degeneration in Southwestern Ontario. 1546 Stemphylium twig and stem canker of Morus. 1076 STEMPHYLIUM SARCINA EFORME Interactions between strawberry roots and Rhizoctonia Induced tolerance to fungicides in three species of fungi. fragariae. 1547 1505 Pathogenicity of Pratylenchus penetrans on strawberry and Ladino clover seedlings. STEES 1608 Comparison of three stem diseases of Melilotus and their

let.

strawberry plants.

causal agents.

STEPHANURUS DENTATUS

Observations on the life cycle and pathogenicity of the swine kidney worm (Stephanurus dentatus). 2299

2467

Anatomical view of the life history of the strawberry root

Amino acid and amide content of healthy and disease-affected strawberry plants. 2503

ST FEPTQCOCCUS BACTERINS			
STEEPTOCOCCUS EACTERINS Streptococcus equi may be sole cause of strangles.	1873	SUCCULENTS Succulent-type plants as sources of plant virus inhibitor	
Swine jowl abscesses introduced by throat infection.	1894		1343
STREPTOMYCES Antibiotic production by Streptomyces sp. in unamended soil.	2399		se 2553
STREPTOMYCIN Streptomycin resistant mutants in Streptomyces scabies.	1059	SUDAN Rickettsial infection (heartwater) in sheep and goats in Sudan.	the 2260
Effect of streptomycin and pimaricin on growth and respation of Pythium spp.	ir- 1128		2015
Chemotherapeutic effects of streptomycin on establishmen and progression of systemic downy mildew infection in he		SUGAR BEETS Respiratory activities of cell-free particles from Pythiu ultimum, Rhizoctonia solani, and sugar beet seedlings.	um 1075
Progression in vivo, rate of growth in vitro, and resisto streptomycin, as indices of virulence of Erwinia amy vora.			1192
Penicillin-resistant staphylococci common in dogs.	1992	Occurrence of Heterodera cysts in association with sugar- beets in eastern South Dakota.	- 1639
Evidence of an energy requirement for absorption of carl-labeled streptomycin and leucine by apple leaves.	bon 14 2489	Competition of annual weeds and sugar beets.	1761
STRIATE MOSAIC (WHEAT) Wheat striate mosaic in Canada.	1159	SUGARCANE Electron microscopic demonstration of sugarcane mosaic vi particles in cells of Saccharum officinarum and Zea mays	
STRIDULATION Ultrasonic production and its reception in some neotrop: Tettigoniidae.	ical 877	Pathogenecity of Helicotylenchus nannus and its relation	1575
STRIGA ASIATICA Penetration and nutrition of Striga asiatica.	1699	Influence of the stubby-root nematode on growth of sugardin Hawaii.	cane 1665
Failure of witchweed to parasitize Smooth Cayenne pine-apple.	1719	Pathogenicity of Meloidogyne incognita acrita and its re- lation with Pythium graminicola on sugarcane in Hawaii.	- 166 6
STRIPE MOSAIC (BARLEY) Liquid-liquid phase separation in concentrating barley stripe mosaic virus.	2537	SULFAMETHAZINE Blood levels of sulfonamides in swine.	177 1
STRIPE RUST (GRASSES) Reaction of grass to stripe rust at Pullman, Wash.	1074	SULFAMETHOXYPYRIDAZINE Blood levels of sulfonamides in swine.	177 1
STRIPE RUST (WHEAT) Seedling versus mature plant reactions of wheat to striprust.	pe 1013	SULFONAMIDES Treatment of canine coccidiosis using nitrofurazone and s fonamides.	sul- 1826
Measures of the destructive potential of stripe rust in Washington.	1161		1885
STRONGYLOIDES The nematode genus Strongyloides grassi, 1879 in Indian		SULPUR Accumulations of sulfur35 around cucumber anthracnose les ions.	s- 1452
livestock. I. Observations on natural infections in the donkey (equus asinus).	2107	The sulfur-depletion of cells by captan.	2448
STRONGYLOIDIASIS Experimental strongyloidiasis in sheep and goats. IV. Migration of Strongyloides papillosus in lambs and		SULFUR DIOXIDE The effect of environment on the toxic action of sulfur oxide on the spores of Botrytis cinerea.	di- 991
accompanying pathologic changes following percutaneous infection.	2120	Inhibition of spore germination of Alternaria tenuis by sulfur dioxide.	1086
STUBBORN DISEASE (CITRUS) Some effects of stubborn disease on bark, foliage, fruit and size of citrus trees.	t, 1044	SUNPLOWERS Effect of temperature and age of host on infection of sunflowers by Sclerotium bataticola.	1256
Calcium content of leaves from stubborn and non-stubborn diseased Washington Navel Orange trees.	1146	SURFACE-ACTIVE AGENTS Surface tension lowering, wettability of paraffin and con	
STUNT (CORN) Corn stunt virus transmission and attenuation in a new h	nost. 1188	leaf surfaces, and herbicidal enhancement of dalapon by	1745
A new corn disease in Ohio.	1302	The role of surfactants in the foliar absorption of indol 3 -acetic acid (IAA)	Le- 2429
STYLETS Stylet-bearing nematodes associated with various plants South Carolina, 1959-1962.	in 1621	SURGERY Open teat sinus surgery for correcting teat occlusions part II	1767
SUGCINVICEOLINE CHLORIDE A note on the prophylactic vaccination of wild animals.	2005	Open teat sinus surgery for correcting teat occlusions.	1822

WAYBACK		
Biochemical and neuropathological changes in swayback.	2202	Cultivation of hog cholera virus in subculturable swine buffy coat cells. $$2071$$
WEET ORANGES Soil moisture in relation to growth reduction of sweet orange seedlings by Thielaviopsis basicola.	1489	The sensitivity to chemotherapeutic agents of salmonellae isolate from pigs. 2098
Influence of soil-oxygen diffusion rates and temperature the citrus mematode and sweet orange seedlings.		Hemadsorption and cytopathic effect produced by african swine fever virus in swine bone marrow and buffy coat cultures.
WEETCLOVER		Vesical schistosomiasis in the domestic pig. 2141
Comparison of three stem diseases of Melilotus and their causal agents.	r 1553	Incidence of Salmonella in the hog colon as affected by handling practices prior to slaughter. 2168
Pathogenicity, host-parasite relationships, and morpholo of some forage legume cercosporae, and factors related disease development.		Enteroviruses of swine. III. Studies on experimental infection in pigs. 2200
Hypoderma and parturition complicate sweet clover poison	ning. 1867	Enteroviruses of swine. II. Studies on the natural history of infection and immunity. 2201
WEETPGTATOES		Factors influencing immunity in hog cholera vaccination.
Relationship of root-knot nematodes to the development of Fusarium wilt in the sweetpotato.	of 1120	The effect of Salmonella choleraesius infection on immunity
Investigations of antigenic components produced by sweetato roots in response to black rot infection.	t po- 1269	to hog cholera. 2228
Control of black rot by prebedding heat treatment of swe	eet-	Trichinosis occurs in foxes. 2282
potato roots. Evaluation of sweetpotato breeding stocks for susceptib.	1273	Observations on the life cycle and pathogenicity of the swine kidney worm (Stephanurus dentatus).
to internal cork virus.	1393	Efficacy of cyanacethydrazide against Metastrongylus spp. (lungworms) in swine. 2311
Reactions of sweetpotato breeding lines to Meloidogyne when inoculated by an improved method.	spp. 1656	Experimental infections of swine with Trichuris suis.
WINE Blood levels of sulfonamides in swine.	1771	SYMPOSIA
Experimental edema disease (hemolytic Escherichia coli		Symposium on tropical plant pathology: invitational papers presented December 11, 1961 at the meeting of The Ameri-
toxemia) in pigs and in mice.	1811	can Phytopathological Society at Biloxi, Mississippi. 1031
Hemoglobin determination in swine anemia. Rinderpest in pigs of european origin.	1834	Symposium on chemical control: theoretical consideration of soil fumigation. 1220
X-ray exposure of swine.	1844	Symposium on pathogen free stock: invitational papers pre-
Subculturable swine buffy coat cells with hog cholera v.		sented June 15, 1960 at the meetings of the Pacific Div- ision of The American Phytopathological Society for Horticultural Science, western region, at Eugene, Ore-
Therapy of atrophic rhinitis.	1885	gon. Introduction. 1462
Lungworms enhance severity of swine influenza.	1888	International Symposium on Newcastle Disease Virus as an Evolving Pathogen. 1812
Swine jowl abscesses introduced by throat infection.	1894	SYMOVITIS Pleuropneumonia-like organisms associated with symovitis in
A relationship between vitamin B12 and reproduction, an method of diagnosing vitamin B12 deficiency in individuations.	al	fowls. 2035
Enhancement of infectivity of hog cholera virus.	1982	Necrosis of the tail in the buffalo. a deficiency disease.
The passage of hog cholera virus through cellulose dial		TAIWAN A field survey of arthropod parasites of birds in Taiwan.
Detection of swine masal viruses in cell cultures.	1984	798
		TANNIC ACIDS
Antibiotics to sows and gilts improves litters.	1990	A tannic acid modified hemagglutination test for infectious bronchitis of chickens. 2189
Experimental leptospirosis. VII. Re-exposure of pregnam sows with Leptospira pomona.		TAXONOMY The emerging classification of animal viruses- A review.
XI pneumonia of pigs.	2043	1912
Leptospires isolated from prepuce of boars.	2044	TEACHING A review of problems in teaching tropical plant pathology.
Inoculation of baby pigs with lapinized hog cholera vac (1 ${\tt ml.}$).	2048	1492
Isolation and cultivation of swine pox virus in primary cultures of swine origin.		TEATS Open teat sinus surgery for correcting teat occlusions part II. 1767
Inoculation of baby pigs with lapinized hog cholera wace (2 and 4 ml.).	cine 2051	Open teat sinus surgery for correcting teat occlusions.
Some factors that may influence hog cholera transmission	n. 2070	

PEETH	
REETH Abnormal pigmentation and fluorescence in canine teeth. 2164	application on the retention of ethyl-N,N-di-n-propyl-thiol carbamate in various soils.
PELIOSPORES	The influence of temperature on the germination of wild oat seeds. 2397
Studies on the germination and metabolism of teliospores of Ustilago maydis. 2391	In vitro hatching of Meloidogyne hapla eggs as affected by temperature, moisture, and age of egg mass. 2431
PELONE Effectiveness of application methods with several nemato- cides for control of root-knot nematode. 1641	TEREPHTHALIC ACID The influence of dietary calcium-phosphorus and terephthalic acid on antibiotic control of experimental infectious
TEMPERATURE Effects and interactions of varied levels of temperature, amino acids, and a vitamin on the rate of larval development in the fly Pseudosarcophaga affinis. 854	synovitis. 1945 TESCHEN DISEASE Encephalomyelitis of swine caused by a haemagglutinating
The need for direct observation of behaviour in studies of temperature effects on light reactions. 866	virus. III. Serological studies. 1936 TETRACYCLINE
The effect of temperature, anoxia, or injection of various	Zoonotic aspects of vibriosis. 1849 Generalized staphylococcic infection in a monkey. 1910
substances on haemolymph composition and super cooling in larvae of Anagasta kuehniella (Zell.).	Antibiotics to sows and gilts improves litters. 1990
Colonization of lima bean plants by Phytophthora phaseoli as affected by temperature and age of plants. 982	Penicillin-resistant staphylococci common in dogs. 1992
Fffect and interaction of temperature and host genes on growth and pathogenicity of Glomerella cingulata on Lupin- us angustifolius. 998	TEXAS Etiology of tomato fruit rot in the Red River valley of Texas. 1064
Temperature effects on host predisposition and development of blackspot. 1001	Cultural growth at different temperatures of Ascochyta gossypii from Georgia, Alabama, and Texas. 1181
The relation of plant maturity, temperature, and soil moisture to charcoal stalk rot development in grain sorghum.	Agglutinins for 11 types of leptospires in serum from cat- tle in northeastern Texas. 2247
The effect of temperature on crown rust reactions. 1083	THERAPEUTICS Killed and live vaccines plus management. 2068
l-proline and l-alamine as substitutes for higher temperatures in the germination of fungus spores. 1097	Haemophilus infections in chickens. III. Factors in intra- flock transmission of infectious coryza and its chemical and antibiotic therapeusis. 2145
Influence of moisture content, temperature, and time of storage upon survival of certain microflora in barley kernels. 1101	Control of infectious synovitis. 8. Degree of infection as influenced by medication with furazolidone and chlortetracycline.
The effect of temperature on multiplication and movement of cabbage virus A in Nicotinia glutinosa L. 1122	THERMOTHERAPY Thermotherapy of planting material. 1456
Effects of preinoculation and postinoculation host temperatures on infection of wheat seedlings by Puccinia striiformis.	THIELAVIOPSIS BASICOLA Some considerations of strain variation in cotton seedling
Effects of temperature, soil moisture, and time of inoculation on symptom development of sorghum charcoal rot. 1142	pathogens. 956 Susceptibility of certain citrus rootstocks to Thielaviopsis basicola. 1067
The relationship between severity of anthracnose of sycamore and temperature. 1157	Effect of host and nonhost plants upon populations of Thielaviopsis basicola in soil. 1219
Time-temperature relationships in thermal inactivation of sclerotia of Macrophomina phaseoli. 1367	Precautions in isolating Thielaviopsis basicola with carrot discs.
Influence of temperature, humidity, and inoculum concentration on development of Helminthosporium sativum and Septoria passerinii in excised barley leaves. 1430	Effect of soil temperature, host variety, and fungus strain on Thielaviopsis root rot of peas. 1266
Temperature in relation to loose smut in barley and wheat.	Isolation of Thielaviopsis basicola from bean rhizosphere. 1395
Effects of temperature on covered smut expression in two barley varieties.	Thielaviopsis basicola associated with declining sweet orange seedlings in Florida. 1418
Influence of soil-oxygen diffusion rates and temperature on the citrus nematode and sweet orange seedlings. 1612	Thielaviopsis basicola as a citrus root pathogen. 1487 Soil moisture in relation to growth reduction of sweet
Treatment of propagating stock with chemicals at different temperatures for root-knot control. 1630	orange seedlings by Thielaviopsis basicola. 1489 Oxygen requirement of three root-rotting fungi in a liquid medium. 2478

THIRAM

Thiram sensitivity.

THRIPS TABACI
Frankliniella fusca, an additional vector for the tomato
spotted wilt virus, with notes on Thrips tabaci, another
vector.
1321

1893

Effects of water evaporation, temperature and rates of

Effect of temperature on growth of root-knot nematodes in soybeans and tobacco.

Lethal time-temperature relation for Heterodera glycines.
1647

Effect of temperature on resistance of alfalfa to the stem nematode (Ditylenchus dipsaci). \$1652\$

HYROXINE Thyroxine utilization rate and some other indicies of	fragmentation. 1171
peripheral iodine metabolism in sucking pigs. 1898	The interaction of potato viruses X and Y in tobacco leaf tissue differing in age. 1215
ILLAGE Cultivated soil. longevity of seeds of wild oats, winter rye, and wheat in. 929	Strains of Pseudomonas solanacearum differing in pathogen- icity to tobacco and peanuts. 1288
Interrelations of cultivations, herbicides, and methods of application for weed control in soybeans. 1714	Isolation of tobacco vein distorting virus from tobacco plants infected with aphid-transmissable bushy-top. 1358
	A virus inhibitor from tobacco. 1450
Interrelations of row spacings, cultivations and herbicides for weed control in soybeans. 1715	Heat adaptation in a rust and a virus. 1466
Cultivation techniques in combination with chemical weed control in cotton.	Expression of black shank resistance in leaves of flue-cured tobacco. 1581
ILLETIA CARIES Inheritance of resistance to common bunt, Tilletia caries, in a cross of P.I. 178383 x Elgin wheat. 1085	Effect of source host on infectivity of tobacco mosaic virus isolates.
ILLETIA CONTRAVERSA Incidence and control of Tilletia contraversa in perennial	Effect of temperature on growth of root-knot nematodes in soybeans and tobacco. 1645
grasses. 1406	Herbicides on flue-cured tobacco. 2323
ILLETIA CONTROVERSA Pathogenic races of Tilletia controversa in the Pacific Northwest. 1371	An inhibitor of TMV infection produced by tobacco leaf cells. 2383
IMBER Inoculation and colonization of stumps of Pinus echinata by Fomes annosus. 1164	TOMATOES An evaluation of two fungicides as soil treatment with and without herbicide for tomato fruit disease control. 997
Control of madrone and tanoak stump sprouting. 1740	The effect of metabolites produced by Fusarium oxysporum f. lycopersici (Sacc.) Snyd. and Hans. on root elongation of tomato seedlings. 1011
IME Weather, space, time, and chance of infection. 1352	Transmission of potato spindle tuber virus to tomato.
Time-temperature relationships in thermal inactivation of sclerotia of Macrophomina phaseoli. 1367	Semeiology of Fusarium wilt of tomato. 1050
IPBURN (PINUS STROBUS) Ozone, a possible cause of white pine emergence tipburn.	Symptom retardation of Fusarium wilt of tomato seedlings by a Cephalosporium species.
925 ISSUE CULTURE	Etiology of tomato fruit rot in the Red River valley of Texas.
Cell-associated virus infectivity of tissue cultures derived from susceptible and resistant sources. 1265	Inhibition of callus and root growth in tomato stems excised
The use of tissue culture-propagated bluetongue virus for vaccine preparation. 1773	from plants inoculated with a combination of tobacco mosaic virus and potato virus X.
Evaluation of a tisse-culture Newcastle disease vaccine.	Diseases affecting production of certified tomato plants in Georgia during 1942-1963.
Duck hepatitis virus in duck embryo fibroblast cultures.	Susceptibility of certain Verticillium-resistant tomato varieties to an Ohio isolate of the pathogen. 1301
The chicken-embryo-lethal-orphan (CELO) virus as a tissue. culture contaminant. 2029	Morphological effects of colletotin on tomato and Digitalis foliage.
The isolation of a latent adeno-like virus from chicken kidney cell cultures. 2173	Solanum pennellii, a possible source of tomato curly-top resistance.
Some observations of the propagation of infectious laryngotracheitis virus in tissue culture. 2243	Delayed preemergence weed control in seeded tomatoes and peppers. 1726
TSSUES	Basal mineral requirements for the growth and sporulation of Alternaria tomato. 2390
Use of pimaricin, penicillin, and polymyxin in isolating Phytophthora spp. from root tissues. 987	Effect of tobacco mosaic virus on the mineral content of tomato leaves. 2392
Trypan blue and boiling lactophenol for staining and clear- ing barley tissues infected with Ustilago nuda. 1292	Effect of the addition of organic amendments to soil on root knot of tomatoes. ii. relation of soil temperature, moisture
A rapid method for the determination of copper in biological tissues by means of zinc dibenzyldithiocarbamate. 2532	and pH. 2495
**************************************	A revised concept of the pathologic changes of the tongue in cattle with vesicular stomatitis. 2127
Distribution pattern and persistence of the systemic resistance induced in hypersensitive tobacco plants by tobacco	TOPOGRAPHY Incidence of systemic dead-arm and its relation to topo- graphy in michigan vineyards. 1262
Direct recovery of tobacco rattle virus from its nematode vector.	TORTRICIDAE On the embryology of the spruce budworm, Choristoneura fum- iferana (Clem.) (Lepidoptera, Tortricidae). 880

Loss of wildfire resistance in tobacco due to chromosome

TORTRICIDAE

TO	XA	P	H	E	N	E

OXAPHENE Horses protected from piroplasmosis by vector control.	1855	TRACTORS A tractor-mounted experimental plot sprayer.	168
OXICITY Toxicity of carbamate, triazine, dichloropropionanilide		TRANQUILIZERS SU-9064, a water-soluble tranquilizer for handling broil and replacement pullets.	ers
diallyactamide compounds to sheep.	1997	TREE ABNORMALITIES Dwarf fascicle abnormality of short leaf pine.	134
Rerbicdal value of arsenic trioxide in Eastern United States.	1709	TREE DISEASES	
Methods of evaluating pre-emergence herbicides for cott	on. 1737	A chemical that retards development of dutch elm disease	121
Salt poisoning in Wisconsin wildlife.	1810	Further data on borax as a control of surface infection slash pine stumps by Pomes annosus.	of 124
Toxicity of haloxon.	2291	Host range of Tylenchorhynchus claytoni on some forrest nursery seedlings.	166
Studies on the chemistry of the fungitoxicity of Folcid	2342	TREE INJURIES Some factors associated with maple decline in	
Toxicity of some halogenated hydrocarbon mixtures to the citrus and root-knot nematode. $ \label{eq:condition} % \begin{center} cente$	e 2343	New Hampshire.	153
The toxicity of citroxinine.	2345	TRRES Increased production of geminate buds on peach mosaic-in ted peach trees.	fec
Assays of volatile fungitoxic effluents from soil treat with fungicides such as Mylone.	ed 2346	Relative efficiency of three methods of inoculating *ree stems with Cytospora fungi.	150
Laboratory evaluation of DDT and phosphamidon on the we ern hemlock looper, Lambdina fiscellaria lugubrosa		TREEALOSE	
(Hulst). Comparison of the toxic effects of Crotalaria spectabil and Crotalaria qiant striata as complete feed contamina		The effect of temperature, anoxia, or injection of vario substances on haemolymph composition and super cooling i larvae of Anagasta kuehniella (Zell.).	
	2352	TRIAZINE Absorption, diffusion, and translocation of C14-labeled	
Toxicity and translocation characteristics of six fungi compounds in plum and prune trees.	cidal 2354	triazine herbicides by peanut leaves. Toxicity of carbamate, triazine, dichloropropionanilide,	171
An early report on Crotalaria poisoning.	2361		199
Pesticides: their properties, uses and disadvantages. II fungicides and herbicides. Pesticides in relation to animals.	2364	The adsorption of some s-triazines in soils. TRICHINOSIS	249
Insecticide tests on the Douglas-fir cone midge, Contar	in-	Trichinosis occurs in foxes.	228
ia oregonemis Foote. Toxicity of some halogenated hydrocarbon mixtures to la	2366 rvae	TRICHODORUS Direct recovery of tobacco rattle virus from its nematod vector.	le 109
of the citrus nematode, Tylenchulus semipenetrans.	2371	TRICHODORUS CHRISTIEI	
Penetration and translocation of Rogor applied to plant	23 7 7	Factors influencing storage life of Hemicycliophora arenaria, Pratylenchus scribneri, and Trichodorus christiei.	159
Toxicity of victoxinine.	2421	Parasitism and pathogenesis of the cultivated highbush b	lue 166
Non-enzymatic detoxification of 2-chloro-4,6-bis(ethyla no)-s-triazine(simazine) by extracts of Zea mays.	2517	berry by the stubby root nematode. TRICHOPLUSIA NI	100
Techniques for evaluating aquatic weed herbicides.	2567	Stess and nuclear polyhedrosis in crowded populations of Trichoplusia ni (Hubner).	85
Industry toxicologists to discuss poisoning symptoms wi medical groups.	2569	TRICHURIS Canine whipworm in man.	187
OXINS The hull rot disease of almond and the pathway for tran cation of a toxin involved in symptom development.	slo- 963	Intravenous treatment of whipworm infection in dogs.	229
Toxin production by Helminthosporium victoriae on synthmedia containing different nitrogen sources.		TROPICAL PLANTS Symposium on tropical plant pathology: invitational pape presented December 11, 1961 at the meeting of The Ameri-	
Toxin production by Leptospira icterohaemorrhagiae.	1883	can Phytopathological Society at Biloxi, Mississippi.	103
Partial reactivation of formalin-inactivated Clostridiu botulinum type C toxin.	m 2347	Some contributions from the tropics to plant disease con methods. $% \left(1\right) =\left(1\right) \left(1\right) \left$	tro 141
Toxicity of wictoxinine.	2421	The role of plant pathology in tropical plantation agric ture.	ul-
Genetic control of toxin production in Helminthosporium victoriae.	2461	Prospective fruits of international cooperation in tropi	
OXOPLASMOSIS Neuropathology of canine toxoplasmosis.	2057	A review of problems in teaching tropical plant patholog	у.
Neuropathology of ovine and bovine toxoplasmosis.	2059	The necessarily broad view in studying tropical plant di	149 - 154
		T-12-12-12-12-12-12-12-12-12-12-12-12-12-	

ULTRAVIOLET RAYS

Special contributions from the tropics to phytopatholog ${\tt mycology}_{\bullet}$	ical 1560	Characteristics of an ornithosis virus strain of low virulence in turkeys.	2046
PRYPAN BLUE Trypan blue and boiling lactophenol for staining and cl	.ear-	The control of paracolon and paratyphoid infections in turkey poults.	2085
ing barley tissues infected with Ustilago nuda.	1292	Chemotherapy of histomoniasis of turkeys. II. The value	of
NSUGA Hemlock canker.	1591	5-nitro-2-furaldehyde acetylhydrazone and 4,7-phenanthr line-5,6 quinone in prevention and treatment.	
UBERCULIB		Studies on leucocytozoonosis of turkeys, with notes on	
Tuberculin reaction size as related to the number of simultaneous tubbeculin injections.	1788	schizogony transmission, and control of Leucocytozoon Smithi.	2121
A comparison of a hemagglutination test with a modified		Ecologic considerations in turkey ornithosis.	2154
hemolytic test on serums from intradermal bovine tuberc reactors and nontuberculous cattle.	1789	Experimental ornithosis in turkeys.	2160
The programme for the eradication of bovine tuberculosi	s. 1819	Thermal inactivation studies on a turkey ornithosis vir	us. 2161
UBERCULIN TEST		Neurofibromatosis in a turkey.	2178
The tuberculin test.	1823	Fowlpox virus neutralization antibody and viremia in	
The early control of bovine tuberculosis.	1831	turkeys.	2197
Vaccination against Johne s disease.	1940	The blood cells of the turkey.	2206
Recent changes in tuberculosis incidence and mortality Scotland.	in 1958	Articular gout in turkeys: a case report.	2216
Avian tuberculosis.	2014	Some physicochemical properties of turkey hepatitis vir	2219
UBERCULOSIS		Further studies of virus hepatitis of turkeys.	2220
The programme for the eradication of bowine tuberculosi	.s. 1819	Pendulous crops in turkeysan anatomic and pathologic	
Tuberculosis in domestic animals other than cattle.	1827	study.	2246
The early control of bovine tuberculosis.	1831	TURNIPS A dependable local lesion assay for turnip yellow mosaic	
Detection of bowine tuberculosis by complement-fixation test.	1840	virus (TYMV) TYLENCHORHYNCHUS CLAYTONI	1392
test.	1040	Host range of Tylenchorhynchus claytoni on some forrest	
Recent changes in tuberculosis incidence and mortality Scotland.	in 1958	nursery seedlings.	1668
Avian tuberculosis.	2014	TYLENCHULUS SEMIPENETRANS A factor in root sap of citrus rootstocks associated wi	+ h
		resistance to citrus nematode.	1154
A new look at tuberculosis eradication in Michigan.	2087	The influence of Tylenchulus semipenetrans on growth of	
Bovine tuberculosis- studies of complement fixation ant gens.	i- 2111	grape cuttings.	1596
TUBERS		Citrus tree decline caused by Tylenchulus semipenetrans tree response following chemical treatment.	1602
Reproductive potential of Cyperus esculentus by tubers.	2488	Influence of soil-oxygen diffusion rates and temperature	
CURF		the citrus nematode and sweet orange seedlings.	1612
The occurrence and control of Typhula itoana and Calone tria graminicola on turfgrass.	1098	Phytopathological notes. infesting citrus seedlings with the citrus nematode, Tylenchulus semipenetrans.	1657
CURREYS			
Experimentally induced mycoplasmosis of adult turkeys.	1843	Influence of Tylenchulus semipenetrans on the growth and chemical composition of sweet orange seedlings in soils warious exchangeable cation ratios.	
Transmission of ornithosis from sheep to turkeys.	1876	The status of bindweeds, Mikania spp. as possible hosts	
The comparative effects of chlortetracycline and oxytet cycline in the treatment of turkeys with ornithosis.	ra- 1897	the citrus-root nematode, Tylenchulus semipenetrans.	1662
L-phase bacterial forms associated with infectious syno in chickens and turkeys.	vitis 1943	Toxicity of some halogenated hydrocarbon mixtures to lagof the citrus nematode, Tylenchulus semipenetrans.	2371
		ULCERATIVE ENTERITIS	
Hematologic findings associated with some common diseas poultry.	1948	The efficacy of chemotherapeutic drugs in the control of experimental ulcerative enteritis in quail.	2034
Salmonellosis in turkeys and chickens associated with contaminated feed.	1956	ULMUS Root grafting of city-planted American elws.	1235
An evaluation of PPLO agglutination antigens for the detection of PPLO agglutinins in turkey sera, 1957-60.	20/10	Multidose injection apparatus for Dutch elm disease inoculations.	c- 2536
	2040	ULTRAVIOLET RAYS	
The lymphofollicar nodules in turkey tissues associated with Mycoplasma gallisepticum infection.	2041	The effect of near-ultraviolet irradiation on the sporu tion of certain fungi.	1a- 953
The gross and microscopic pathology of an ornithosis vi of low virulence for turkeys.	rus 2045	The relation of sporulation of Ascochyta pisi to wave length, intensity, and exposure length to monochromatic	ul-

UNITED STATES

Changes in virulence of soft-rot of bacteria during labora-	seedlings with U. tritici.
tory cultivation and after ultraviolet light irradiation. 1108	USTILAGO TRITICI Naturally occurring quinones in wheat and barley and their toxicity to loose smut fungi. 129
UNITED STATES Epidemiology of leptospirosis in the United States and Canada. 1960	Inoculating barley seedlings with Ustilago nuda and wheat seedlings with U. tritici.
UNITED STATES A virus of ovine abortionisolation from sheep in the United States and characterization of the agent. 2020	UTERUS Noncellular bactericidal factors in inflammatory exudate from the uterine and pleural cavities of estrous and pseudopregnant rabbits. 176
UPLAND COTTON Bost-parasite relations of Rotylenchus reniformis on Gossypium hirsutum. 1642	The effect of an induced state of leukopenia on the uterine bactericidal activity in rabbits.
UREA Effect of urea applications on survival of Fusarium oxysporum f. cubense in soil. 1207	Variations in uterine response to experimental infection du to the hormonal state of the ovaries. I. The role of cervical drainage, leukocyte numbers, and noncellular factors in uterine batericidal activity. 180
UREA BERBICIDES Substituted urea herbicides in the control of undesirable hardwoods. 1695	The bactericidal properties of uteri and uterine exudates o rabbits with reduced leukocytic activity.
UREDINALES The fungicidal activity of acrolein phenylhydrazone and related compounds against rust. 2433	The effect of ovarian hormones on the uterine defense mechanism during the early stages of induced infection. 212
UREDIOSPORES Some factors affecting germinability of uredospores of Puccinia coronata. 2411	The uterine biopsy technique for following the histologic changes caused by Vibrio fetus in the uterine mucosa.
UREDOSPORES Pree amino acid content of stripe rust uredospores. 1042	VACCINES The use of tissue culture-propagated bluetongue virus for vaccine preparation. 177
Overwintering capabilities of uredospores and mycelium of Puccinia graminis tritici in the Pacific Northwest. 1061	Vaccination safety in small dogs, using bivalent modified live virus vaccine. 183
Hutations for virulence in Puccinia coronata. 1329	Propagation of hog cholera virus in tissue culture and its
Storage viability of bean rust uredospores. 1356	application to vaccine I. Propagation of the virus in tissue culture.
The influence of storage conditions on the longevity of urediospores of Puccinia polysora Underw. and Puccinia sorgi Schw. 2318	Killed and live vaccines plus management. 206
URIC ACID The renal clearance of uric acid and p-amino-hippurate in the fowl. 2205	VACCINIA VIRUS Propagation and titration of vaccina virus in bovine epidermal cells. 227
URINE	VAPAM Decomposition of Vapam in soil. 250
Nitrogenous constituents of serum and urine in normal and scrapie sheep. 1923	VARIEGATION Heat-induced variegation-a model disease. 154
Orolithiasis. I. Incidence of bladder calculi, urine properties, and urethal diameters of feedlot steers. 1934	VASCULAR SYSTEM (PLANTS) A vascular disease of soybeans caused by Corynebacterium
UROLITHIASIS Urelithiasis. I. Incidence of bladder calculi, urine properties, and urethal diameters of feedlot steers. 1934	sp. 137 VEIN BANDING (STRAWBERRIES)
UROMYCES PEASEOLI Etiological studies on the ash die-back disease. Leaf age and susceptibility. 1320	Obtaining virus-free strawberries by excision and culturing of apical meristems of plants infected with the yellow edge crinkle, and veinbanding viruses and certain other virus complexes.
URONYCES PHASEOLI WAR. PHASEOLI A revised system for identification of races of Uromyces phaseoli var. phaseoli. 1080	Fragaria virginiana, an indicator host for veinbanding viru of strawberry.
Longewity of urediospores of race 33 of Uromyces phaseoli var. phaseoli in storage. 1312	VEIN ENATION (CITRUS) Modification of immunity of Poncirus trifoliata to yellow- vein virus by the addition of vein-enation virus and susceptible tissue. 238
USTILAGO AVENAE The effect of low temperature on germination of chlamydo- spores of Ustilago avenae. 2487	VENTURIA INAEQUALIS Amino acids in relation to pathogenicity of two wild-type lines of Venturia inaequalis to two apple varieties.
USTILAGO BUDA Resistance of barley to Ustilago nuda. 1133	williams, b j. 102
Effect of cyanide in anaerobic treatment of barley for control of loose smut.	Phloridzin-its metabolism and role in resistance to Venturia inaequalis, incitant of apple scab.
Naturally occurring quinones in wheat and barley and their toxicity to loose smut fungi. 1291	Metabolism of DL- and L-phenylalanine in Malus related to susceptibility and resistance to Venturia inaequalis. 132
Trypan blue and boiling lactophenol for staining and clear- ing barley tissues infected with Ustilago nuda. 1292	VERMICULITE The use of vermiculite cover as a possible means of increas
Inoculating barley seedlings with Ustilago nuda and wheat	ing dwarf bunt in winter wheat test nurseries. 157

ERMINOUS BRONCHITIS Clinical and hematologic studies on pure Dictyocaulus vivi- parus (Block) lungworm infections in calves. 179	7 um-neutralizing antibodies in serum of convalescent cattle
Lungworms enhance severity of swine influenza. 188	
A note on the possible association of Muellerius capillaris with enterotoxaemia.	
Evaluation of cyanacethydrazide for removal of lungworms from naturally infected sheep. 218	VETERINARY MEDICINE The problem of adulterated milk and how it affects the veterinarian. 1765
Studies on infection and immunity with the cattle lungworm, Dictyocaulus viviparus (Bloch). I. Infection in laboratory animals.	medical facilities. 1768
PRNONIA	VIBRIO FETUS BACTERINS Immunization of sheep against ovine vibriosis. 1833
Growth of ironweed as affected by mowing and storage root removal.	9 Zoonotic aspects of vibriosis. 1849
ERTICILLIUM Screening eggplants for resistance to Verticillium wilt. 127	Experimental immunization against ovine vibriosis. I. The use of live and formalin-killed Vibrio fetus vaccines. 6 1953
ERTICILLIUM ALBO-ATRUM	Sporadic ovine vibriosis in virginia. 2262
Effects of soil amendments on nematodes and subsequent Verticillium wilt. 91	8 VIBRIOSIS
Evaluation of soil fumigants for the control of early matnrity wilt of potatoes on long island.	The effect of growth factors on the growth of Vibrio fetns. 1800
Relationship of meadow nematodes to Verticillium wilt of strawberries.	Experimental immunization against ovine vibriosis. I. The use of live and formalin-killed Vibrio fetus vaccines.
Importance of nonhosts in maintaining the inoculum potentia of Verticillinm.	
Mechanisms of variation of Verticillium albo-atrum.	2 Sporadic ovine vibriosis in virginia. 2262
Relation of chlorogenic acid in potato to resistance to infection by Verticillium albo-atrum.	
Ultrastructure of microsclerotia of Verticillium alboatrum.	9 VICTORIN
Reproduction of Verticillium in the rhizospere and subsequent root infection of resistant and susceptible mint species.	Release and accumulation of electrolytes by cells and cell fractions after treatment with victorin. Changes in the nitrogen metabolism of victorin-treated oat
Susceptibility of certain Verticillium-resistant tomato	varieties. 1172
varieties to an Ohio isolate of the pathogen. 130	1 An intermediate reaction to victorin. 1646
Effect of root exudates on germination of conidia and micro sclerotia of Verticillinm albo-atrum inhibited by the soil fungistatic principle.	torin-treated oat tissue. 2418
Comparative reactions of certain cottons to Pusarium and	VICTOXININE The toxicity of citroxinine. 2345
Verticillinm wilts.	Toxicity of victoxinine. 2421
Fathogenicity of an isolate of Verticillium albo-atrum from olive. 145	
Influence of some environmental factors on hereditary variation in monospore cultures of Verticillinm albo-atrum.	- killed Newcastle disease vaccines. 2123
The effect of some insecticides on the growth of Verticil-	Fowlpox virus nentralization antibody and viremia in turkeys. 2197
linm albo-atrum. 246 BRTICILLIUM DAHLIAE	VIRGINIA
Effect of anaerobic fermentation in soil on survival of sclerotia of Verticillium dahliae.	Horsenettle and Osborne s cyst nematodes - two undescribed nematodes occurring in Virginia. 1610
Interaction of Verticillium dahliae and Pratylenchus pene-	Sporadic ovine vibriosis in virginia. 2262
trans in tomato wilt. Colonization of plant debris in soil by Verticillium dahli-	Characteristics of filamentons virnses isolated mechanically from apple. 1332
ac. 131	Relations of 10 isolates of watermelon mosaic virus (WMV)
Influence of soil type on the fungicidal activity of soil fumigants against Verticillium dahliae.	8 Identity of mosaic virus of cowpea. 1431
ERTICILLIUM WILT Relation of histochemical tests for phenols to Verticillium wilt resistance of potatoes. 136	An improved method for assaying infectivity of tobacco mosa-
Influence of soil temperature, isolates, and method of inoculation on resistance of mint to Verticillinm wilt.	Apparent natural infection of Corturnix quail hens with the virus of avian encephalomyelitis - case report. 1974
138	

VIRUCIDE:

WIRUCIDES Succulent-type plants as sources of plant wirus inhibito	ors	lated strains of plant viruses.	04
Successful type plants as sources of plant virus innibite	1343	Characterization of five geranium virus isolates and in vitro growth of geranium stem tips.	04
A virus inhibitor from tobacco.	1450	Further studies on the woody gall virus disease of citrus.	
Thermal inactivation studies on a turkey ornithosis viru	15. 2161		07
VIRULENCE		The destruction of viruses by soil fumigants. mcKeen, c d. 10	07
Complementary effects of related viruses mixed in serial lutions.	1038	Transmission of unstable viruses from liquid-nitrogen-from plant tissue.	ze 09
Changes in virulence of soft-rot of bacteria during lab tory cultivation and after ultraviolet light irradiation		Obtaining virus-free strawberries by excision and culturing of apical meristems of plants infected with the yellow edge.	ng
Expressions of virulence among isolates of Pseudomonas astanonoi from olive and oleander.	sav- 1125	crinkle, and veinbanding viruses and certain other virus complexes.	10
Cell-associated virus infectivity of tissue cultures der from susceptible and resistant sources.	ived 1265		12
Mutations for virulence in Puccinia coronata.	1329	The effect of single and multiple virus infection upon nu- leic acid content in Prunus mahaleb seedlings. 1	c- 13
Survival of PPLO injected into eggs previously dipped in antibiotic solutions.	2038	Identification of two citrus virus diseases by serological agglutination. $\ensuremath{1}$	1 17
Physiological differences between a virulent and a weak virulent radiation-induced strain of Erwinia carotovora.	· .	Recovery of aster yellow virus from carrot tissue culture inoculated in vitro.	s 18
	2458	Additional hosts of the fig mosaic virus.	22
A rapid cultural test for relative cellulolytic activity fungi.	y of 2507	Effect of excortis on Satsuma orange.	24
VIRUS DISEASES (ANIMALS) Experimental studies on a new feline virus.	1928	Pathological anatomy of rapid decline of Spy 227 apple.	27
Detection of swine masal viruses in cell cultures.	1984	Soil transmission of tobacco ringspot virus.	28
Recent studies on the virus of infectious bronchitis.	2009	A new corn disease in Ohio.	30
Propagation of hog cholera virus in tissue culture and a		Relations of 10 isolates of watermelon mosaic virus (WMV) $_{\rm 1}$	• 38
application to vaccine I. Propagation of the virus in tissue culture.	2039	Effect of virus infection on persistence of ladino clover	38
Studies on five porcine enteroviruses.	2053	Transmission of some Gladiolus viruses on tools in	30
Serologic relationship of new feline cytopathogenic wir	us. 2066	harvesting flowers and corms.	39
Experimental ornithosis in turkeys.	2160	Advantages of determining the tolerance of strawberries by grafting with leaves infected with a virus complex.	у 40
Louping-ill: The red deer (Cervus elaphus) as an alternative host of the virus in Scotland.	2191	Weak peach, a new virus disease of peach.	41
VIRUS DISEASES (PLANTS)	2131	Cowpea (southern pea) diseases in Georgia, 1961-1962.	43
A comparison of virus isolates, dwarf-fruit and Spy 227-lethal.	945	Systemic resistance induced by localized virus infections beans and cowpeas. $\ensuremath{\text{1}}$	i 45
New types of primary necrotic lesions produced by common bean mosaic virus.	950	Virus-fungus relationships in a root-rot complex in red \mathbf{c} ver.	10 50
An apparently virus-free leaf of a systematically invade plant.	ed 958	Heat-induced variegation-a model disease.	54
Resistance to cucurbit viruses in Cucumis melo.	966	Variation among isolates of necrotic ringspot and prune dwarf viruses isolated from sour cherry.	54
Factors determining the rate of bean yellow mosaic virustransmission by the aphid Myzus persicae.	s 977	${\tt A}$ stable, dense, infective form of tobacco mosaic virus.	57
A kinetic investigation of the mode of TMV attachment to infectible sites.	981	The effect of pH and phosphate on virus infection. 2	37
Transmissable decline diseases of apple.	983	Changes in the DNA content of leaves collected from healt and virus-infected cherry.	hy 39
Acquisition and transmission of asters yellows wirus.	002	Test of a fixative for virus-infected plant cells. 2	47
Relationships among Prunus viruses of the necrotic ring		VIRUS DISEASES PLANTS Some properties and fine structure of a new virus isolate from Gladiolus. 1.	d 44
Transmission of viruses to strawberry by excised leaf grown plants other than strawberry.	rafts 1028	VIRUS HEPATITIS Some physicochemical properties of turkey hepatitis virus	
Complementary effects of related viruses mixed in serial lutions.	1 di- 1038		21 22
Interference studies with mixed inocula of related and	unre-		

SUBJECT INDEX

ROS MOTATION Characteristics of proteinless mutants of tobacco mosa: rirus.	ic 1143	WATER TREATMENT The effect of applied water on preemergence applications of amiben. 2326
RUS 2 (BEANS) a strain of bean virus 2 that overcomes resistance in p		WATERMELONS Mycosphaerella fruit rot of watermelon. 1225
conditioned by the mo mo genctype.	1123	Relations of 10 isolates of watermelon mosaic virus (WMV)
NOSES Cell-associated virus infectivity of tissue cultures de From susceptible and resistant sources.	erived 1265	1384 Symptoms associated with watermelon mosaic virus in south
characteristics of filamentous viruses isolated mechani from apple.	ically 1332	Georgia. 1433 Histology of watermelon anthracnose. 1562
solation of tobacco wein distorting wirus from tobaccollants infected with aphid-transmissable bushy-top.	o 1358	WEAK PEACH (PEACHES) Weak peach, a new virus disease of peach. 1410
rapid method for purifying tobacco ringspot virus and corphology by electron microscopy and negative staining	g.	WEATHER Weather, space, time, and chance of infection. 1352
	1494	Turbulent transfer of fungus spores. 1369
irus cause of blue dwarf of oats and its transmission arley and flax.	to 1520	The seasonal variations of Strongyle infestations in Nigerian Zebu cattle. 1969
desistance in red clover to five viruses.	1564	
Castern and western encephalomyelitis found in florida NOTSES.	1869	Winter survival of Digitaria sanguinalis in subtropical climates. 2477
ransmission of ornithosis from sheep to turkeys.	1876	WEB BLIGHT (BEANS) Web blight -a severe disease of beans and soybeans in
Bowine lymphosarcoma.	1882	Mexico. 1239
therapy of atrophic rhinitis.	1885	WEB BLIGHT (SOYBEANS) Web blight -a severe disease of beans and soybeans in
The emerging classification of animal viruses- A revie	v	Mexico. 1239
	1912	WEED CONTROL Host specificity of Calophasia lunula (Hufn.) (Lepidop-
colostral antibody to rabies in cattle vaccinated with flury strain of the virus.	нер 2016	tera: Noctuidae). 801
Owine virus abortion.	20 19	Bibliography of weed investigations for January, Pebruary, March 1961. 1670
An in vitro neutralization test with avian encephalomyelitis virus (AEV)	2174	Bibliography of weed investigations for April, May, June, 1960. 1672
The structure of animal viruses.	2199	Bibliography of weed investigations for October, November, December 1960. 1674
the immunological antigenicity of rapid heat inactivate viruses. I. Newcastle disease virus.	ed 22 17	Bibliography of weed investigations for July, August, September, 1960.
SCERA Diabetes insipidus attributed to visceral larva migran:		Chemical weed control in young grapes. 1677
iog.	1884	Bibliography of weed investigations for July, August, September, 1959.
Influence of vitamins and other compounds on the degre- infection of wheat by Puccinia graminis tritici.	e of 1402	The bristly thistle and its control. 1681
LATILE SUBSTANCES Inactivation of tobacco mosaic virus by volatile chemi	cals.	Interrelations of row spacings, cultivations and herbicides for weed control in soybeans. 1715
	1186	Bibliography of weed investigations for july-december 1961,
LVN Squamous-cell carcinoma of the vulva of cattle in Keny.		table of contents. 1720
	2256	Uptake and distribution of simazine by oat and cotton seed- lings. 1725
SHINGTON Reaction of grass to stripe rust at Pullman, Wash.	1074	Delayed preemergence weed control in seeded tomatoes and peppers.
Dynamics of the mycoflora of subterranean parts of win wheat in the dryland area of Washington.	ter 1134	Herbicides and herbicide mixtures for weed control in
Measures of the destructive potential of stripe rust in Rashington.	n 1161	peanuts. 1734 Weed control in castorbeans. 1753
Re-examination of vector-specificity in the barley yel:	low	WEEDS
dwarf virus in Washington.	1587	A variant culture of Xanthomonas malvacearum obtained from weed roots.
TER Lethal time-temperature relation for Heterodera glycin	es. 1647	Bibliography of weed investigations - April, May, June, 1959.
Influence of nozzle size and type hardness of water, a wetting agents on spray drift.	nd 2558	Bibliography of weed investigations for January, February, March 1961.
		Bibliography of weed investigations for April, May, June, 1960.

WEEDS

SUBJECT INDEX

WE	STERN EQUINE ENCEPHALOMYELITIS VIRUS			
	Bibliography of weed investigations for January, Februa:	ry, 1673	tion intensity of stem rust of wheat.	1537
	Bibliography of weed investigations for October, Novemborecember 1960.		Resistance to snow mold of winter wheat. Sterilization of wheat seed by ethylene oxide.	1585 2319
	Bibliography of weed investigations for October, Novemb	er,	MHEX	
	December 1959. Bibliography of weed investigations for July, August,	1675	Presence of blood-serum albumin in mastitic milk. Experimental studies on the occurrence of staphylococcal	1851
	September, 1960.	1676	antitoxin in the whey of cows.	1904
	Report of the terminology committee, Weed Society of America.	1678	WHITE CLOVER Aphid transmision of white clover mosaic virus.	1517
	Weeds as carriers of two potatoe pathogens in Colorado.	1688	Factors influencing survival of red and white clover plaexposed to low temperatures.	ants 2450
	The role of chemical research in develoring selective we control practices.	eed 1690	WHITE MUSCLE DISEASE Nutritional muscular dystrophy in lambs- importance of t ewe s diet at certain stages of gestation and lactation.	
	Penetration and nutrition of Striga asiatica.	1699	ewe s diet at tertain stayes of gestation and lattation.	2023
	Weed control in cotton over a ten-year period by use of more promising materials and techniques.	the 1724	Serum transaminase in the blood of lambs given preventive treatments for white muscle disease.	ve 2049
	Research and organizational needs in the field of weed $oldsymbol{ ext{trol}}.$	con- 1728	Blood enzyme interrelationships in white muscle disease.	2230
	Weed control research - past, present and future.	1741	Prevention of white muscle disease in lambs by oral and subcutaneous administration of selenium.	2231
	Phytotoxicity of s-triazine herbicides to corn and weeds related to structural differences.	s as 2365	WILDFIRE (TOBACCO)	
	Root moisture extraction profiles of various weeds.	2443	Loss of wildfire resistance in tobacco due to chromosome fragmentation.	1171
	STERN EQUINE ENCEPHALONYELITIS VIRUS Recovery of western equine encephalomyelitis virus from washings of experimentally infected pigeions.	crop 2138	Resistance to the wildfire disease in relation to the gentlement of the description of th	ene- 1513
9 8	EAT		WILDLIFE Epidermoid carcinoma of the esophagus of an antelope.	
	Relation between phenol metabolism and stem rust resistant wheat.	ance 944		2277
	Seedling versus mature plant reactions of wheat to stri		Trichinosis occurs in foxes.	2282
	rust. Effect of crop rotation on yields of corn, oats, and who and on corn stalk rot.	1013 eat 1033	WILDLIFE DISEASES Apparent natural infection of Corturnix quail hens with virus of avian encephalomyelitis - case report.	the 1974
	A technique for measuring CO2 production of wheat at 15- percent moisture content.		WILT (BANANAS) Effect of urea applications on survival of Fusarium oxysporum f. cubense in soil.	1207
	Inheritance of resistance to common bunt, Tilletia cari	es, 1085	WILT (COTTON) Infection relationship between Meloidogyne incognita acr	
	Effects of preinoculation and postinoculation host temptures on infection of wheat seedlings by Puccinia striimis.		and Fusarium oxysporum f. vasinfectum in cotton. Comparative reactions of certain cottons to Pusarium and Verticillium wilts.	921 d 1427
	Dynamics of the mycoflora of subterranean parts of winter		WILT (DIANTHUS CARYOPHYLLUS)	
	wheat in the dryland area of Washington.	1134	Phytophthora wilt of carnation.	1130
	Phenol content in rust infected and nitrogen fertilized wheat leaves.	1152	WILT (MUSKMELONS) Sudden wilt of muskmelon in New York state.	1218
	Wheat striate mosaic in Canada.	1159	WILT (QUERCUS) The effect of growth regulators on oak wilt development.	
	Storage of fungi in seeds of small grains.	1275		1114
	Some histological and genetic relationships of resistand wheat to loose smut.	ce of 1327	WILT (STRAWBERRIES) Relationship of meadow nematodes to Verticillium wilt of strawberries.	f 1007
	Influence of vitamins and other compounds on the degree infection of wheat by Puccinia graminis tritici.	of 1402	WILT (TOMATOES) Effects of soil amendments on nematodes and subsequent	
	Postinfection development of flag smut of wheat in relato controlled soil moisture.	tion 1421	Verticillium wilt. Mitigation of Fusarium wilt symptoms of tomato seedlings	918
	Inoculating barley seedlings with Ustilago nuda and where seedlings with \mathbf{U}_{\bullet} tritici.	at 1518	seed inoculation with a species of Cephalosporium.	1012
	Relation of moisture content and length-of-storage peri- to changes in the fungus flora and germination percenta-		Symptom retardation of Fusarium wilt of tomato seedlings	
	wheat.	1523	a Cephalosporium species.	1054
	Duration of protective activity in wheat seedlings of values compounds against stem rust.	ar- 1531	Interaction of Verticillium dahliae and Pratylenchus pen trans in tomato wilt.	ne- 1129
	Pre- and postinoculation effects of light quality on in:	fec-	Symptoms of Fusarium wilt in relation to quantity of fun	igus

and enzyme activity in tomato stems.	1353	XYLOTRECHUS COLONUS
WIND TUNDELS A low speed wind tunnel for determining the effects of	wind	Descriptions of immature forms and biology of Xylotrechus colonus (Fab.) (Coleoptera: Cerambycidae). 872
on flight activity of insects.	2543	YEAST CULTURES Effect of fungicides on permeability of yeast cells to the pyruvate ion. 2485
WINGS (INSECTS) A note on the pterostigma in insects.	809	11
A flexible cuticle in the wing bases of Lepidoptera.	831	YPASTS Uptake of cycloheximide by a sensitive and a resistant yeast. 2486
WISCONSIN Does the corn leaf blight fungus survive Wisconsin winters.	1372	YELLOW BUD MOSAIC (PEACHES) Relationship between tomato ringspot and peach yellow bud mosaic viruses. 1337
Relation of seed- and soil-borne inoculum to epidemiolo of angular leaf spot of cucumber in wisconsin.	1566	YELLOW DWARF (BARLEY)
ROOD DECAY Site affects rate of decay in cherrybark oak.	1429	Control of barley yellow dwarf in winter oats by a systemic insecticide. 1335
Resistance of extrative-free coniferous woods to decay white-rot fungi.	by 1593	Hill technique for evaluating the resistance of cereals to barley yellow dwarf virus. 1374
Changes in degree of polymerization of holocellulose du decay of sweetgum sapwood by white- and brown-rot fungi		Latent periods in the aphid transmission of barley yellow dwarf virus. 1411
HOOD DESTROYING FUNGI	2512	Survival and yield of winter cereals affected by yellow dwarf. 1485
Phytophthora cinnamomi associated with Lawson cypress mality in Louisiana.	nor- 1408	Re-examination of vector-specificity in the barley yellow dwarf virus in Washington. 1587
Site affects rate of decay in cherrybark oak.	1429	YELLOW EDGE (STRAWBERRIES)
Fungi associated with the discolorations around root cocaused by Fomes igniarius.	olumns 1437	Obtaining virus-free strawberries by excision and culturing of apical meristems of plants infected with the yellow edge, crinkle, and veinbanding viruses and certain other virus complexes.
Artificial infection of small spruce roots with Polypor tomentosus.	1574	YELLOW MOSAIC (BEANS) Factors determining the rate of bean yellow mosaic virus
$\mbox{\ensuremath{\mathtt{A}}}$ rapid cultural test for relative cellulolytic activityingi.	ty of 2507	transmission by the aphid Myzus persicae. 977
WOOD DURABILITY Resistance of extrative-free coniferous woods to decay white-rot fungi.	by 1593	YELLOW MOSAIC (TURNIPS) A dependable local lesion assay for turnip yellow mosaic virus. 1391
WOOD STAINING FUNGI	funai	A dependable local lesion assay for turnip yellow mosaic virus (TYMV) 1392
Factors affecting pigmentation by two wood-inhabiting f	1412	YELLOW VEIN (GRAPES) Purification and serology of a virus associated with the grape yellow vein disease. 1478
Further studies on the woody gall virus disease of citr	1071	YELLOWS (CHERRIES) Influence of gibberellin on bud differentiation of sour
WORLD AGRICULTURAL SITUATION Symposium on plant disease losses.	1184	cherry and on damage by sour cherry yellows. 1212 YOLK SAC
Plant disease losses as they occur worldwide.	1228	Chick mortality and the contamination of yolks by members of the enterobacteriaceae. 2108
Control of anaplasmosis under Wyoming conditions.	2276	ZEBU CATTLE The seasonal variations of Strongyle infestations in Nigerian Zebu cattle. 1969
Angular leaf spot of strawberry caused by Xanthomonas if gariae sp. nov.	fra- 1524	ZINEB A rapid method for the determination of copper in
IANTHOMONAS MALVACEARUM A variant culture of Xanthomonas malvacearum obtained f weed roots.	from 1274	biological tissues by means of zinc dibenzyldithiocarbamate. 2532
In vitro nutrition of Manthomonas malvacearum.	2444	ZINOPHOS Nematode control in cranberry. 1637
XANTHOMONAS PELARGONII Whitefly transmission of Xanthomonas pelargonii and his logical examination of leafspots of Pelargonium hortory		ZOALENE A 3,800 bird trial of a new coccidiostats. 1835
XANTHOHONAS VESICATORIA	1525	The immunogenicity of a commercial coccidiosis vaccine in conjunction with Trithiadol and Zoalene. 2102
The effect of high nitrogen fertilizer on the control of bacterial leafspot of peppers caused by Xanthomonas vesicatoria and the yields of marketable fruit.	of 1255	ZOOGEOGRAPHY Principles and methods of zoogeography: the field approach. 799
XYLANS A xylanase system produced by Diplodia viticola.	2472	ZOOLOGICAL GARDENS Incidence and treatment of parasites in a zoological garden. 2296
XYLEN Similarity of movement of N-alkyl quaternary ammonium of	com-	2270
pounds in aqueous systems on paper chromatograms and in plant xylem.		

SUBJECT INDEX

ZOOSPORES

ZOOSPORES Penetration and infection of pea roots by zoospores of Aphanomyces euteiches.	972
Serological evidence that Olpidium zoospores carry tobacconecrosis virus.	o 179
Pathogenic and cultural variability of single zoospore iso lates of Phytophthora megasperma var. sojae. 12	o - 299
Oospore production by single-zoospore isolates of Phytoph- thora fragariae in culture.	- 381
Attraction of Aphanomyces eutiches zoospores to pea and other plant roots.	563
1,2-DIBBONO-3-CHLOROPROPANE Chemical dips for eradication of root-knot nematode from plant roots.	540
Effectiveness of application methods with several nematocides for control of root-knot nematode.	541
Toxicity of mixtures of 1,2-dibromo-3-chloropropane and 1,2-dibromoethane to the root-knot nematode, Meloidogyne javanica.	369
2,4-D Determination of 2,4-D residues in soybeans. 16	689
The fate of long chain esters of 2,4-D in plants.	438
The degradation of isolated microsomes from cucumber and corn seedlings. 2ℓ	462
Penetration of living and non-living surfaces by 2,4-D as influenced by ionic additives.	497
2,4,5-TRICHLOBOPHENOXYACETIC ACID Control of blackjack oak by basal spraying with 2,4,5-T. 1	716

2,6-DICHLORO-4-NITROANILINE
Effects of 2,6-dichloro-4-nitroaniline on Rhizopus and
brown rot of peaches.
2341

BIOGRAPHICAL INDEX

		115	Her, K D
Adler, H E	2152	National Institutes Of Health Grant HE-08460-02 Carpenter, J B	2355
National Animal Disease Laboratory, Ames, Iowa Adler, H E		U. S. Dept. Of Agriculture, Indio, Calif.	
National Institutes Of Health Adler, H E	2155	Agricultural Research Service Crops Research Division	1359
National Institutes Of Health Alexander, A F	2156	Chalquest, R R Dr. Salsbury s Turkey Research Fellowship	2038
National Institutes Of Health	1950	Chalquest, R R	
Allen, R K National Science Foundation	838	U. S. Dept. Of Agriculture Agricultural Research Service, W-5	
Anderson, A S Royal Veterinary And Agricultural College, Copenhagen		Animal Disease And Parasite Division U. S. Public Health Service	226 7
Dept. Of Plant Physiology Anderson, N H	1531	Chandra, P University Of Baghdad, Abu Garib, Iraq	
Oregon State University, Corvallis		College Of Agriculture	170 1
Entomology Dept. Asdell, M K	800	Chute, H L Chas. Pfizer And Co., Groton, Conn.	2209
U. S. Dept. Of Agriculture Athow, K L	2249	Cohen, M University Of Florida, Fort Pierce	
Furdue University Agricultural Experiment Station	1363	Citrus Experiment Station	420.5
Bacle, J F Canada Dept. Of Fisheries, Quebec	1907	Indian River Field Laboratory Collier, J R	1345
Barber, C W U. S. Dept. Of Agriculture, Washington, D. C.		Colorado Serum Company Collins, K E	1952
Agricultural Research Service	0000	Associated Veterinary Laboratories, Inc.	1982
Animal Diseases And Parasite Research Division Barber, C W	2040	Collins, K E Associated Veterinary Laboratories, Inc.	1983
U. S. Dept. Of Agriculture, Washington, D. C. Agricultural Research Service		Cornelius, C E California Thoroughbred Breeders Poundation	1794
Animal Disease And Parasite Research Division	2041	Cornelius, C E	
Barnes, E H Michigan Concord Grape Research Fund	1262	California Thoroughred Breeders Poundation Crandell, R A	1796
Bateman, D F National Institutes Of Health	1214	Office Of Naval Research Cundy, K R	1928
Beamer, P D	1217	U. S. Public Health Service Grant AI 03916	2146
Public Health Service Division Of Research Grants		Cunningham, J L University Of Toledo	
National Institutes Of Health Bell, A A	2195	Dept. Of Biology Davis, C L	1563
University Of Maryland, College Park	2492	U. S. Public Health Service	
Benda, G T A National Science Foundation	1541	Institute Of Allergy And Infectious Diseases del Mundo, A	2030
Benton, W J Public Health Service		Missouri Agricultural Experiment Station, Columbia Detweiler, D K	1534
National Institute Of Health	2404	National Institutes Of Health	0026
National Cancer Institute Beran, G W	2181	National Heart Institute Dimopoullos, G T	2236
Silliman University Besch, E D	2200	National Institutes Of Health Domermuth, C H	2003
U. S. Dept. Of Agriculture	2300	U. S. Dept. Of Agriculture	
Bhatt, D D Tri-chandra College, Kathmandu, Nepal	1304	Agricultural Research Service Animal Disease And Parasite Research Division	2263
Biely, J National Cancer Institute Of Canada, Toronto	2104	Domermuth, C H U. S. Dept. Of Agriculture	
Blackburn, R D U. S. Dept. Of Agriculture		Agricultural Research Service Animal Disease And Parasite Research Division	226 4
Crops Protection Research Branch	2400	Dozsa, L	
Blodgett, E C Washington State Dept. Of Agriculture, Prosser	1583	Regional Research Funds Drudge, J H	2268
Bohl, E H Public Health Service		Veterinary Division Of The Upsohn Co., Kalamazoo, Mich.	2295
National Institutes Of Health	2053	Du Bose, R T	2293
Bovey, R W U. S. Dept. Of Agriculture, Texas A. And M. University		Virginia Polytechnic Institute, Blacksburg, Va. Dept. Of Animal Pathology	2095
Agricultural Research Service Crops Research Division	1754	Dziuk, H E Iowa State University, Ames	
Bowey, R W		College Of Veterinary Medicine	2018
University Of Nebraska Brodie, B B	2533	Eisa, A M Burroughs Wellcome And Co., Tuckahoe, N. Y.	1777
Texas Agricultural Experiment Station, Lubbock Brown, W E	1424	Ellingboe, A H Harvard University, Cambridge, Mass.	
National Institutes Of Health Broyles, J W	2189	Biological Laboratories Endo, R M	1526
U. S. Dept. Of Agriculture,		University Of California, Riverside	
Agricultural Research Service Crops Research Division	1267	Dept. Of Plant Pathology Ennis Jr, W B	1374
Burdin, M L Central Veterinary Laboratory, Weybridge	2256	U. S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service	
Burke, C N	2230	Crops Research Division	474
Public Health Service Research Grant No. AI-03217-05	2173	Crops Protection Research Branch Fabricant, C G	1711
Burnside, O C University Of Nebraska		U. S. Public Health Service National Institutes Of Health	
Dept. Of Agronomy	2338	National Institute Of Allergy And Infectious Diseases.	2022
Burnside, O C University Of Nebraska	0.25	Fincher, M G	2032
Dept. Of Agronomy Calnek, B W	2372	U. S. Public Health Service Division Of Enveronmental Engineering And Food Protecti	on
DeKalb Agricultural Association, Inc., DeKalb, Ill. Carltop, W W	2218	Fisher, K D	2331
• •			

BIOGRAPHICAL INDEX

Ford; R E

rold, a b			
University Of Vermont Dept. Of Botany Ford, R E	1639	Washington State University Dept. Of Plant Pathology Bolden, P	137 1
Oregon State University, Corvallis		National Institutes Of Health, Bethesda, Md.	
U. S. Dept. Of Agriculture Agricultural Research Service		Division Of Research Services Laboratory Aids Branch	2136
Crops Research Division	1215	Hooker, A L	2100
Forgacs, J	1914	Dept Of Health, Education And Welfare Public Health Service	
Good Samaritan Hospital, Suffern, N. Y. Forgacs, J	1514	National Institutes Of Health	1510
American Cyanamid Company, Princeton, N. J.		Hooker, A L	
Agricultural Division Fowler, E B	1973	Dept. Of Health, Education And Welfare Public Health Service	
U.S. Public Health Service		National Institutes Of Health	1511
National Institute Of Health	2058	Horner, C E	1000
Funderburk Jr, E B Auburn University		United States Brewers Association Bughes, R W	1404
Botany Dept.	2415	Public Health Service	
Funderburk Jr, E E		National Institute Of Allergy And Infectious Diseases	2070
Auburn University Botany Dept.	2416	Husain, S M	2070
Gabrielson, R L		Glassboro State College, N.J.	2553
Washington State University Western Washington Experiment Station	1474	Husain, S S Colombo Plan	1546
Gaskin, T A		Husain, S S	10.0
Warren s Turf Nursery, St. Palos Park, Ill.	1327	Colombo Plan	1547
Goetz, M E California State Dept. Of Public Health		Hwang, J American Poultry And Hatchery Federation	2174
2151 Berkely Way		Hwang, J	
Berkeley, California Gooding Jr, G V	2085	American Poultry And Hatchery Federation Ikenberry Jr, G J	2177
North Carolina Research Triangle, Durham		Michigan State University, East Lansing	
U. S. Forestry Sciences Laboratory	1478	Dept. Of Botany And Plant Pathology	1303
Goth, R W U. S. Dept. Of Agriculture, Beltsville, Md.		Inman, R E University Of Nebraska	
Agricultural Research Service		Dept. Of Plant Pathology	1515
Crops Research Division	1517	Jaques, R P	
Goth, R W U. S. Dept. Of Agriculture, Beltsville, Md.		Cornell University, Ithaca, N. Y. Dept. Of Entomology	857
Agricultural Research Service		Jaskoski, B J	
Crops Research Division Graves, J H	2487	Society Of The Sigma Xi Jordan, B E	2296
U. S. Dept. Of Agriculture, Greenport, Long Island,	N. Y.	Fort Dodge Laboratories	2188
Agricultural Research Service	2079	Kamimura, S	2489
Animal Disease And Parasite Research Division Graves, J H	2019	National Institutes Of Health Kasza, L	2403
U. S. Dept. Of Agriculture, Greenport, Long Island,	N. Y.	Public Health Service	2050
Agricultural Research Service Animal Disease And Parasite Research Division	2080	National Institutes Of Health Kavanagh, T	2050
Greenberg, B		University College, Dublin, Ireland	
National Science Foundation Grant, G9934	896	Dept. Of Plant Pathology	1518
Gregory, D W Affiliated Laboratories Corp., White Hall, Ill.	1811	Kavanagh, T University College, Dublin, Ireland	
Grimm, R B		Dept. Of Plant Pathology	1519
U. S. Public Health Service Grover, R K	2419	Kawashima, N Japan Monopoly Corp., Yutaka-machi, Shinagawa-ku, Toky	70
University Of Panjab, Chandigarh, India		Central Research Institute	1269
Dept. Of Botany	2373	Kleckner, A L	
Gupta, J U. S. Dept. Of Agriculture		U. S. Dept. Of Agriculture Agricultural Research Service	
Animal Disease And Parasite Research Division	2274	Animal Disease And Parasite Research Division	218 7
Hahn, A W Auburn Research Foundation		Koestner, A U. S. Public Health Service	
Scott Research Grant	2287	Institutes Of Health	2057
Hall, C F		Kontaxis, D G	1468
U. S. Dept. Of Agriculture Agricultural Research Service		Philippine Packing Corp., Manila Lannek, N	1400
Animal Disease And Parasite Reasearch Division	2093	State Veterinary Medical Institute, Stockholm	2083
Hall, C F U. S. Dept. Of Agriculture		Larson, E J Upjohn Co., Kalamazoo, Mich.	1780
Agricultural Research Service		Leaf, A L	
Animal Disease And Parisite Research Division Hampton, R O	2094	American Smelting And Refining Co., South Plainfield N	N. J. 1709
U. S. Dept. Of Agriculture		Legenhausen, D H	1703
Vegetables And Ornamentals Research Branch	4506	U. S. Dept. Of Agriculture	
Irrigation Experiment Station, Prosser Berridge, E A	1586	Agricultural Research Service Animal Disease Eradication Division	2123
University Of California, Berkeley		Levine, N D	
Dept. Of Plant Pathology Beuschele, W B	923	Smith, Kline, And French Laboratories Levine, P P	2309
U. S. Dept. Of Agriculture		U. S. Dept. Of Agriculture	
Agricultural Research Service		Agricultural Research Service	
Animal Disease And Parasite Research Division Flum Island Animal Disease Laboratory	2277	Animal Disease And Parasite Research Division Respiratory Diseases Project	2037
Hill Jr, R R		Lingappa, B T	
Cornell University, Ithaca, N.Y. Dept. Of Plant Breeding	1422	National Science Foundation Lister, R M	2422
Hobbs, E L		Scottish Horticultural Research Inst., Invergowrie, Du	
Gulf Coast Experiment Station, Bradenton, Fla.	2411	Inter P W	1330
Hoffman, J A		Lutey, R W	

BIOGRAPHICAL INDEX

		Sel	lleck, G W
Malting Barley Improvement Association, Milwaukee, Wis		Agricultural Research Service	2154
Mace, M E	1527	Page, L A University Of California, Davis	
United Fruit Company, Norwood, Mass.		School Of Veterinary Medicine	
Central Research Laboratories	1291	Dept. Of Avian Medicine	2160
Maddy, K T Arizona Tuberculosis And Health Association	2137	Page, L A University Of California, Davis	
Malca, I		School Of Veterinary Medicine	
Herman Frasch Foundation	1477	Dept. Of Avian Medicine	2161
Martin, M W U. S. Dept. Of Agriculture		Patel, P N University Of Wisconsin	
Agricultural Research Service		Research Committee Of The Graduate School	1568
Crops Research Division Martinson, C A	1576	Patel, P N Wisconsin Alumni Research Foundation	2498
Oregon State University, Corvallis	1204	Pieczarka, S J	2430
Matta, A	4252	Ferry-Morse Seed Co., Salinas, Calif.	1703
Istituto Di Patologia Vegetale, Turin, Italy Maurer, F D	1353	Pirone, T P Louisiana State University	
U. S. Army Medical Research Laboratory, Fort Knox, Ky.		Dept. Of Plant Pathology	1556
Pathology Division	1920	Price, J I	****
Mayer, G P U.S. Public Health Service	2239	New York State Veterinary College, Ithaca Price, J I	1964
McLaughlin, R E		Long Island Duck Research Cooperative, Inc.	2033
Boll Weevil Research Laboratory, State College, Miss.	878	Reber, E F	
McLaughlin, R E	070	Swift And Co. Research Laboratories	1799
Boll Weevil Research Laboratory, State College, Miss.		Rehfeld, C E	
McLean, J G	879	U. S. Atomic Energy Commission Riqdon, R H	1805
Extension Vegetable Crops	1366	U. S. Public Health Service	
McWhorter, C G		National Institute Of Neurological Diseases And Blinds	
Mississippi Agricultural Experiment Station, Stoneville	2365	Pictic #	2246
Delta Branch McWhorter, C G	2303	Ristic, M University Of Illinois	
Mississippi Agricultural Experiment Station, Stoneville		College Of Veterinary Medicine	
The Delta Branch	2452	Dept. Of Pathology And Hygiene	1798
McWhorter, C G Mississippi Agricultural Experiment Station, Stoneville		Ristic, M U. S. Public Health Service	
The Delta Branch	2463	National Institutes Of Health	2185
McWhorter, C G		Ristic, M	
Mississippi Agricultural Experiment Station, Stoneville	2561	University Of Illinois College Of Veterinary Medicine	
Melville, G S		Dept. Of Pathology And Hygiene	2186
U. S. Air Force	100#	Roberts, E D	
School Of Aviation Medicine Miller, R E	1804	Iowa State University, Ames Dept. Of Veterinary Pathology	2027
Grange League Federation Exchange, Incorporated	1623	Rochow, W F	
Moll, T Office Of Naval Research	2265	National Institutes Of Health Ross, J P	1411
Moore, R W	2203	University Of North Carolina, Raleigh	1364
U. S. Dept. Of Agriculture		Roth, J N	
Agricultural Research Service Animal Disease And Parasite Research Division	1897	Goshen College, Goshen, Indiana Dept. Of Biology	2430
Moorhouse, D E	1037	Rubin, R	2430
University Of Queensland, Brisbane, Australia	000	Burroughs Wellcome And Co.	2289
Dept. Of Parasitology Morter, R L	909	Saidak, W J Plant Research Institute, Ottawa, Ontario	2407
Iowa State University		Salerno, M	2407
Veterinary Medical Research Institute	2008	University Of Catania, Italy	0447
Morton, D J Malting Barley Improvement Association	1292	Institute Of Plant Pathology Sanford, J	2447
Munnecke, D E	1272	University Of Glasgow Veterinary Hospital	
California Agricultural Experiment Station	2368	Dept. Of Veterinary Pharmacology	2204
Murphy, L C National Institutes Of Health, Bethesda, Md.		Schafer, J F Purdue University	
National Cancer Institute		Dept. Of Botany And Plant Pathology	1555
Virology Research Resources Branch	1921	Schafer, J F	
Nagel, W P Oregon State University, Corvallis		Purdue University Dept. Of Botany And Plant Pathology	1559
Dept. Of Entomology	817	Scheffer, R P	
Hayudu, M V	1569	National Science Foundation	2421
Wisconsin Alumni Research Foundation Wielsen, S W	1203	Schelo Jr, H W U. S. Forest Service, Gulfport, Miss.	
The American Cancer Society	2055	Southern Forest Experiment Station	1540
Olesiuk, O M U. S. Dept. Of Agriculture		Schieber, E Rockefeller Foundation	1572
Agricultural Research Service		Schliebe, K A	1372
Contract No. 12-14-100-5414 (45)	2213	San Juan Basin Experiment Station	2327
Olson, C University Of Wisconsin		Schmitthenner, A F Rockefeller Foundation	1297
Dept. Of Veterinary Science	2229	Schreiber, L R	123
Olsop, N O	2274	Shade Tree And Ornamental Laboratory, Delaware, Ohio	1300
Regional Project NE-5 Padgett, G A	2271	Agricultural Research Service Scudder, G G E	1328
Washington State University, Pullman		National Research Council Of Canada	892
Dept. Of Veterinary Pathology	2011	Sehgal, O P	
Page, L A National Animal Disease Laboratory, Ames, Iowa	2145	University Of Missouri, Columbia Dept. Of Field Crops (genetics)	2503
Page, L A		Selleck, G W	
U. S. Dept Of Agriculture		Monsanto Chemical Co., St. Louis, Mo.	1755

RIOGRAPHICAL TARRY

	DIOGRAF	HICAL INDIA
Sequeira, L		
Sequeira, L		College Of Agriculture Experiment Stations
University Of Wisconsin Dept. Of Plant Pathology	1206	Coastal Plain Experiment Station Wenner, H A
Sequeira, L		National Foundation
University Of Wisconsin, Madison Dept. Of Plant Pathology	1207	Wescott, E W U. S. Public Health Service
Sheets, T J University Of California, Davis	1725	Whiteside, J S
Shibley, G P	1723	Cornell University New York State College Of Agriculture
Dr. Salsbury s Laboratories Charles City, Iowa	2170	Dept. Of Agronomy Will, D H
Shifrine, H		Mark L. Morris Animal Memorial Foundation
U. S. Public Health Service Shipton, W A	2150	Wilson, J D Ohio State University
Wheat Industry Council Of Australia	1545	Dept. Of Plant Pathology
Siebnrth, J M University Of Rhode Island		Wilson, V E University Of Iowa, Ames
Narragansett Marine Laboratory	1809	Dept. Of Botany And Plant Pathology
Simon, J University Of Florida		Winstead, N N University Of Arkansas, Fayetteville
Cancer Research Laboratory	2252	Winter, A J Wisconsin Alumni Research Foundation
Simons, J N James G. Boswell Foundation	1343	Winter, A J
Simons, J N James G. Boswell Foundation	1344	Wisconsin Alumni Research Foundation Witter, R L
Singh, K V	1544	U. S. Dept. Of Agriculture
U. S. Public Health Service National Institutes Of Health	2056	Respiratory Disease Project, NE5 Worley, D E
Snoeyenbos, G H		American Cyanamid Co., Princeton, N. J.
Chas. Pfizer And Co., Inc., Terre Haute, Ind. Solberg, R A	2220	Wright, M L Cyanamid Of Canada Limited.
Montana State University, Missonla	2476	Yale Jr, J W
Spnrr Jr, H W Rockefeller Foundation	2496	Pent-A-Vate, Inc., Lindsay, Calif. Biological Testing And Research Laborator
Staples, R C Boyce Thompson Institute, Yonkers, N. Y.	2501	Yoder, Jr., H W Eli Lilly And Co.
Starzyk, H J		Zaitlin, M
Northern Illinois University, Oregon, Ill. Strobel, G A	2340	National Science Foundation Zenjanis, R
U. S. Public Health Service	2472	Louis W. And Maud Hill Family Foundation
Stubbs, E L Goldhaft Poultry Research Fund	2238	Zimmer, D E U. S. Dept Of Agriculture,
Swan, D G Pendleton Branch Experiment Station, Pendleton, Ore.	2483	Agricultural Research Service
Szabo, S S		Crops Research Division
New Mexico State University Talbert, R E	2497	
University Of Arkansas, Fayetteville	1752	
Talbert, R E University Of Arkansas, Fayetteville		
Dept. Of Agronomy	2490	
Talerico, R L Northeastern Region Of The Forest Service, Upper Darby,	, Pa.	
Taylor, P J	899	
Animal Medical Center, New York	2214	
Tourtellotte, M E U. S. Dept. Of Agriculture		
Agricultural Research Service	2172	
Trainer, D O Federal Aid To Wildlife Restoration	1810	
Tzianabos, T Chas. Pfizer And Co., Terr Haute, Ind.	2210	
Vickery, V R	2219	
Lyman Entomological Museum Walker, C R	827	
Missouri Conservation Commission		
Fisheries Section Walker, J C	1683	
Wisconsin Pickle Packers Association	1566	
Walker, J C U. S. Public Health Service		
National Institute Of Allergy And Infections Diseases	1571	
Walker, J T	1571	
Brooklyn Botanic Garden Waterworth, H E	1630	
Graduate School Of The University Of Wisconsin	1549	
Weide, K D Kansas State University, Manhattan		
School Of Veterinary Medicine	2072	
Veterinary Diagnostic Laboratory Weide, K D	2048	
Kansas State University		
School Of Veterinary Medicine Veterinary Diagnostic Laboratory	2051	
Weinhold, A R University Of California, Berkeley	1476	
Wells, H D		
University Of Georgia		

AUTHOR INDEX

			201.	100 1000 1000 1000 1000 1000 1000 1000			Byrd, W P
Abdella, A	1968	1064, 2362		Benda, G T A	1541	2533	
Ablashi, D V Abu-Gharbieh, W	2029 1007	Aspitarte, T R Atherton, D R	961 1805	Benjamin, D M Benjamin, M M	840 1952	Bowman, G W Boyce Jr,	2302 1498
Ackers, G K Adam, A V	2535 94 7	Athow, K L Atwood, C E	1363 835	Bennett, D G 1890	1857	Boyce Jr, J S Boyd, J W	1496 1899
Adams, O R	1951	Aves, I J	2310	Benson, D C	1794	1957	
Adams, R E 2385	1668	Awad, F I Aycock, R	2017 1232	Bentley, R M Benton, W J	2349 2180	Boyer Jr., C I Boylan, C G	1956 1963
Adler, H E 2152, 2155,	2150 2156	Bachrach, H L 2128	2114	2181 Benzie, D	2103	Boyle, A M Boyle, J S	1451 932
Aftosmis, J G 2176	2172	Bacle, J F Bacon, E	1907 2 17 2	Beran, G W 2201	2200	2392 Bozarth, R F	964
Agamalian, H	1742	Bagnall, R H	1193	Berbee, J G	1045	Bradbury, J F	1197
Aichele, M D Aichelle, M D	1583 1020	Bailey, D M Baines, R C	1932 911	Berger, K C Berger, R D	2253 1008	Bradley, G A Brady, U E	824 89 7
Al-Sohaily, I A 1340	1339	1136 Baird, D M	2285	1567, 2500 Bergeson, G B	1636	Brambell, M R Brandt, W H	2025 1315
Albert, J J Albert, L	1316 2184	Baird, E R Baker, G L	1766 883	Bergman, E L Berkman, R N	2392 1967	2430 Braun, A J	1028
Albert, L T	2252	Baker, K F	1456	Berry, C R	925	1613	
Alberts, J 0 Alcorn, S M	2197 1435	1481 Baker, R	952	Berry, D M Berry, J W	2166 1403	Braverman, S W 1276	1275
Alexander, A F Alexander, F	1950 2183	1201, 1202, 1205, 2353,	1203 23 7 9	Berry, R W 1348	1010	Braye, E T Breen, H	1779 2276
Alexander, J Alexander, L J	900 1301	Bald, J G 992, 1482,	976 2476	Berry, S Z Besch, E D	1380 2300	Brennan, E 2324	1273
1516		Baldwin Jr, C H	1000	Best, K F	1687	Bretschneider, B F	989
Alexander, M Alexander, M A	2378 1802	1124 Baldwin, R E	946	Betts, A 0 2165	2163	Brierley, P Brierley, Philip	1399 1397
Alexander, P M Alibasoglu, M	1621 1916	1591, 1667 Ball, E M	1536	Bhambhani, H J Bhander, D S	891 1236	Brim, A Brimhall, P B	2139 1761
Alicata, J E Allap, R E	2308 1013	Ealmer, E Bancroft, J B	1618 1330	1237 Bhatt, D D	935	Brion, A S Brister, L R	2031 1376
Allcroft, R	1940	1332		1304		1609	
Allen, A M Allen, M W	2298 1091	Bankowski, R A 2157	1917	Bhelwa, P W Biberstein, E L	1012 2149	Britton, M P Brodey, R S	1509 1803
Allen, R K Allen, W R	838 994	Bankuti, M D Banttari, E E	1180 1004	Bickford, A A Biely, J	2072 2 1 04	Brodie, B B Brooksby, J B	1424 20 7 6
Alley, H P 1761	1760	1520, 1528 Barakat, M Z	1968	2105 Bierer, B W	1948	Broome, A W Brown Jr, I F	1807 962
Allington, W B Allison, C C	1536 1012	Barbee, J G Barber, C W	1006 2040	2352, 2361 Bigland, C H	1907	Brown, C M Brown, J F	1485 1545
1054	2386	2041	1434	Bingham, S W	1762 2522	Brown, M S	2527 2518
Allison, P V B	2504	Barber, T L	2129	Birchfield, W	1087	Brown, N A 2519, 2532	
Alper, M Amador, E J	1 183 24 17	Barden, E S Bardin, R	2209 1165	1376, 1609, Bird, G H	1642 1637	Brown, R D Brown, R T	1965 1248
2418 Amin, J V	2362	Bardon, P Barker, K R	2531 1548	Bird, J Bird, L S	939 919	Brown, R W 1858	1791
Andersen, A L Andersen, R N	968 1731	Barksdale, T H Barnes, E H	1212 1262	1181 Bishop, J A	1796	Brown, W E Browning, J A	2189 1030
Anderson, A h Anderson, A S	1144 1531	Barnett, H L 2505	2387	Biswas, P K Bitters, W P	1710 1154	Broyles, J W Bruehl, G W	1267 1585
Anderson, G W	2061	Baron, R R	1934	1486		1587	
Anderson, J L Anderson, L E	1562 2413	2193 Barr, T R B	2195	Bittle, J L Bizzell, W E	2066 2285	Bruins, H W Brun, W A	2102 1441
Anderson, N A 996, 1525	984	Bartell, P Bartley, T R	2275 2567	Black, H S Blackburn, R B	1016 1721	Bruner, B W Bruner, D W	1956 1964
Anderson, N B Anderson, R V	800 1603	Basak, W Basch, H I	1212 2220	Blackburn, R D Blackmore, J S	2400 2136	Bryans, J T Buchanan, R S	1873 2235
1607 Andison, H	2550	Eateman, D F 1214, 1219	1213	Bladwin, D E Blank, L M	2126 1018	Buchholtz, K P 2506	2497
Andrews, H	1844	Bates, J D	1491	Bleakney, J S Blenden, D C	884	Buck, W B	1792
Angstrom, C I Anzalone Jr, L	2207 1014	Batte, E G Baxter, J T	2299 2015	Blincoe, C	1909 2230	Buckner, C Buddenhagen, I	2245 1032
1246, 1251 Apple, J L	1287	Bayona, I G Beamer, P D	837 2195	Blodgett, E C 1583	1020	1034 Buddenhaggen, I W	1441
Appleby, A P 2413	1702	Beasley, C A Beauregard, M	1706 1937	Bloom, J R 1634	1633	Bugbee, W M 1036, 1525	984
Apt, W J 1665, 1666	1575	Beaver, P C Beck, E W	1848 1222	Boatwright, R S Boehringer, E G	2006 1980	Burdin, M L Burgis, D S	2256 1691
Aragaki, M 2390, 2480	1130	Beck, G E Beck, S D	1049 901	Boehringer, I K Boettcher, A D	1980 2499	Burke, C N Burke, D W	2173 1038
Arean, V M	1883	Becker, R B	1797	Bohl, E H	2050	1040	
Armour, J	2563 1969	Beckett, S D Beckman, C H	1865 1441	2053, 2056 Bohn, G W	966	Burkhart, D M Burleigh, J R	1975 1042
Armstrong, G M 1199	1156	1442 Bedford, E R	1035	Bollen, W B Bool, P H	1701 1979	Burnett, H C Burnett, T	1227 2547
Armstrong, J K 1199	1156	Bega, R V Behrens, R	1367 1731	Boone, D M 1025, 2503	1022	Burns, K N Burns, M J	1940 1770
Arnold, J P Arnold, J W	2226 809	2338, 2372 Belkengren, R O	1105	Boosalis, M G Booth, J A	2491 1024	1865 Burnside, O C	1753
Arny, D C Arya, H C	1092	Bell, A A	2492	Booth, N H	1776	1754, 2326,	2327
Asbury, A C	1543 1864	Bell, D L Bell, D S	1309 2049	Boothroyd, C W 1623	1026	2338, 2339, Burr, W E	2372 2321
2147 Asdell, M K	2249	Bell, C E Bell, R R	2285 1786	Bootroyd, C W Bordt, D	1109 2065	Burton, G W Bussell, R H	1432 1908
Ashton, F M 1744, 2471	1743	1787, 2301 Bell, W	1196	Boswell, S B Boswell, T E	1136 1635	Butler, E E Buxton, A	969 2203
Ashworth Jr, L J	920	Belloff, G B	1947	Bovey, R W	1754	Byrd, W P	1370

PAGE 185

AUTHOR INDEX

Byrne	, J	L
-------	-----	---

bythe, 5 L							
Byrne, J L	2320	Chisler, J A	1054	1741		Deem, A W	1952
Cabasso, V J	1912	Chorin, M	1271	Craig, C H	852	del Mundo, A	1137
1913		Chow, T L	1952	Cram, W T	2550	1534	
Cabrera, D	1932	Christensen, C M	1066	Crandell, R A	1928	Delfel, N E	1415
Cadman, C H	1337	1101, 1523,	152 7	1929		Deming, J M	2523
1338		Christianson, D W	1044	Crane, J L	1003	Denington, E M	2113
Cairns, E J	1618	Christie, G S	2222	Crawford, R D	1933	Dennis, H E	1448
Calavan, E C	1044	Christie, M G	2025	Creamer, A A	2235	Derbyshire, J B	1904
Caldecott, R S	1368	Chubb, L G	1976	Cresswell, E	2103	Derscheid, L A	1705
Caldwell, R M	1331	2520	0007	Crews, J W	1581	1706, 2360	4000
Callis, J J	2128	Chute, H L	2207	Crispin, A	1239	DeTray, D E	1842
Calnek, B W	2218	2208, 2209	2205	Cristou, T	1461	Detweiler, D K	2236
Calner, B W	2214 1223	Ciordia, H	2285 2 0 52	Crittendon, H W	917	Deutsch, D B	2517
Calpouzos, L 1415, 1416	1223	Clack, F B	1865	1003 Crosier, W F	1275	DeVay, J E 971, 1078,	963 1117
1415, 1416 Caltrider, P G	2391	Clark, C H 1930, 1931	1005	Crossan, D F	943	1473	,
Cameron, H R	1046	Clark, D T	2310	997, 2514	943	Dewey, W G	1579
1308, 1310		Clark, G W	2042	Crozier, J A	1218	Dewolfe, T A	911
Cameron, J M	2559	Clark, H C B	886	Cruickshank, J G	2166	1136, 2478	, , ,
Campbell, A	2268	Clark, R L	1582	Crum, R A	1264	deZeeuw, D J	1194
2270		Clarkson, M J	2206	Crump, M	2274	1264	
Campbell, C H	2132	Claus, K D	1839	Crump, M H	1815	Dhaliwal, A S	1056
Campbell, R N	1048	Clayton, C N	1282	Cruzado, H J	1722	1578	
1471		Clerx, W A	2528	Culver, A W	1165	Diaz, J R	1270
Campbell, R W	2412	2530		Cundy, K R	2146	Dickey, R S	1217
Campbell, S G	1829	Clopton, J R	1774	Cunningham, C H	2009	Dickson, J G	1555
Campbell, W A	1408	Cmorse, G	1851	Cunningham, C J	2269	1559, 1572	400#
Camphell, B	1801	Cobb, F W	1318	Cunningham, H S	1655	DiEdwardo, A A	1224
Camphell, R W	830	Cochran, G W	1056	Cunningham, J L	972	Diener, T O	1391
889, 890	794	1578	1425	1563	2208	1392	1198
Cannon, F M Cappelini, R A	2384	Cochran, L C Cockrill, W R	1971	Cuozzo, R F Dadd, R H	893	Dieter, C E Dietz, S M	1074
Cappellini, R A	2341	1972	1371	Daines, R H	1272	1076	1074
2440	2541	Coffin, D L	1926	1273, 2324	12/2	Diller, J D	2389
Care, A D	2097	Coffman, F A	1370	Dale, J L	1617	Dimalla, G G	1072
Carlos, E R	2297	Coggins Jr, C W	2530	Dalton, R G	1880	Dimock, A W	1211
Carlson, H C	2554	Coggins, L	1853	Daly, J ń	1537	1481	
Carlstrom, R C	2358	Cohen, M	1345	Damon, R A	2042	Dimond, A E	1208
Carlton, W W	2355	Colber, C	1223	Damsteegt, V D	1587	1209, 1353,	1622
Caroselli, N E	1011	Colberg, C	1415	Dana, M N	1759	Dimopoullos, G T	2003
1544		Cole, C R	2055	Danielson, L	2353	Dingman, E	2460
Carpenter, G P	1307	2057, 2059,	2060	Danielson, L L	2336	Directo, A C	2297
Carpenter, J B	1359	Cole, J S	1358	Danskin, D	2257	Djafar, M I	1797
Carroll, L H	1876	Coles, G C	85 0	2259		Doane, J F	858
Carroll, R B	1590	Colglazier, M L	2305	Darby, J F	1198	Doll, C C	1677
Carroll, T W	927	Collier, J R	1894	Darbyshire, J H	1938	Dollahite, J W	2091
Cartier, J J	860	1952	1000	1939	1027	Domermuth, C H	2263
Cartwright, E Case, M T	2566 2194	Collins, K E 1983	1982	Darcel, C Le Q	193 7 2242	2264	2368
Casida, L E	1806	Collins, R P	1058	Dardiri, A H 2243	2242	Domsch, K H Dougherty 3rd, E	2033
1807	1000	Combs, A W	2315	Darling, H M	1603	Dougherty, E.	1964
Cassidy, D R	1902	Comes, R D	1713	1607, 1664	1005	Dow, C	1763
2279	.,,,,	Compton, L E	1331	Darne, A	1879	1816, 2100,	2101
Castelfranco, P	2517	Comstock, J A	846	Das, C R	949	Doyle, T M	1944
2527		Connell, R	1937	Davey, C B	1383	Dozsa, L	2268
Cation, D	945	Conner, G H	1781	1386, 1395		Drake, R J	1071
Cavill, J P	1866	Conroy, J D	1927	Daviault, L	875	Draudt, H N	2494
Cazier, M A	834	Converse, R H	1060	Davie, J	2076	Drechsler, C	934
Cetas, R C	922	1381, 2455		Davies, E B	2078	Drehle, L E	1773
Chabas, D	2031	Conway, D P	1859	Davis, A D	2265	Drever, H	1680
Chalquest, R R	2035	Cook, A A	1495	Davis, C L	2030	Driver, C H	1242
2038, 2267	1761	Cook, R J	1088	Davis, D	1082	1243	1685
Chamberlain, E W Chambers, A Y	1761 1641	Cooper, C S Cooper, G R	1 717 2565	1084 Davis, D E	1681	Dropkin, V H 2510	1645
Chambers, E E	2426	Cooper, W E	1284	1682, 2329,	2400	Drouin, J A	870
Chambers, H L	1050	1424	201	2401		Drudge, J H	1994
Chambers, T S	1446	Corbett, M K	1494	Davis, F S	1714	2294, 2295	
Chand, J N	1566	Corden, M E	1050	Davis, H H	1871	Du Bose, R T	2095
Chandiramani, N K	2213	1622, 2508		Davis, L H	1481	Duberman, D	1826
Chandra, P	1701	Cordon, M E	1309	Davis, L R	2302	Dubose, R T	2261
Chandrasekhar, B K	1056	Cormack, M W	1192	Davis, R	1757	Dudley, J W	1422
2445	00	Cornelius, C E	1794	Davis, R G	2443	Dukes, P D	1287
Chang, P W	2029	1796	2002	Davis, T C	999	Dungworth, D L	2144
2242, 2243	1/102	Cornwell, G	2223	Davison, A D	1080	2149	1060
Charlebois G J	1493	Corstvet, R E	2157 1426	1312	2202	Dunleavy, J 1245, 1375	1068
Charlebois, G J Charleston, W A G	1830 2025	Cotter, R U Cottral, G E	2126	Davison, A N Dawson, A M	2024	Dunn, A M	2191
Chen, P S	865	Couch, H B	1035	Dawson, F L M	2012	Dunn, G M	2450
Chen, I-A	1608	Couch, J R	2246	Day, B E	1747	Dunn, S	2493
2344		Couey, H M	991	2337, 2526,	2528	Dunne, H W	1916
Cherewick, W J	2405	1086		2529, 2530		2064	
Chi, C C	1052	Couling, E B	2507	De Groot, Th.	2000	Duran, R	979
1550		Coupland, R T	1755	De Hertough, A A	2323	Durbin, R D	1051
Chiarappa, L	927	Cover, M S	2179	de la Isla, M d L	1110	1066	
1228	45	2180, 2181,	2207	de Pietri-Tonelli, P	2377	Dutcher, R M	2217
Chiaravalle, P D	1597	Covey, R P	1522	de Sousa, J	907	Dutra, J C	1158
Chidester, J L	1056	Cowling, E B	1593	Deauville, G A	1875	1160	060
1578	2350	2512	2126	DeCamp, D	2134	Dyer, E D A	869 2018
Chinn, S H F Chippendale, G M	2350 901	Cox, B F Crafts, A S	2126 1680	Decker, G C DeEds, F	1595 2115	Dziuk, H E Easterday, B C	1837
carppendate, 6 n	301	Crurco, a o	1000	Jenus, I	2113	Pascerday, D C	1037
PAGE 186							

							,
Eastin, E F	2330	Fletchall, O H	1751	Ganaway, J R	1929	2089, 2092,	2093
2402		1752		Garber, M J	911	2095, 2096,	2261
Easton, G D	1514	Fletchhall, O H	2490	1136		Grundbacher, F J	1652
Ebert, P S	1988	Flor, H H	1100	Gard, D I	1967	Grunsell, C S	2142
Echandi, E	1241	Flores, E	1238	Gardiner, J L	2117	Guba, E F	1027
Echeverria, J	1270	Flowers, A I 2093, 2261	2089	Gardiner, M R	1925	Gupta, J	2274
Eckert, J W 989, 1483,	987 23 1 7		1244	Gardner, A F Gardner, J L	2212 2118	Guss, S B Gustafson, D P	1916 1878
2328, 2368,	2370	Foley, D C Fontaine, M	2031	Gardner, L M	872	2070, 2071	1070
Edgington, L V	918	Fontaine, M P	2031	Gardner, M W	1467	Guthrie, J W	1366
1209, 1210,	1622	Foote, F J	1486	Garren, K H	938	Guthrie, R S	2331
2447		Foote, L E	2003	970	,,,,	Gysin, H	1690
Edmunds Jr, G F	838	Foott, W H	805	Gaskin, T A	1327	Haas, J H	1019
Edmunds, L K	1062	Forbes Jr, I	998	Gates, D H	1723	Haas, R H	1692
Edwards, J S	903	Forbes, Jr, I	1361	Geary, T F	1114	Haberman, R T	1959
Egdhal, R H	2006	Ford, E J H	1899	Gebhardt, M R	1715	Habutsu, Y	908
Eisa, A M	1777	1900		Gelenczei, E	2065	Hacskaylo, J	2335
Elam, G W	2294	Ford, H W	1418	Geleta, J N	2119	2453	45.00
2295	2227	Ford, R E	1215	Genter, W A	2336	Hagadorn, D J	1563
Elder, C 2228	2227	Fordyce Jr, C	1102 1914	Gentile, A G	1656 1732	Hagedorn, D J	972 1565
Eleazar, T H	1948	Forgacs, J 1973	1514	Gentner, W A George, L G	1896	1079, 1554, 2388	1505
Ellett, C W	1302	Fornari, O E	1980	Georgopoulos, S G	1116	Hahn, A W	2287
Ellett, E W	2090	Forrest, H S	900	Gershman, M	2208	Haiba, M H	2288
Ellingboe, A H	1153	Foster, J W	2189	Gerwitz, D L	1118	Haig, D A	2257
1261, 1526		Foster, R E	1448	Ghent, A W	836	2259	
Ellinwood, E H	2315	Fowler, E H	2058	Giamalya, M J	1120	Halber, M	1311
Elliott, E S	990	Fox, I	837	Gillaspie, A G	1333	Halfon-meiri, A	1271
1590, 1591		Fox, L E	2307	Gillespie, J H	1908	Halisky, P M	933
Elsaid, H M	1090	Fox, P H	1601	Gillespie, R W H	2266	Hall, C F	2089
1253	4020	Fox, R I	837	Gilmer, R M	1216	2093, 2094	4430
Elsasser, T A	1032	Foy, C L	1712	1277, 1279,	1280	Hall, D H	1139
Elson, J E	1309	1745, 2517	1446	Ginns, J H	954 1936	Hall, H R Halliwell, R S	962 1313
Emge, S Endo, B Y	2168 1605	Francki, R I B Frank, F W	1934	Girard, A Girardeau, Jr J H	1500	Halmos, S	1442
1647, 1648	1005	2110, 2193	1234	Gisler, D B	1863	Hamblen, M L	1617
Endo, R M	1374	Frank, N A	2047	Goedbloed, E	1979	Hamilton, R H	2333
1485		Frank, P A	1713	Goetz, M E	2085	Hampton, R E	902
Englehard, W E	2081	2567		Gold, A H	1091	Hampton, R O	1038
English, H	1476	Fraser, G	2182	1095		1586	
English, W H	1078	Frazier, L M	2149	Goldberg, H S	1909	Hancock, B B	2053
Ennis Jr, W B	1711	Frazier, M N	2178	Gomez, D	903	Hancock, J G	2408
Enzie, F D	2305	Frederick, G L	1935	Gonzalez, L C	1122	Hanks, R W	2479
Epps, N A	2061	Frederiksen, R A	1104	Goode, M J	1452	Hanley, J E	2069
Epstein, A H	1592	1373	2222	Goodin, J R	1746	Hanna, G C	1656
Ercanbrack, S K Erickson, L C	2110 1692	Freed, V H 2428, 2429	2332	Gooding Jr, G V Goodman, R N	1478 1000	Hannon, C I 1662	1661
2533	1092	2428, 2429 Freeman, B M	1976	1124, 1532,	1533	Hansbrough, T	1695
Erwin, D C	1094	Freeman, T E	1172	2489	1555	Hansen, H N	1558
Ethiraj, S	2399	French, D W	996	Goodno, R W	1212	Hansen, M F	1856
Evans, R A	1735	French, E R	1106	Goos, R D	1347	2293	
Exner, B B	1254	French, F E	1862	Gore, U R	1370	Hansen, R	2168
Fabricant, C G	2032	French, W J	2354	Goth, R W	934	Hanson Jr, L E	2197
Fabricant, J	2032	Frey, K J	1030	950, 1055,	1382	Hanson, E W	1008
2035, 2037,	2038	1368		1385, 1387,	1394	1052, 1550,	1553
Faddoul, G P	2221	Friedman, B A	1108	1517, 1573,	2487	1564, 1567,	2500
Fang, S C	2332	2458	0566	Gottlieb, D	2391	Hanson, J B	2462
Farkas, G L	944	Friend, W G	2566	Gough, F J	1409	Hanson, L E	2199
Farley, J D Farris, S H	1263 822	Fries, G F	1781 2397	Gourlay, R N Gourley, I M G	1966 2226	Hanson, R P 2250, 2251,	2249 2273
Farstad, C W	796	Friesen, G Fritz, T E	2196	Gowing, D P	924	Hara, J	2328
Faulkner, L R	1096	Frontali, N	881	Gowing, G M	2088	Harding, H P	1998
Faustine, R	1771	Froyd, G	2258	Graham, T W	1632	Hardison, J R	1406
Feder, W A	1418	Fry, D E	2029	Grant, T J	1419	1407, 2560	
2459		2242, 2243		Graves, J A	2130	Hardy, W T	2091
Feldman, A W	2479	Fuentes, S	1110	Graves, J H	2079	Hare, W C	1882
Feldmesser, J	1662	Fukushi, T	1190	2080		Harjung, M K	2381
Fellowes, O N	2129	Fulton, R H	1112	Gray, D M	2148	Harkema, R	2299
Fellows, G W Fellows, O N	2221	Fulton, R W	1549	Gray, M L	2021	Harnish, W N	2387
Fergus, C L	2133 1318	Funderburk Jr, H H 1682, 2329,	1681 , 2401	Green Jr, R J 1119, 1328,	1102 2359	Harris, C I Harris, J M	2509 2010
Ferguson, D C	829	1682, 2329, 2415, 2416	, 2401	Green, J H	1883	Harris, L	1802
Ferguson, T M	2246	Fung, J	2320	Greenberg, B	896	Harris, P	801
Fernandez, C E	1241	Furr, J R	1359	Greene, G L	1347	Harris, V C	1724
Field, E J	2232	Furtick, W R	1701	Greene, J W	1991	Harrison, A L	1322
Filer, T H	1098	1702		Gregory, D W	1811	1350	
Filmer, R S	1335	Furumoto, W	981	Gregory, P W	1795	Harrison, H F	1734
Fincher, M G	2331	Futrell, M C	1132	Greig, A S	1936	Harrison, M B	1610
Fink, R J	1751	1348, 1402,		Gressitt, J L	799	1615, 1655	4600
Finlayson, T	802	Gabelman, W H	1365	Grice, H C	1961	Harrison, M D	1688
Finnamore, D B Finnegan, R J	804 871	Gabrielson, R L	1474 2027	Gries, G A	1024	Harrison, W B	922
Fischer, W R	871 1585	Gainer, J H Gale, C	2027 1967	Griesener, R A Grimm, R B	2060 2419	Harrold, D R Harthoorn, A M	2153 2005
Fisher, K D	1639	2045, 2046	1307	Grogan, C O	2330	Hartman, H A	2175
Fisher, R W	1197	Gallegos, C C	1239	2402	2330	Hartwig, Q L	1804
Fitts, R H	1832	Galton, M M	1959	Grogan, R G	1474	Harvey, W R	1788
Fitzsimmons, W M	1955	2004		Gross, W B	2263	Harwood, P D	1975
Flanagan, T R	1757	Galvez, G E	1536	Grover, R F	1950	Hash, T R	2270
Flangas, A L	1010	Galvin, T J	1786	Grover, R K	2373	Hassall, K A	2364
Fleming, A A	1497	1787, 2301		Grumbles, L C	1902	Hatziolos, B C	2210

Bauser, E W

bauser, E w							
2211		2244		Jacobs, N	2168	Kennedy, B W	1148
Hauser, E W	1734	Hogan, T W	887	Jacobs, R E	2176	1524, 1530	
Hawk, H W	1769	Holbrook, A A	2119	Jain, G L	1543	Kennedy, P C	2149
1903, 2122 Hawkins Jr, W W	2022	Holden, P Hollander, S L	2136 2209	James, H G Jansen, L L	2542 2336	Kenzy, S G 2266	1949
2023	2022	Hollis, J P	1601	Janson, B F	1302	Keplinger, J A	1028
Hay, D	2112	Holm, E W	1466	Jaques, R P	857	1613	
Hay, J R	1686	Holm, L G	2426	Jaskoski, B J	2296	Kernkamp, H C H	2225
Hebert, T T	1291	Holmes, F O	1357	Jasmin, J J	816	Kerr, H D	1723
1370, 2425	2356	Holmes, F W	2536 796	Jaworski, E G	1268	1727	1150
Hedden, O K Heddleston, K L	1843	Holmes, N D Holowczak, J	1326	Jenifer, F G Jenkins Jr, J M	1392 1539	Kessler Jr, K J Ketter, W E	1150 22 7 9
2124		Holstun Jr, J T	1736	Jenkins, J H	1255	Khadga, B B	1254
Heikkeņen, J	899	1737, 2365		Jenkins, W R	1007	Kiesel, G K	1770
Heimpel, A M	888	Holzworth, J	1838	1336, 1611,	1637	1931	0400
Heishman, J O 2270, 2272	2269	1922	1222	1638	1600	Kikumoto, T	2423 2075
2270, 2272 Helmboldt, C F	2170	Homer, D W Honeycutt, R P	1138	Jensen, B J 1631	1600	Kilgore, R L Kilpatrick, R A	2344
2171, 2173,	2174	Hood, J R	1455	Jensen, L L	1732	2450	25 7 7
2178, 2321		Hooker, A L	1126	Jensen, R	1833	Kim, W S	960
Helper, L C	2196	1140, 1509,	1510	Jensen, R J	1953	Kimble, K A	1656
Helton, A W 1234, 1503,	1233 1504	1511	2484	Jewell, F F	2456	King, A S	2143
1234, 1503, 1506, 1507,	2354	Hooker, R L Hooker, W J	960	Jha, S K Johnson, B G	1782 2506	King, T H 1524, 2442	1521
Hemingway, R G	2518	Hooks, J W	2323	Johnson, C	828	King, W R	1064
2519, 2532		Hoppe, P E	1372	Johnson, G V	1146	Kinsey, M G	1475
Hemwall, J B	1220	Hopping, G R	819	Johnson, L F	2495	Kiraly, Z	944
Hendrix Jr, F F	1164	820, 821	0.054	Johnson, S D	2331	1152	
1458	1061	Horava, A	2054	Johnson, W P	2283	Kirkpatrick, B C	1362
Hendrix, J W 1074, 1286	1061	Horn, N L Horne, R D	1255 1881	Johnston, R F Jones, D O	1782 2050	1584 Kirkpatrick, J D	1154
Hendrixson, R T	1747	Horner, C E	965	Jones, K B	987	1486	
2526, 2529		1053, 1166,	1314	Jones, R K	1445	Kitchell, R L	1801
Henning, J N	1815	1404		1491		Kittock, D L	1753
Hepson, J B	2091	Horov, L	2090	Jordan, B E	2188	Kiuna, H	908
2092 Herbel, C H	2563	Horst, R K Bouse, H L	1298 854	Jordan, L S 2337, 2526,	1747 2528	Kleckner, A L Klemmer, H W	2187 980
Herlich, H	2302	Houston, B R	971	2529, 2530	2320	Kline, D M	1423
Herman, H A	1784	1473, 1479		Josephs, M J	2363	Klingman, D L	1714
Hernandez, T P	1120	Houston, D R	1293	Joyner, J F	1643	Klingman, G C	2323
Herne, D H C	847	Howard, C M	978	Joyner, L P	1942	Klisiewicz, J M	1398
Herold, F	1240 1298	Howarth, J A	2149 2202	Judd Jr, R W	2450 839	1479 Klosterman, H J	2537
Herr, L J Herrick, W C	2277	Howell, J G Hoyman, W G	2460	Judd, W W Julian, L M	1795	Klotz, L J	911
Herridge, E A	923	Hoyt, H H	1800	Jungherr, E L	1911	987, 2478	, , ,
941		Hsi, D C H	1142	2177		Knabe, E L	1748
Hess, W R	2114	Hsu, B	1947	Jungk, N K	1963	Knerer, G	835
2128	1005	Hsu, S	898	Kachroo, J V	1257	Knuelle, W	797
Heuberger, J W 1491	1445	Hubben, K Huber, D M	2236 968	Kado, C I Kahn, R P	2375 1324	Kobayashi, S Koch, H	2284 1914
Heuschele, W B	2277	1144	300	Kais, A G	1552	1973	.,,,
Hewitt, W B	1160	Hudson, W	1480	Kamimura, S	2489	Koerber, T W	2366
Hewlett, P S	841	Huffaker, R C	1005	Kanarek, A D	2166	Koestner, A	2057
Hilborn, M T	1259 1393	Hughes, J P	2151 2429	Kaneko, J J	1794 908	2058, 2059	1861
Hildebrand, E M Hildebrandt, A C	1049	Hughes, R E Hughes, R W	2070	Kaneko, K Kano, R	908	Kohn, A 1988	1001
2496, 2499		Hulet, C V	2110	Karrar, G	2260	Koike, H	1575
Hill Jr, R R	1422	2193		Karstad, L	1810	1665, 1666	
Hill, D H	2141	Humphrey, R D	2110	Karzon, D T	1908	Kolbezen, M J	989
Hill, E R	2380	2193	1905	Kasza, L	2050	2317, 2328	2488
Hill, R W Hilmy, M I	1974 1776	Hunter, G D Husain, A	1236	2053 Katayama, M	882	Kommedahl, Thor Konicek, D.E	1234
Hilty, J W	1299	Husain, S M	2553	Kates, K C	2303	1600	
Hilu, H M	1126	Husain, S S	1546	Katz, S	1099	Kontaxis, D G	1468
Himelick, E B	1157	1547	4000	Kaufman, D D	2509	Kosikowski, F V	2331
1235 Hine, R B	1128	Hussain, A	1237 2459	Kavanagh, T 1519	1518	2552 Kosuge, T	1158
1130, 1501,	2474	Hutchins, P C Hutchins, R G	942	Kawakubo, A	2039	1160	1158
2481		Hutchison, J A	1961	Kawashima, N	1269	Kottke, M	2485
Hines, M P	2315	Hutzler, L B	2295	Kay, B L	1740	Kowalczyk, T	2253
Hinsman, E J	1779	Hwang, J	2026	Keane, F W L	983	Kozelnicky, G M	1497
Hirumi, H Hitchner, S B	849 1901	2174, 2177 Hybal, J	2439	Kearney, P C Keenum, R D	2509 2 10 2	Kozlowski, T T Kral, F	1758 22 37
1919	1301	Byodo, H	1269	Keil, H L	986	Krauss, W C	2180
Hiura, U	2427	Hyre, R A	982	Keilin, J	2164	2181	
Hobbs, C D	1132	Ikenberry Jr, G J	1303	Keith, T B	1934	Kreitlow, K W	1388
1402	00:-	Ingle, M	2465	Kelber, W J	1830	Kronfeld, D S	2144
Hobbs, C S	2245	Inglis, J S S	25 1 8	Kelley, G W 2311, 2312	1802	2239	2240
Hobbs, E L Hocking, B	241 1 842	2519 Inman, R E	1002	23 11, 2312 Kelman, A	1034	Kronfield, D S Krook, L	2082
Hodges Jr, C S	1164	1515	1002	1288, 1540	, 034	Krupp, J H	2306
Hodges, H G	2331	Ishii, S	2028	Kelton, L A	800	Krzeminski, W	2296
Hodgson, J M	1717	Ives, W G H	867	812	40: -	Kuc, J	1162
Hodgson, R H	1713	Jabara, A G	2222	Kelton, W H	1843	1173, 1326,	2376 2494
Hoes, J A Hoffman, J A	1134 1371	Jackson, C Jackson, C R	2351 1499	Kemeny, L Kempen, H M	1773 1712	2436, 2437, Kuhlman, E G	1164
Hoffman, O L	1708	Jackson, C.	2551	Kendrick, E L	1371	Kuhn, C W	1231
Hoffman, P F	1268	Jackson, J B	1792	1420		Kume, S	2284
Hoffman, W S	1874	Jackson, R F	2292	KenKnight, G	1410	Kunkel, J F	1068
Hofstad, M S	1985	Jackson, W T	2409	Kennard, W C	1722	Kuntz, J E	1114

AUTHOR INDEX

Meiners, J P Meinershagen, W A Marks, G C Marlatt, R B 1449 Loan, R W 2071 Lobl, K Kuo, J S Kupfer, H G Melvinle, G S
Melvin, J C E
Menaker, M
Menges, R M
Menges, R W
Mennon, M R Kuppuswamy, P Kurtz, H Marr, T G Marsh, C L Marsh, H Lock, J A 2062 Locke, L N Lockwood, J L Kusch. Kuttler, A K
Kuttler, K L
2313 Marsh, P B
2454,
Marshak, R R
Martin, A G
Martin, B R
Martin, I D 1263. 1260, 2422 2422
Loebenstein, G
1183, 2
Loegering, W Q
Loosli, J K
Loosli, J L
Loring, L B
Lovely, W G
Lucas, A M
Lucas, G B
1285, 1
Ludwig, R A
Lueke, A J
Luginbuhl, R E 2313
L Ecuyer, C
Labanauskas, C K
Lacasse, N L
Lachman, W H
Lacy, M L
Lafrance, J
Lagace, A
2049 Menzies, J D 1081 1081
Merriam, D C
Merrifield, R G
Merrifield, R G
Merriman, G M
Metzger, R J
Michaux, H R
Michelsen, A
Milbrath, J A
951, 9
1313, 14
Millan, S J
Millan, R L
Miller, C W
2442 in, J P 1659 Martin, Martin, M Martin, M W Martin, W B Martin, W J 2049
Lamborn, C A
Langford, E V
Langham, R F
Lannek, N Martin, W B
Martin, W J
1247
Martinson, C M
1204,
Marty Jr, E W
Mascoli, C C
Mathur, S B
Matsui, C
Matsui, C
Matsui, C
Matsui, C
Matsura. M 975, Lucke, A J Lucinbuhl, R E Larsen, A B 1790, Larsen, R P 1840, 2171, 2172, Miller, C W 2442 Miller, D Miller, G W Miller, H Miller, H N 2174, Luhn, C H Luke, H H 1646 1780 1256 Larson, E J Larson, L L Matsui, C Matsuura, M Matsuzawa, H 1646
Lukens, R J
2448
Lukezic, P L
Lukezic, L F L
Lumb, W V
Luna, L V
Lund, S
Lunsetter, W B
Lutey, R W
1527 Larson, R E Larson, R H 2502 Matsuzawa, H
Matta, A
Matumoto, M
Maurer, C L
2353
Maurer, P D
1929
Maxwell, C W Larsson, S Latch, G C M Laviolette, F A Miller, J H Miller, L I Miller, L P 1782 Miller, I Lavy, T L Law, A G Miller, P M 918 Law, A G Lawrence, J M 918
Miller, P W
1105,
Miller, R E
1623
Miller, V A
1953
Miller, W C
Miller, W E
Millers, I
Millian, S J May, C
Maybee, G E
Maybee, G E
Mayer, G P
Maynard, D N
Mc Iconachie, J D
Mc Loughlin, D K
McAlpine, J F
McCain, A H
McCampbell, H C
McCarter, A
McCarter, A
McClanahan, R J
McClelland, R B
McCracken, P I
McChum, R C
McDaniel, H A
McDonald, L E
McDonald, W C
McFerran, J B 2544 Le Tourneau, D Leach, C M 955, Leach, J G 978 Lyda, S D Maa, T C Maag, D D 1774 MacDonald, D W
Macdowall, F D H 914 Leaf, A L Lear, B 1655 Mace, M E MacFarlane, J R 1946 MacFarlane, J R
MacGillivray, M E
MacGregor, I M
Machmer, J H
MacKinnon, J P
MacLeod, A J
Macleod, G F
MacPhee, A W
MacWithey Jr, H S
Maddy, K T
Madin, S H
MacStrone G Leasure, J K Leathers, C R Ledford, R A Millikan, D F Milliman, L H Millson, G C Ming, T Mink, G I Minshall, W H Minteer, R J Minton, E B 1970 1813 Ledingham, R J Lee, M H Lee, R P 1259 Leefe, J S Leffingwell, T P Legenhausen, D H Minton, N A
1619,
Mirocha, C J
Mitchell, D
Mitchell, F E
Mitchell, J E McDonald, W C
McFerran, J B
1816, 2100,
McGavran, M H
McGlohon, N E
McGowan, B
McGuire, J M
McIntosh, A
McKeen, C D
McKeen, C D
McKeen, W E
1547
McKercher, D G
McKittrick, R T
1449 Maestrone, G Magie, A R 1145, Magwood, S E 2320 Leius, K Leland, S E 2101 Leonard, O A Leone, I Leone, I A LeTourneau, J 2394, Mitsuhashi, Mahadevan, 1544
Mai, W P
1624,
Maier, C R
Malca, I J Mahadevan, A Miyamoto, K Moffatt, J E Mohr, C O Moje, W 2369, Leuck, D B Levenbook, L Levine, N D 2310 Malca, I 1477, Malek, R B Malekzadeh, F Levine, P P 2037 Lewis, F H Lewis, R W Moll, T Monlux, W S Monroe, R L Monteith, L G McLaughlin, R E McLaughlin, R E 879 McLean, D L McLean, D M McLean, J G McLeod, J M 876 McLoughlin, D K Mallett, S L
Malmquist, W A
Malone, J C
Maloy, O C Lewis, S Montgomery, M Moody, K M 1822 Libeau, J Libman, G Lillie, D T Lindberg, G D 2435 913 1325 Maloy, O C Malsberger, R G Moore, J D 2373, Moore, L D Moore, M B 1520 Mandel, M Mankau, R 2435
Lindgren, N O
Lindner, R C
Lindquist, O H
Lindsay, D B
Lingappa, B T
2422 McMartin, D M McMartin, D M McMartin, D M McMillan, C W McNutt, S H 1807, 2314 McRitchie, J J McWhorter, C G 1037, 1660 1484. 2155 Mankau, S K Mankin, C J Moore, R A Moore, R W 1897 Moorhouse, D E Morehart, A L 2514 Morehouse, L G Manston, R Manzer, F E 2565 2422
Linscott, D L
Linsey, N
Linsley, E G
Lipke, W G
Lister, R M
1332, 13
Litsky, W
Livingston, C H
Lloyd, A B 1737, 2365, 2561, 2562 2463, Mead, H W Meade, J A Maramorosch, K 849, 845, 993, Morgan Jr, O D Morgan, F L 1188. Morgan, F L Morgan, G T Marble, D W 2231, March, B E Meads, E B 1889 Morre, J D Morrill, C C Morris, O N 1780

Mehra, K N

Lloyd, A B

Morris, O N

Morrison, R D

Bollison, a D							
Morrison, R D	2300	Noviello, C	1469	Patterson, F L	1329	Putnam, L G	853
Morse, E V	1987	Nozu, M	2423	1331		Quackenbush, F W	2436
2008		Nyland, G	967	Patton, R F	1561	Raabe, R D	1467
Morsink, F	1625	1472	47.0	Patty, R E	2114	1502	
Morter, R L	2008	Nylund, R E	1749	Paulus, A D	1482	Radeleff, R D	1792
Morton, D J	1200	O Banion, J H	1651	Paulus, A O	2381	1793, 1852	4000
1230, 1292, 1433	1430	O Bannon, J H 1626	1602	Paver, H Payne, J M	2531 1877	Radewald, J D Radostits, O M	1029 1821
Moseman, J G	1377	O Brien, M J	1041	Peckham, M C	2034	Raggi, L G	2159
Moss, L M	1343	O Hara, P J	2090	Peevy, F A	1716	Raghunath, T	1258
1344		O Keefe, R B	1535	Pendery, W E	1139	Rai, P	2107
Mould, D L	2024	O Meara, D C	2209	Penn, K	2274	Rajya, B S	2254
Moulthrop, I M	2002	O Reilly, K J	2 07 6	Penny, R H C	2142	Ramachandra-Reddy, T	1444
Moulton, W M	1818	Ogawa, J M	959	Pepper, J H	883	Ramberg, C F	2239
Mountain, W B	1129	969	4022	Perez-Rebelo, R	2001	Ramchandra Iyer, P K	1978
Mowat, G N	20 7 6	Ogg, J E	1833	Perk, K	1918	Randall, A P	2351
2077 Moxon, A L	2049	Ohishi, I Okazaki, T	2284 908	Perman, V Perron, J P	1986 816	Randles, J W Rangaswami, G	1446 2399
Muggenburg, B A	2253	Olander, H J	2151	Person, L H	1288	Rappaport, I	985
Muller, A S	1492	old, K M	1174	Peters, E G	853	Raski, D J	1029
Mulligan, R M	2169	1529		Peters, E J	1714	1654	
Mullikan, D F	1534	Olesiuk, O M	2213	1715		Rasmusson, D C	1133
Mumford, D L	1133	Oliver, W T	17 85	Peters, R A	1700	Ratcliffe, T J	1230
Munnecke, D E	992	2524	4000	Petersen, L J	933	1500	4400
1490, 2346,	2368	Olsen, L S	1802	971, 1473	1503	Rau, G J	1198
2475 Munroe, E	813	2311 Clsen, R D	2068	Peterson, C A Peterson, J L	1593 1335	Rautela, G S Raymer, W B	2507 1041
815	013	Olson, C	2229	Peterson, L K	796	Raymond, R G	1974
Murakishi, H H	1141	Olson, N O	2268	Philbeck, R H	2316	Rea, H E	1707
1265		2269, 2270,	2271	Philip, J R	2106	Read Jr. R B	2217
Murchelano, L	2273	2272		Phillips, D J	1167	Reade, D	2555
Murphy, H C	1436	Olson, R E	8 26	1203, 2353		Reagan, R L	2210
Murphy, L C	183 7	O MELLIA, f C	1606	Phillips, D V	1012	Reber, E F	1799
1921	0.070	Omori, T	2028	Phillips, J D	1205	Rebois, R V	1662
Murray, H C	2470	Onabamiro, S D	2141	Phillips, J H H	848	Reed, H E	1640
Muth, O H Muzik, T J	2357 1722	Orellana, R G 1378	1323	Pickford, R Pieczarka, S J	851 1703	1641 Reed, R E	2137
Myers, D D	2194	Orenski, S W	843	Pierce, K R	1876	Reeves, J T	1950
Myers, G A	1706	845	0.13	Pike, R M	2247	Rehfeld, C E	1805
Mykytowycz, R	1989	Orlob, G B	1057	Pilchard, E I	2197	Reid, J	873
Nadakavukaren, M J	965	Orsborn, J S	1774	Pimentel, David	817	Reid, J A	906
1149, 1332		Ortmayer, H	2 1 55	Pinckard, J A	1087	Reid, R W	868
Nadel, M K	1946	Osborne, J C	2299	Pine, T S	973	Reid, W M	2190
Nagamitsu, M	1585	Osborne, M P	832	1360, 1425	0110	Reinert, R A	1049
Nagel, W P	817	Osborne, W W	16 11	Pinkerton, C	942	Reitemeier, R F	1772
Nair, K R S Nakamura, J	1261 2039	Ose, E E Oshima, N	1967 1688	Piraino, F P Pires, E G	2 25 1 2335	Renfro, B L Retief, G P	1004 1892
Nakano, R Y	980	Otto, G F	2292	Pirone, T P	988	Reyes, A A	2434
Narotsky Jr. S.	1956	Otto, N E	2567	1021, 1556	,,,,	Reynolds, H W	1602
Nash, R L	1704	Ourecky, D K	1432	Pitcock, J A	1863	1626, 1651	
Natalizi, G M	_881	Ousterhout, L E	2150	Pitois, M	2190	Reynolds, I M	2042
Nayak, D P	1888	Owen, L N	2164	Pittman, U J	1671	2215, 2216	
Nayashi, N	2039	Oxberry, J	2202	Plakidas, A G	1249	Reynolds, J E	9 7 5
Nayudu, M V 2444	1569	Padgett, G A	2011 2443	1295	2175	1089 Reynolds, R	2034
Nealy, J	1767	Pafford, J L Page, G E	2558	Plastridge, W N Platonow, N	1785	Rhoades, H E	2196
1822	1,0,	Page, L A	2145	2524	1703	Rhoades, K R	1843
Nearpass, D C	2325	2152, 2154,	2160	Poljakoff-Mayber, A	1355	Rhode, E A	1796
Neely, D	1157	2161		Pomeroy, B S	2045	1864	
1235		Paige, L	1058	2224		Rhodes, W H	2352
Negi, N S	2329	Palarski, J D	1824	Pope, A L	2253	Ribelin, W E	2115
Neilson, W T A	1594	Palmer, A C	2086	Poppensiek, G C	2130	Rich, A E	1505
Nelson, P E Nelson, R R	1217 1423	Palmer, D F Palmer, J G	2138 1001	Porter Jr, W K 2415, 2416,	2414 2521	1538, 1608, 2450	2344
1699, 2461	1425	Palmer, J S	1996	2522	2321	Rich, S	1023
Nelson, W A	796	1997	.,,,,	Porterfield, J G	2557	Richards, M A	1884
Nelson, W L	1161	Palmer, R D	2330	Pound, G S	1122	Richards, W R	808
Newberne, J W	2066	2402		1551, 1556		811	
2067		Palmiter, D H	1278	Pounden, W D	2047	Richardson, L T	2404
Newnham, A G	2167	Pande, B P	2107	2049	4407	25 16	1000
Nex, R W	2525	Pannu, J S	1917	Powelson, R L	1107	Riddell, P E	1889 1696
Nicholas, H K Nicholls, C F	989 2542	Papavizas, G C 1386, 1395	1383	2358 Powers Jr, H R	2451	Ries, S K Riffle, J W	16 14
2543, 2544,	2545	Pappelis, A J	1341	Powers, K G	2314	Rigdon, R H	2246
2546		1342		Price, D A	2110	2248	
Nichols, C G	1365	Parham, S A	1734	Price, J I	1964	Riggs, R D	1281
Nichols, C W	1165	Parker, H D	2020	2033		1617	
Nichols, R E	1815	Parker, K G	1212	Price, K E	1945	Riker, A J	1045
2274	1500	Parker, M W	1728	Prier, J E	2007	1552, 2496	1770
Nicolson, T H	1529	Parmeter Jr, J R	1455 1103	2235	23115	Riley Jr, W F	1779 2266
Niederhauser, J S Nielsen, S W	1169 2054	Parmeter, J R Parnell, I W	1925	Pringle, R B 2421, 2461	2345	Ringen, L M Ripperton, L A	925
2055, 2175	2034	Partridge, A D	1505	Provvidenti, R	1123	Ristic, M	1798
Niemann, W H	1929	Patel, P N	1568	Prydie, J	2077	2185, 2186,	2198
Niilo, L	1937	1571, 2498		Pryor, W J	2241	Rivera, C M	1223
Nilsson, T	2083	Pathak, R C	2108	Psarros, E E	2435	Roane, C W	1580
Nolla, J A B	1542	Patil, S S	1107	Purcell, W R	1887	Robert, A H	1379
Nolla, J A B Norcross, S L	1542 1829	Patil, S S Paton, I M	1107 224 7	Purcell, W R Purchase, H G	2135	Robert, A H Robert, A L	1369
Nolla, J A B	1542	Patil, S S	1107	Purcell, W R		Robert, A H	

Roberts, D H	1943	Schalm, O W	2148	Shelton, D C	2269	Smith, R N	2143
Roberts, D R	1681	2158		2271, 2272		Smith, R S	1367
Roberts, E D	2027	Scharpf, R F	1103	Shepherd, R J	1139	Smith, S G	870
	2106	Scheer, R L	1417	1551	1155	Smith, T E	1274
Roberts, R M			2345		1218		1631
Robertson, A	2531	Scheffer, R P	2343	Sherf, A F		Smithson, H	
Robertson, Jr., S W	888	2421, 2461	1310	Sherwood, R T	1422	Snell, V N	2137
Robinson, A G	898	Schein, R D	1319	Shibley, G B	2171	Snoeyenbos, G H	2207
Robinson, E L	1719	1320, 1356,	2432	Shibley, G P	2170	2216, 2219,	2220
1730		Schelo Jr, H W	1540	Shifrine, M	1764	Snow, G A	- 1229
Robinson, G A	1889	Schenck, N C	1225	2150, 2156		Snow, J A	1319
Robinson, V B	206 7	Schieber, E	15 7 2	Shigo, A L	974	Snyder, W C	1127
Robocker, W C	1723	Schindler, A F	1610	1412, 1413,	1437	1461, 1469	
1727		1644		Shihata, I M	2288	Sobers, E K	1295
Rochow, W F	1411	Schliebe, K A	2327	Shikata, E	1190	Sohi, S S	977
Rodabaugh, D E	2227	Schmidt, E L	2338	Shinde, B G	2445	Solberg, R A	2475
2228		Schmidt, R A	1318	Shinonaga, S	908	2476	
Rodenhiser, H A	1438	Schmitthenner, A F	1033	Shipton, W A	1545	Solomon, G C	2136
Rodriguez, A E	1110	1111, 1297,	1299	Shirlaw, J F	1962	Soloway, S B	2513
Rodriguez, J G	902	Schmittle, S C	2189	Shiroishi, K K	1381	Soltys, M A	1891
Roebuck, D E	1948	Schmutz, E M	926	Shively, J N	1844	Somers, R K	2316
Roenigk, W J	2058	Schneebeli, G	1805	Shupe, J L	1915	Somme, L	885
Rogers, B J	2438	Schneider, H	1115	Sieburth, J M	1809	Sonder, L W	1760
2465		1583		Siegel, A	1143	Soper Jr, R S	826
Rogers, R	2168	Schneider, I R	958	1450, 2383		Soto, P J	1875
Rogers, W E	1699	Schnurrenberger, P R	2052	Sigurdsson, B	2192	Soulsby, E J L	2162
Rohde, C R	1085	Schoen, J F	2319	Silberschmidt, K	1238	Spalding, D H	2510
Rohrbacher, G H	2116	Schoenhard, D E	2011	Sillaman, J M	2007	Spanis, W C	2475
	1065		2139		823	Specht, H B	807
Romanko, R R	1003	Scholtens, R G	2003	Silver, G T	2144		2322
1443	21126	Schrader, G T		Simesen, M G		Spencer, G R	
Romanowski, R D	2436	Schreiber, L R	1119	Simmonds, F J	905	Sperling, F G	2238
Roncadori, R W	2382	1328	4400	Simon, D V	2194	Splittstoesser, W E	2360
Rooney, J R	1837	Schroeder, W T	1123	Simon, J	1806	Spurr Jr, H W	2496
2082		Schroth, M N	1127	2184, 2252,	2322	Stadtherr, R J	1750
Rosanoff, E	2275	1457, 1458		Simons, J N	1147	Stahman, M A	2501
Roscher, A A	2006	Schuepp, H	2359	1343, 1344		Stairs, G R	859
Rosenthal, G A	1221	Schulze, M L	2247	Simons, M D	1030	880	
Ross, A F	964	Schwartzman, R M	2233	1368		Stanford, E H	1652
1215, 1459		Scott, D H	2455	Simpson, M E	1390	Staniforth, D W	1693
Ross, E W	1346	Scott, G R	1842	2454		1694	
Ross, J G	1969	Scott, H A	1324	Sinclair, J B	1090	Staples, R C	843
Ross, J P	1364	1384		1135, 1248,	1250	2501	
1649		Scrivner, L H	1934	1254		Starzyk, M J	1294
Roth, F E	2004	Scudder, G G E	833	Singh, C M	2108	2340	
Roth, J N	2430	892		2254		Steck, F	1764
Roth, L O	2557	Seaman, W L	1063	Singh, K V	2053	Steele, J H	1960
Rothenbacher, H	2063	Segre, D	2229	2056	2000	Steere, J H	1767
Rowell, J B	1531	Sehgal, O P	1143	Singh, R K N	2412	1822	.,,,
Rowsell, H C	1889	2503	1145	Sinha, R N	862	Steere, R L	2535
Rubin, R	1777		2127		2123	Stegmiller, H E	2052
2286, 2289,	2290	Seibold, H R	2121	Sinkiewicz, R J	2485		897
		2131	1698	Sisler, H D	2403	Sternburg, J	1597
Runion, H I	895	Selleck, G W	1030	2486	1005	Stessel, G J	
Ruppel, E G	1073	1755, 1756	2040	Skaggs, J W	1995	Stevens, C E	2018
1079, 1565	2402	Sellers, A F	2018	Skelley, J F	2234	Stevenson, D E	2164
Russakon, N	2403	Semeniuk, G	1339	Skelly, J M	1317	Stevenson, J A	1389
Ryder, H W	917	1340	1001	Skidmore, L V	2229	Stewart, L	2410
Ryff, J F	2276	Semeniuk, P	1001	Skoropad, W P	1151	Stewart, R B	2453
Ryley, J F	1977	1644	2244	Skotland, C B	1155	Stewart, R N	1644
Saari, A A	1083	Sen, H G	2311	1582	4046	Stingl, H	1521
Sackston, W E	1256	Sequeira, L	1034	Slater, E	1946	Stockton, J J	2010
SadaSivan Nair, K R	1153	1206, 1207,	1560	Slater, J S	1923	Stokes, G W	1171
Safeeulla, K M	1588	Sevoian, M	2218	Slater, T F	2140	1513	
2396	0.00	Sexsmith, J J	1671	Slebodzinski, A	1898	Stolzy, L H	16 1 2
Saidak, W J	2407	1684	445"	Slife, P W	2483	2478	4040
Sakimura, K	1321	Shaffer Jr, W H	1124	Sloper, J C	1884	Stone, S S	1818
Salerno, M	2447	1532	464.	Slusher, R L	2317	Storm, L W	1146
Sanford, J	2204	Shafiee, M F	1604	Slykhuis, J T	1159	1175	
Sanger, H L	1091	Shah, P	1851	1196		Stout, G L	1191
1095		Shaifee, M F	1336	Smalley, E B	1163	Stover, B J	1805
Sanger, V L	2045	Shalkop, W T	2120	1552, 1557,	1558	Straub, M	1991
2048, 2051		Shalla, T A	927	1592, 1815		Strauli, U D	2140
Santelmann, P W	1700	Shands, H L	1555	Smalley, G W	1417	Street, J E	1740
2420		1559		Smart Jr, G C	1599	Streets, R B	1175
Santiago, A	1223	Sharaf, A	2288	1664		Stretch, A W	2341
Santilli, ▼	1099	Sharp Jr, J B	2127	Smibert, R M	2262	2440	
2445		Sharp, E L	1131	Smiley, J H	1513	Strider, D L	1283
Satasin, G	1883	Sharplin, J	831	Smirnoff, W A	818	1289	
Sasser, J N	1628	891		874		Stritzke, J F	171 5
1629		Shatla, M N	1135	Smith Jr, R J	1738	Strobel, G	1176
Satchuthananthavale,	1334	1250		Smith, F F	1399	Strobel, G A	2472
Sauer, D B	1523	Shaw, C G	10 17	Smith, G E	1054	Struckmeyer, B E	1365
Sauer, R M	2007	1588, 2396		Smith, H W	2098	Stuart, E E	2073
2235		Shaw, J G	2502	Smith, I M	2078	2074, 2102	
Sawyer, B	2140	Shaw, W C	1732	Smith, Jr, R E	1709	Stubbs, E L	2238
Saxena, K M S	2484	1734		Smith, L R	920	Studdert, M J	2153
Sayedain Joeffery, S	1949	Shay, J R	1113	Smith, L W	1745	Stuteville, D L	1564
Schaefer, J F	1331	1330		Smith, M A	1400	Subramanyam, P	2224
Schaefer, W B	2030	Shebeski, L H	2397	1401		Suga, N	877
Schafer, J F	1327	Sheets, T J	1725	Smith, P G	1454	Sullivan, C R	870
1329, 1555,	1559	1733, 2367,	2509	Smith, R E	2042	Sullivan, D J	2125
Schaller, C W	1377	Shelley, W B	1893	2215	2012	Summers, T E	1643
			,	~~.~			1045

PAGE 191

Sutherland, J R

Stenctiona, o n							
Sutherland, J R	1668	2099		von Meyer, W C	2318	Wheat, J D	1794
Svoboda, J A	883	Toler, R W	1289	von Ramm, C	1285	Wheeler, H	1016
Swan, D G	2483	1431, 1434		Von Schmeling, B	1440	1646, 2417,	2418
Swangard, W M	1963	Tolmsoff, W J	1075	Wada, E M	2153	2419	
Swanson, L E	1797	2515		Wada, M	2151	White-Stevens, R H	1914
2307		Tomizawa, K	2039	Wade, A E	2307	1973	
Sweeney, E J	1941	Toole, E R	1428	Wade, E K	1566	White, G	1842
Swenson, K G	949	1429		Waggoner, P E	916	White, L V	1616
977, 1307		Torrell, P J	1692	1352		Whiteman, C E	1954
Swezey, A W	2525	Tourtellote, M E	2176	Wagle, R F	926	Whitenberg, D C	2449
Swidler, R	1343	Tourtellotte, M E	2172	Wahby, A M	1968	Whiteside, J S	2378
Swingle, K F	1783	2175	111611	Wahl, I	1354	Whitney, R D	1574
2022, 2023	1005	Toussoun, T A 2468	1464	Wakelin, D	1976	Whitworth, J W	2424
Switzer, W P 1984	1885	Towey, J P	1963	Walker Jr, J K Walker, C R	2335 1683	Wicker, E F 1017	1009
Sykes, A H	2205	Townsley, W W	943	Walker, J	1798	Wicks, G A	1704
2534	2203	Trainer, D O	1810	Walker, J C	1548	1705, 2339	1704
Sykes, J F	1769	Trautman, R J	1991	1562, 1566,	1568	Widmer, R E	1750
1903, 2122	,,,,,	2137		1569, 1570,	1571	Wiese, A F	1707
Szabo, S S	1689	Tribe, M A	894	2498		2443, 2446	
2497		Trione, E J	1085	Walker, J T	1630	Wiggs, D N	1186
Szanto, J	2309	True, R P	915	2349		1290	
Szuszkiewicz, T E	1612	2385, 2456		Wallace, H A H	862	Wight, P A L	1906
Tachibana, H	979	Trujillo, E E	931	Wallace, J	2376	Wikerhauser, T	1808
1177		1502		2494		Wilcox, H S	2281
Talbert, R E	1752	Tryon, E H	915	Wallace, J M	1071	Wilcoxson, R D	1174
2490	000	Tsao, P H	928	Wallace, W H	1705	1528, 1573	0.54
Talerico, R L	899	987, 1067,	1483	Wallen, V R	1063	Wilde, W H A	861
Tamman, J	1019	1487, 1489,	1657	Wallenstein, A	1544	Wildman, S G	981
Tammen, J 1178	952	Tsao, P W 2388, 2395	1488	Walton, G S	2384 1578	1043, 1480	1427
Tangri, R P	2108	7300, 2393 Tudor, D C	2084	Wang, H L Ware, B	2379	Wiles, A B Wilhelm, S	1427
Tasker, J B	1954	Tumbleson, M E	2488	Warner, A R	1844	2467	1402
Taylor, G N	1805	Tunnicliff, E A	2019	Warner, R E	840	Wilkerson, J A	1712
Taylor, G S	1023	Turk, R D	1786	Warren, G F	1703	Wilkes, A	792
Taylor, K E	2334	1787, 2301		Warren, G H	2275	Wilkinson, R E	2464
Taylor, M E	851	Turner, G D	1769	Warren, J	1946	Will, D H	1775
Taylor, P A	1889	1903, 2122		Waters, W E	1691	1950	
Taylor, P J	2214	Turner, J H	2120	Waterson, A P	2166	Williams, E B	1162
2218		2303		Waterworth, H E	1549	1173, 1326,	2376
Taylor, R B	2539	Turner, N J	2348	Watkins, G M	1351	Williams, G	2493
Taylorson, R B	1726	2508		Watkins, J R	1897	Williams, H E	2016
Teakle, D S	1179	Turner, P D	1589	Watrach, A M	2198	Williams, L E	1033
1457, 1460	2216	Turnock, W J	844	2199	1500	1111	1000
Teianabos, T	2216 1185	Tyler, W S	1795 1195	Watson, R D Watson, T K	1508 861	Williams, N D Williams, P H	1409 1570
Templeton, G E Teskey, H J	2278	Tyner, L E Tzianabos, T	2219	Watson, W Y	873	Williamson, R E	1711
Tesseler, J	2133	Udall, R H	1775	Watt, K E F	863	Wills, W H	1581
Tessler, J	2129	Umebachi, Y	882	Way, R D	1216	Wilson, B J	1825
Tewari, A N	1978	Underdahl, N R	2200	1279	12.10	Wilson, C	1187
Thakur, R N	1236	Underwood, G R	873	Weatherly, N F	1856	Wilson, C H	1825
1237		Unfug, H V	1776	Weathers, L G	2381	Wilson, C L	1453
Theaker, T L	2550	Uota, M	991	Weaver, M L	1749	Wilson, E E	963
Theis, T	1223	Updike, J J	1834	Webb, J L	1879	1125, 1145,	2469
Theisen, P	2332	Uribe, E G	2471	Webb, R E	966	Wilson, F D	1643
Thirumalachar, M J	1588	Uritani, I	1269	1200, 1384,	1433	Wilson, G I	2120
Thomas Jr, W D	1180	Uscavage, J P	2237	1454, 1582	4600	Wilson, G P	2058
Thomas, C A	13 7 8	Usherwood, P N R	895	Weber, C R	1694	Wilson, J B	942
1380, 1398	2276	Uzzell Jr, G	1628	Weber, D F	1059 1493	Wilson, J D 1630, 2356	1300
Thomas, G M Thomas, J B	2352	1629 Vaghi, M A	1771	Weber, G F Webster, D H	2556	1630, 2356 Wilson, J E	2014
2361	2002	Vakilzadeh, J	2052	Webster, G D	2234	Wilson, R A	986
Thomas, R E	2109	Vallega, J	1228	Weeks, D L	2300	Wilson, V E	1436
Thomason, I J	1598	Van Demark, P J	2032	Weeks, T E	1584	Windsor, G D	2232
1606, 1627,	2343	Van Gundy, S D	928	Wehr, E E	2121	Winget, C H	1758
2369		1154, 1487,	1598	Weibel, J	1240	Winmill, A J	2257
Thomlinson, J R	2203	1612, 1657		Weide, K D	2048	Winn, J F	2138
Thempson, J L	1687	Van Roekel, H	2213	2051	22-2	Winstead, N N	1281
Thompson, R H	2013	VanGundy, S D	1596	Weihing, J L	1535	Winter, A	2087
2099	1070	1659	1700	Weinbren, M P	907	Winter, A J	1806
Thompson, S S	1434	Vardaman, T H	1788	Weinhold, A R	1476	1807	1206
Thompson, W R Thorn, G D	795 2404	1789, 1790, 2111	1840	Weinke, K E Weldon, L W	940 1718	Winter, H F Winterfield, R W	1296 1901
2433, 2516	2707	Varney, E H	1007	Welkie, G W	1056	1919	1501
Thornberry, H H	1512	Vaughan, E K	1304	Wellington, W G	866	Witcher, W	1282
Thorne, A L C	1970	1312		Wells, H D	998	Witter, R L	2036
Thorp, A C B	2076	Vaughn, E K	1080	1361, 1432		Wolfgang, R W	1975
Thrasher, F P	1717	1305		Welsh, M F	983	Wood, F A	1317
Tillotson, A J	2286	Vegors, H H	2285	Welter, C J	1860	1318	
2290		Venekamp, J H	1578	Wenner, H A	2200	Wood, G W	1620
Timian, R G	2537	Venifer, F G	1391	2201		Woodward, K	1844
Timmons, F L	1718	Venkataratnam, A	2206	Werder, A A	2200	Wooten, O B	2561
Tims, E C	1252	Verrall, A F	1408	2201	2006	2562	1554
Tingey, D C 2504	929	Vertrees, I	2467	Wescott, E W	2486	Worf, G L	1554
		Vickers, C L	2352	Weseloh, J W	2413 1226	Worley, D E	2293 1039
	1350	Vickers J U	1910				
Tobolsky, I	1354 1551	Vickers, J H Vickery, V R	1910 827	West, E West, S H		Worley, J F Worth, C B	
Tobolsky, I Tochihara, H	1551	Vickery, V R	827	West, S H	2462	Worth, C B	907
Tobolsky, I		Vickery, V R Viglierchio, D R					
Tobolsky, I Tochihara, H Todd, A C	1551	Vickery, V R	827 1653	West, S H Wester, R E	2462	Worth, C B Worthington, W E	907 1871

2228	
Wright, J R	248
Wright, M L	206
Wu, J	98
Wu, J-H	104
1480 Wuest, P J	242
Wyant, Z N	243
2294, 2295	199
Yale Jr, J W	130
Yamaguchi, S	247
Yamamoto, I	251
Yarwood, C E	104
1463, 1465,	146
1470, 2466	
Yates, V J	202
2242, 2243	
Yoder, H W Yoder, Jr., H W	224
Yoder, Jr., H W	198
York, C J	206
Young Jr, H C	130
Young, P A Young, R A	134
2508	110
	180
Young, R J Young, S	202
2023	
Younger, R L	185
Younger, V B	247
Youngner, V B	174
Yount, W L Zaitlin, M	163:
	1143
1450, 2383	
Zaki, A I	105
Zaumeyer, W J	950
1055, 1382, 1394, 1396	1381
Zawadzka, B	2393
Zemjanis, R	1804
Zentmyer, G A	1490
Zimmer, D E	1329
1414, 2457	
Zink, F W	1742
Zolli Jr. Z	1945
Zscheile Jr, F P	1477
Zscheile, F P	1005
2470	
Zuckerman, B M	1663
Zumme, N	1249
Zwart, D	1998
1999 Zweig, G	21174
avery, G	2471



	UKGANIZ	ATION INDEX	
(university Of Manitoba, Winnipeg, Canada plant Science Dept.	2397	Microbiology Laboratory Arkansas Agricultural Experiment Station	2399 1185
A. And M. College Of Texas Dept. Of Veterinary Microbiology A. And M. College Of Texas, College Station 919	1897 920	Arkansas Agricultural Experiment Station, Fayetteville 1617 Armed Forces Institute Of Pathology	1928
1181 A. R. C. Institute Of Animal Physiology, Babraham, Cambr		Armed Forces Institute Of Pathology Veterinary Pathology Division	1929
1898 1899 A. R. C. Institute Of Animal Physiology, Cambridge, Engl		Atlantic Christian College, Wilson, N. C. Atomic Energy Commission	1186
Abbott Laboratories, North Chicago, Ill.	1901	Division Of Biology And Medicine Auburn University	1772 2401
Amdal Co. Division Agricultural And Mechanical College Of Texas, College St Dept. Of Veterinary Microbiology		Auburn University Dept. Of Animal Disease Research Auburn University	1931
Agricultural Experiment Station, Rehovot, Israel Agricultural Experiment Station, University Park, N. Mex	2398	School Of Agriculture Auburn University	2400
Dept. Of Botany And Entomology Agricultural Research And Development Center, Wooster, O	1616 hio	School Of Veterinary Medicine Dept. Of Physiology And Pharmacology	1930
Institute Of Acarology Dept. Of Zoology And Entomology Agricultural Research Center, Beltsville, Md.	797	Auburn University School Of Veterinary Medicine Dept. Of Small Animal Surgery And Medicine	228 7
Agricultural Research Service Animal Husbandry Research Division		Auburn University Agricultural Experiment Station Auburn University Agricultural Experiment Station, Alaba	2329
Dairy Cattle Research Branch Agricultural Research Council, Babraham, Cambridge	1903	Botany And Plant Pathology Dept. 1681 Auburn University, Ala	1682
Institute Of Animal Physiology Agricultural Research Council, Compton, Berkshire Field Station	2539 1904	School Of Agriculture Agriculture Experiment Station Auburn University, Ala. 921	1187 1618
Agricultural Research Council, Compton, Berkshire, Engla	nd	Auburn University, Alabama	
Institute For Research On Animal Diseases Agricultural Research Council, Edinburgh, U. K.	1905	Alabama Extension Service Dept. Of Botany And Plant Pathology	1619
Poultry Research Centre	1906	Auburn University, Alabama	2220
Agricultural Research Station, Rehovot, Israel 1183	1182	Dept. Of Botany And Plant Pathology Auburn University, Auburn	2330
Alabama Polytechnic Institute, Auburn		United States Dept. Of Agriculture Agricultural Research Service	
School Of Veterinary Medicine Dept. Of Animal Disease Research	1770	Crops Research Division	2540
Alberta Dept. Of Agriculture, Edmonton, Canada Veterinary Laboratory	1907	Auburn University, Auburn, Ala. Dept. Of Microbiology	1933
Amer. J. Vet. Res., 22, (Nov., 1961): 1069-1074	1908	Auburn University, Auburn, Ala.	1932
Amer. Journal Of Vet. Res., 22, (Nov., 1961): 1081-1084		Dept. Of Pathology And Parasitology Auburn University, Auburn, Alabama	
American cyanamid Co., Pearl River, N. Y. Lederle Laboratories Division	1910	Dept. Of Botany And Plant Pathology B. P. Bishop Museum, Honolulu, Hawaii	2402 798
American Cyanamid Co., Pearl River, N. Y.		Bell Helicopter Company	2541
Lederle Laboratories American Cyanamid Co., Pearl River, N. Y.	1911	Bishop Museum, Honolulu, Hawaii Boyce Thompson Institute, Yonkers, N. Y. 849	799 1188
Lederle Laboratories Viral And Rickettsial Research Section 1912	1913	1189 1190 2348 2403 Brooklyn Botanic Garden, N.Y.	2349
American Cyanamid Co., Princeton, N. J.		Bureau Of Sport Fisheries And Wildlife, La Crosse, Wis.	
Agricultural Division 1914 American J. Vet. Res., 22, (July, 1961): 770-774	2283 2347	Fish Control Laboratory C.S.I.R.O., div. Of Wildlife Research, Canberra, A.C.T.	1683
American Journal Of Veterinary Res., 23, (Jan., 1962):8	81-84	1989 Cairo University	
American Journal Of Veterinary Res., 23, (jan., 1962):15	5-20	Faculty Of Veterinary Medicine	2288
American Journal Of Veterinary Res., 23, (jan., 1962):24	-31	Dept. Of Pharmacology Caldwell Branch Station, Idaho	1934
1915 American Journal Of Veterinary Res., 23, (jan., 1962):42	2-48	California Dept. Of Agriculture Bureau Of Plant Pathology	1191
2286 American Journal Of Veterinary Res., 23, (jan., 1962):49	-57	Cambridge University Dept. Of Zoology	850
1916 American Journal Of Veterinary Res., 23, (jan., 1962):65		Canada Agriculture Research Station, Lethbridge, Alberta Soils Section	1684
1771		Canada Agriculture Research Station, Saskatchewan	
American Journal Of Veterinary Res., 23,(Jan., 1962):96		Entomology Section Canada Agriculture Research Station, Saskatoon, Sask.	85 1
American Journal Of Veterinary Res.,23,(Jan., 1962):150		Entomology Section Canada Agriculture Research Station, Saskatoon, Saskatch	852 ewan
American Phytopathological Institute American Scientific Laboratories, Inc., Madison, Wis.	1184	1192 Canada Agriculture, London, Ontario	
Dept. Of Preventive Medicine American Veterinary Medical Association	1919	Pesticide Research Institute Canada Agriculture, Saskatoon, Saskatchevan	2404
Council On Public Health And Regulatory Veterinary Med	licine	Research Station	853
American Veterinary Medicinal Association Council On Public Health And Regulatory Veterinary Med	licine	Canada Dept. Of Agriculture Entomology And Plant Pathology Section Canada Dept. Of Agriculture	1193
1921 Angell Memorial Animal Hospital, Boston, Mass.	1922	Research Branch Animal Research Institute	1935
Animal Diseases Research Association, Glimerton, Edinbur		Canada Dept. Of Agriculture	
Animal Diseases Research Institute, Hull, P. Q. Canada Dept. Of Agriculture		Research Station, Winnipeg, Manitoba Canada Dept. Of Agriculture, Belleville Entomology Research Institute For Biological Control	2405
Animal Pathology Laboratories Health Of Animals Division	1924	2543 Canada Dept. Of Agriculture, Belleville	
Animal Health And Nutrition Laboratory, Perth, Australia 1925		Entomology Research Institute For Biological Control Research Branch	2542
Animal Medical Center, N. Y., N. Y. Animal Medical Center, New York	1926 1927	Canada Dept. Of Agriculture, Belleville Ontario Research Branch	
Annamalai University, Annamalainagar, Madras State, Indi		Entomology Research Institute For Biological Control	
Dept. Of Agriculture		800	

	ORGANIZ	ALION INDEA	
Canada Dept. Of Agriculture, Belleville, Ontario Entomology Research Institute Por Biological Control		Research Station Canada Dept. Of Agriculture, Swift Current, Saskatchewan	861
Research Branch Canada Dept. Of Agriculture, Belleville, Ontario	2544	Research Branch Canada Dept. Of Agriculture, Victoria, British Columbia	1687
Research Branch Entomology Research Institute For Biological Control 801 802 855 856		Entomology Laboratory Canada Dept. Of Agriculture, Vineland Station, Ontario Research Branch	2550
801 802 855 856 Canada Dept. Of Agriculture, Belleville, Ontario Research Institute		Research Laboratory Canada Dept. Of Agriculture, Winnepeg, Manitoba	1197
Research Branch Canada Dept. Of Agriculture, Bellville, Ontario	854	Research Station Entomology And Plant Pathology Laboratories	962
Research Branch Entomology Research Inst. For Biological Control Canada Dept. Of Agriculture, Bellville, Ontario	2547	Central Plorida Experiment Station, Sanford Central Veterinary Laboratory 1938 1939 Central Veterinary Laboratory, Weybridge 1941	1198 1940 1942
Research Branch Entomology Research Institute For Biological Control		Central Veterinary Laboratory, Weybridge 1941 1943 1944 Chas. Pfizer And Co., Inc., Terre Haute, Ind.	1945
2545 2546 Canada Dept. Of Agriculture, Chatham Ontario		Chas. Pfizer And Co., Inc., Terre Haute, Indiana Dept. Of Biologics Research	1946
Entomology Laboratory Canada Dept. Of Agriculture, Edmonton, Alberta	1194	Chemical Control Section, Ottawa, Canada Chemical Control Section, Ottawa, Ontario	2551 2351 1947
Research Branch Laboratory Of Plant Pathology Condo Port Of Arrighture Productor N. B.	1195	Ciba Pharmaceutical Company, Summit, N. J. Clemson College	1621
Canada Dept. Of Agriculture, Fredericton, N. B. Research Branch Research Station		Dept. Of Botany And Bacteriology Clemson College Livestock Sanitary Dept. Clemson College, Clemson, S. C.	2352
Entomology And Plant Pathology Section Canada Dept. Of Agriculture, Fredericton, N. B.	803	Dept. Of Botany And Bacteriology Clemson College, S. Car.	1199
Research Station Entomology And Plant Pathology Section	804	Livestock-Poultry Health Dept. Coastal Plain Experiment Station, Tifton, Ga.	1948 1200
Canada Dept. Of Agriculture, Fredericton, New Brunswick Research Station		College Of Animal Husbandry, Lahore, Pakistan Colorado Serum Co., Denver	1949 1773
Plant Pathology And Entomology Section Canada Dept. Of Agriculture, Guelph, Ontario	1594	Colorado Stae University College Of Veterinary Medicine	1950
Research Branch Entomology Laboratory	2278	Colorado State University Colorado State University	1202
Canada Dept. Of Agriculture, Harrow, Ontario Research Branch	225	College Of Veterinary Medicine 1774 1775 2289 2290	1952
Research Station Canada Dept. Of Agriculture, Hull, Quebec	805	Colorado State University College Of Veterinary Medicine	4054
Animal Diseases Research Institute Health Of Animals Branch	1936	Dept. Of Clinics And Surgery Colorado State University	1951
Canada Dept. Of Agriculture, Hull, Quebec Animal Diseases Research Institute		College Of Veterinary Medicine Dept. Of Physiology	1776
Health Of Animals Branch Animal Pathology Division	2320	Colorado State University Oregon State University	1201
Canada Dept. Of Agriculture, Kentville, N. S. Research Station	806	Colorado State University, Fort Collins College Of Veterinary Medicene	1954
Canada Dept. Of Agriculture, Kentville, Nova Scotia Canada Dept. Of Agriculture, Kentville, Nova Scotia	807	Colorado State University, Port Collins College Of Veterinary Medicine 1777	1953
Research Station Canada Dept. Of Agriculture, Kentville, Novia Scotia Research Station	2548 857	Colorado State University, Fort Collins Dept. Of Botany And Plant Pathology 1203 1688 2353	1204
Canada Dept. Of Agriculture, Lethbridge, Alberta	037	Colorado State University, Ft. Collins	1205
Animal Diseases Research Institute (Western) Health Of Animals Division Canada Dort Of Agriculture London Ontonio	1937	Dept. Of Botany And Plant Pathology Commonwealth Bureau Of Helminthology, St. Albans Commonwealth Institute of Biological Control	1955 905
Canada Dept. Of Agriculture, London, Ontario Pesticide Research Institute	1605	Commonwealth Institute Of Biological Control Compania Bananera De Costa Rica, Coto	
University Sub Post Office Canada Dept. Of Agriculture, London, Ontario	1685	Research Dept. 1206 Connecticut Agricultural Experiment Station, New Haven	1207
Research Institute Canada Dept. Of Agriculture, New Brunswick	25 16	1210 1622 Connecticut Agricultural Experiment Station, New Haven	1200
Research Station Horticultural Section Canada Dept. Of Agriculture, Ottawa	1620	Dept. Of Plant Pathology And Botany 1208 Cooper Technical Bureau, Berkhamsted Cornell University 1211	1209 2291 2552
Research Branch Plant Research Institute 1196	1686	Cornell University Dept. Of Plant Pathology 1212 1213 1214	1215
Canada Dept. Of Agriculture, Ottawa, Ontario Research Branch	1000	Cornell University Dept. Of Vegetable Crops	2407
Entomology Research Institute 792 808 810 811 812 813 814 815	809	Cornell University, Geneva, N.Y. Cornell University, Ithaca, N Y	1216
Canada Dept. Of Agriculture, Saskatchewan Research Station	858	Dept. Of Plant Pathology Cornell University, Ithaca, N Y	1623
Canada Dept. Of Agriculture, Saskatoon, Saskatchewan Research Station	2406	Dept. Of Plant Pathology Ornamentals Research Laboratory, Farmingdale, Long Isl:	and
Canada Dept. Of Agriculture, Saskatoon, Saskatchewan Research Station	2400	1217 Cornell University, Ithaca, N. Y. 1218 1219	1624
University Sub Post Office Canada Dept. Of Agriculture, Sault Ste. Marie, Ontario	2350	1625 2408 Cornell University, Ithaca, N. Y.	
Insect Pathology Research Institute Canada Dept. Of Agriculture, St. Jean, Quebec	859	Dept. Of Entomology Cornell University, Ithaca, N.Y.	817 2553
Research Branch Research Laboratory	860	Cornell University, Ithaca, New York New York State Veterinary College	2333
Canada Dept. Of Agriculture, St. Jean, Quebec Research Branch	0.30	Dept. Of Pathology And Bacteriology Cornell University, Ithaca, New York	1956
Research Section Canada Dept. Of Agriculture, St. Jean, Quebec	2549	New York State Veterinary College Dept. Of Physiology	1957
Research Branch Research Station	816	Cornell Univesity, Riverhead, N. Y. Long Island Vegetable Research Farm	922
Canada Dept. Of Agriculture, Summerland, British Columbi Research Branch		Cotton Research Center, Temple, Ariz. Agricultural Research Service	1626
PAGE 196		ASTICULTURAL RESCRIPTION SELVICE	1020

Dartmouth College	2409	Gulf Coast Experiment Station, Bradenton, Fla.	1691
Dept. Of Agriculture, Edmonton, Alberta, Canada		Harvard University Medical School, Boston, Mass.	
Veterinary Services Branch	2554	Pathology Dept.	2292
Dept. Of Botany		Harvard University, Cambridge, Mass.	
University Of California, Davis	2517	The Biological Laboratories	877
Dept. Of Forestry, Ottawa		Heisoorf + Nelson Farm, Inc. Redmond, Washington	1974
Statistical Research Service	863	Hess And Clark Research Laboratory, Ashland, Ohio	1975
Dept. Of Forestry, Victoria, British Columbia		High Point High School, Beltsville, Md.	
Forest Entomology And Pathology Laboratory	864	Dept. Of Biology	2410
Dept. Of Health For Scotland.	1958	Horticultural Crops Research Station, Castle Hayne, N.	C.
Dept. Of Health, Education And Welfare		1232	
Public Health Service		Houghton Poultry Research Station, England	1975
Bureau Of State Services		Houghton Poultry Research Station, Houghton, Huntingdon	shire
Communicable Disease Center, Atlanta, Ga.	1959	2520	
Dept. Of Health, Education, And Welfare		Idaho Agricultural Experiment Station 1233	2354
Public Health Service		Idaho Agricultural Experiment Station, Moscow	1234
Bureau Of State Services		Idaho Agricultural Experiment Station, Parma	1692
Communicable Disease Center, Chamblee, Ga.	1960	Illinois Natural History Survey, Urbana	1235
Dept. Of Health, Education, And Welfare		Illinois Natural History Survey, Urbana	
U. S. Public Health Service, Bethesda, Md.		Section Of Economic Entomology	1 595
National Inst. Of Arthritis And Metabolic Diseases	865	Illinois State Natural History Survey, Urbana	8 7 8
Dept. Of National Health And Welfare, Ottawa, Ontario		8 7 9	
Food And Drug Laboratories		Imperial Chemical Industries Ltd., Alderley Park, Chesh	nire
Animal Pathology Section	1961	Pharmaceuticals Division	1977
Dept. Of Nematology		Indian Council Of Agricultural Research, Kanpur	
University Of California, Riverside	1627	Regional Research Center (oilseeds And Millets)	1237
Dept. Of Veterinary Sciences, Kenya	1962	Indian Council Of Agricultural Research, Kanpur	
Detroit, Michigan	1778	Regional Research Centre (oilseeds And Millets)	1236
Diamond Laboratories, Des Moines, Iowa		Indian Veterinary Research Inst., Izatnagar, U. P., Ind	
Dept. Of Biological Research	1963	Disease Investigation Station	1978
Dow Chemical Co., Midland, Mich.		Insect Pathology Research Institute, Sault Ste. Marie,	Ont.
Chemicals Laboratory	1220	880	
Duck Research Lab, Eastport, Long Island, New York	1964	Insect Pathology Research Institute, Sault Ste, Marie,	Ont.
Duke University, Durham, N. C.		826	
School Of Forestry	1221	Inst. For Tropical And Protozoan Diseases, Utrecht	1979
East African Veterinary Res. Org., Mugaga, Kikuyu, Kenya	l .	Institute For Medical Research, Kuala Lumpur, Malaya	906
1965		Instituto Biologico, Sao Paulo, Brazil	
East African Veterinary Res. Org., Muguga, Kikuyu, Kenya	l +	Section Of Plant Physiology	1238
1966		Instituto Nacional De Investigaciones Agricolas, Mexico)
Eli Lilly And Company, Greenfield, Ind.	1967	1239	
Entcmology Research Division, Tifton, Ga.	1222	Instituto Nacional De Technologia Agrospecuaria, Chaco,	, Arg.
Faculty Of Veterinary Medicine, Giza, Cairo	1968	Estacion Experimental Agrapecuaria	1980
Federal Dept. Of Veterinary Research, Vom, Nigeria	1970	Instituto Venezolano De Investigaciones Cientificas, Ca	aracas
Federal Dept. Of Veterinary Research, Vom, Nigeria		Departamento De Virologia	1240
Animal Production Division	1969	Inter-African Bur. For Animal Health, Mugugu, Kenya	1981
Federal Experiment Station, Mayaguez, Puerto Rico	1223	Inter-American Inst. Of Agricultural Sciences, Turriall	oa.
Florida Agricultural Experiment Station	1224	1241	
Florida Agricultural Experiment Stations, Leesburg		International Paper Company, Bainbridge, Ga.	
Watermelon And Grape Investigations Laboratory	1225	Southlands Experiment Forest 1242	1243
Florida Agriculture Experiment Station, Gainesville, Fla		Iowa Agricultural And Home Economics Expt. Station, Ame	es
1226		Dept. Of Botany And Plant Pathology	1693
Florida Dept. Of Agriculture, Winterhaven		Iowa State University	1694
Division Of Plant Industry	1227	Iowa State University	
Food And Agricultural Organisation, Rome	1971	Dept. Of Botany And Plant Pathology 1244	2411
Food And Agricultural Organisation, Rome.	1972	Iowa State University	
Food And Agriculture Organization, Rome, Italy		Veterinary Medical Research Institute 1982	198 3
Plant Production And Protection Division	1228	Iowa State University Of Science And Technology	
Forest Biology Laboratory, Quebec, Canada	818	College Of Veterinary Medicine	
Forest Biology Laboratory, Victoria, British Columbia		Veterinary Medical Research Institute	1994
866		Iowa State University Of Science And Technology, Ames	1005
Forest Biology Laboratory, Winnepeg, Manitoba, Canada		Veterinary Medical Research Institute	1985
867	4000	Iowa State University, Ames	1245
Forest Disease Laboratory, Gulfport, Miss.	1229	Iowa State University, Ames	
Forest Entomology And Pathology Laboratory, Calgart, Alb	erta	Midwest Interprofess. Sem. On Dis. Common To Man And	Animals
819		1986	
Forest Entomology And Pathology Laboratory, Calgary, Alb	erta	Iowa State University, Ames	4007
820 821 868	~	Veterinary Medical Research Institute	1987
Forest Entomology And Pathology Laboratory, Victoria, B.	C.	Israel Institute For Biological Research, Ness Ziona	1988
822 823 869	004	Istituto Superiore di Sanita, Rome	881
Forest Entomology Laboratory, Winnepeg, Manitoba	824	J. Anim. Sci., 21, (May, 1962):209	1990
870		Jewish Hospital, Cincinnati, Ohio	4004
Forest Insect Laboratory, Sault Ste. Marie, Ont.	074	Clinical Laboratories	1991
Forest Research Laboratory, Quebec, P. Q.	871	Journal Of Comp. Pathology, 72, (april, 1962): 131	1992
Forest Insect Laboratory, Sault Ste. Marie, Ontario	825	Journal Of Dairy Science, 45, (April, 1962):547	1993
Forest Insect Laboratory, Sault Ste. Marie, Ontario, Cam	ada	Kanazawa University, Japan	000
872 873	070	Dept. Of Biology	882
Forest Research Laboratory, Sillery, Quebec	874	Kansas State University	0000
Forest Research Laboratory, Sillery, Quebec, P. Q.	875	Dept. Of Zoology	2293
876		Kansas State University Manhattan	
Ft. Detrick, Maryland	1600	Kansas Agricultural Experiment Station	2/140
Dept. Of Plant Physiology	1689	Dept. Of Horticulture	2412
Geigy Chemical Corporation, Basle, Switzerland	1690	Kansas State University, Manhattan, Kans.	
Georgia Dept. Of Agriculture, Tifton	10.20	Kansas Agricultural Experiment Station	21:42
Division Of Entomology	1230	Dept. Of Agronomy	2413
Georgia Experiment Station, Experiment	1221	Kentucky Agricultural Experiment Station, Lexington	2294
Dept. Of Plant Pathology	1231	Kentucky Agricultural Experiment Station, Lexington	2205
Glasgow University Dent Of Animal Bushandry and Waterinary Proventive No.	diaina	Dept. Of Animal Pathology 1994	2295
Dept. Of Animal Husbandry And Veterinary Preventive Me	ulcine	Kentucky State Dept. Of Health, Louisville	19 95
2518 2519	1073	Kerrville, Texas	4000
Good Samaritan Hospital, Suffern, New York	1973	Animal Disease And Parasite Research Division	1996

197

1997 Kwame Nkrumah University Of Science And Technology, Ghana	a	Ministry Of Animal Resources, Khartoum, Sudan Veterinary Research Division 2	2017
1998	•		2018
Kwame Nkrumah University, Kumasi, Ghana		Mississipi State University	
School Of Agriculture	1999		1267
Veterinary Section Lab. For Anim. Physio. Of The Agric. Univ. Col., Netherla		Mississippi Agricultural Experiment Station, Stoneville 1697	
Agric. Bur. Of The Neth. Nitrogenous Fertilisers Indust			2523
2000		Monsanto Chemical Company, St. Louis, Mo. 1	1268
Laboratories Serva, S. A. Madrid 51, Mexico	2001	Monsanto Europe, Brussels, Belgium	1698
Live Stock Samitary Service Laboratory, Salisbury, Md. 2002		Manager Of Agricultural Products 1 Montana State College	090
Louisiana State Univerity, Baton Rouge	1246	Agricultural Experiment Station	
Louisiana State University 2414 2415 2416	2521		2019
Z522		Montana State College	020
Louisiana State University Dept. Of Plant Pathology	1247	Montana Veterinary Research Laboratory 2 Montana State College Agricultural Experiment Station	2020
Louisiana State University			2021
Dept. Of Veterinary Science	2004	Montana State College, Bozeman	
Louisiana State University Louisiana Agricultural Experiment Station			2023
Dept. Of Veterinary Science	2003	Montana State University, Bozeman, Mont. Dept. Of Zoology And Entomology	883
Louisiana State University			1783
North Louisiana Hill Farm Experiment Station	1695	Moredun Institute Gilmerton, Edinburgh	
Louisiana State University Plaquemines Parish Experiment Station	1248		2024
Louisiana State University, Baton Rouge 1250	1253	Moredun Institute, Gilmerton, Edinburgh Animal Diseases Research Association	
1254 1255 2417 2418			2025
Louisiana State University, Baton Rouge	4240	N. Y. State Veterinary College At Cornell Univ., Eastport	
Dept. Of Botany Louisiana State University, Baton Rouge	1249	Dept. Of Avian Diseases Duck Research Laboratory 2	2026
Dept. Of Botany And Plant Pathology	24 19	Nagoya University, Anjo, Aichi, Japan	020
Louisiana State University, Baton Rouge		Faculty Of Agriculture	
Dept. Of Plant Pathology	1251		1269
Louisiana State University, Baton Rouge Louisiana Agricultural Experiment Station	1252	Nagoya University, Anjo, Aichiken, Japan Faculty Of Agriculture	
Loycla University	1232		2423
Dept. Of Biological Sciences	2296	National Animal Disease Laboratory, Ames, Iowa	
MacDonald College, Quebec	1256		2279
Maharashtra Association For The Cultivation Of Science Biological Laboratories, Poona, India		National Animal Disease Laboratory, Ames, Iowa Pathology Section	
Dept. Of Mycology And Plant Pathology	1257		2027
Maharashtra Association For The Cultivation Of Science.		National Association Of Artificial Breeders, Columbia, Mo.	
Biological Laboratories, Poona, India Dept. Of Mycology And Plant Pathology	1258	National Institute For Agricultural Research, Quito, Ecuad	lor
Maine Agricultural Experiment Station, Orono	1259		1270
Makerere College, Kampala, Uganda			2028
Depts. Of Veterinary Physiology And Med. Pharmacology. 2005		National Institute Of Health Division Of Research Studies	
Manila, Philippine Islands	2297	Laboratory Aids Branch	
Maryland Agricultural Experiment Station, College Park		Comparatives Pathology Section. 2	298
Dept. Of Agronomy	2420	National Institute Of Health	020
Massachusetts Institute Of Technology, Cambridge Dept. Of Nutrition And Food Sciece	2355	Rhode Island Experiment Station 2 National Jewish Hospital At Denver, Colo.	2029
Mcdonald College, Quebec	827		2030
Medical College Of Virginia, Richmond	2006		2031
Merck Sharp And Dohme, West Point, Pa. Biological Development And Control Laboratories	2007	National-University Inst. Of Agriculture, Rehovot, Israel Seed Research And Testing Division	271
Michigan State University	2010	New Jersey Agricultural Experiment Station, New Brunswick	
Michigan State University		1272	
Dept. Of Botany And Plant Pathology 1260 Michigan State University	1261	New Jersey Agricultural Experiment Station, New Brunswick Dept. Of Plant Pathology	273
Dept. Of Botony And Plant Pathology	1262	New Mexico Institute Of Mining And Technology, Socorro	213
Michigan State University		Dept. Of Biology	828
Dept. Of Dairy	1781		2424
Michigan State University Dept. Of Microbiology And Public Health 2008	2009	New Mexico State University Dept. Of Botany And Entomology 1	274
Michigan State University	2005		275
Dept. Of Veterinary Pathology	1780	1276	
Michigan State University	1779	New York State Agricultural Experiment Station, Geneva	
School Of Veterinary Medicine. Michigan State University, East Lansing 1263	1265	New York State Agricultural Experiment Station, Geneva	
1696		Dept. Of Plant Pathology 1277 1	280
Michigan State University, East Lansing	40.00	New York State Agricultural Experiment Station, Geneva	270
Dept. Of Botany And Plant Pathology 1264 2421 2422	1266	Dept. Of Pomology And Plant Pathology New York State College Of Agriculture	279
Michigan State University, East Lansing			2032
Dept. Of Microbiology And Public Health	2011	New York State Veterinary College	
Michigan State University, East Lansing Dept. Of Surgery And Medicine	1702	Dept. Of Medicine And Obstetrics New York State Mastitis Control Program 2	331
Mid-continent Aerial Sprayers, Hayti, Mo.	1782 2555	New York State Veterinary College, Eastport, Long Is., N.	
Ministry Of Agric., Fisheries And Food, Cambridge		Duck Disease Research Laboratory 2	033
Veterinary Investigation Service	2012	New York State Veterinary College, Ithaca	037
Ministry Of Agriculture For Northern Ireland, Stormont Veterinary Research Division	2013	Dept. Of Avian Diseases 2034 2036 2 New York State Veterinary College, Ithaca	2037
Ministry Of Agriculture, Lasswade, Midlothian		Dept. Of Pathology And Bacteriology 2	035
Fisheries And Food Laboratories	2014	New York State Veterinary College, Ithaca, N. Y.	030
Ministry Of Agriculture, Stormont, Belfast Veterinary Research Division	2015		038
Ministry Of Agriculture, Trinidad, West Indies	2016		281

		ORGENINE			
North Carolina Agricultural Experiment Station, Ra	aleigh			1312 13	13
Dept. Of Animal Industry North Carolina Agricultural Experiment Station, Ra	aleigh	2299	1315 Oregon State University, Corvallis		
Dept. Of Field Crops	arergn	2323	Dept. Of Farm Crops	17	02
North Carolina State College	4000	4002	Oregon State University, Corvallis	4.7	111
	1282 1284	1283 1287	Forest Research Laboratory Patuxent Wildlife Research Center, Laurel, Md.		111
1289 1290 1291 1628 1629 1	1699		Pee Dee Experiment Station, Florence, S.C.		32
North Carolina State College, Raleigh Dept. Of Plant Pathology 1285	1286	2425	Penna. State University, University Park	20	163
Dept. Of Plant Pathology 1285 North Carolina State College, Raleigh	1200	2423	Dept. Of Veterinary Science Pennslyvania State University, University Park	20	0.5
Dept. Of Poultry Science	2040	2041	Dept. Of Botany And Plant Pathology		16
North Carolina State College, Raleigh Plant Pathology Dept.		1288	Pennsylvania Dept. Of Agriculture, Harrisburg Pennsylvania State University	16	33
North Carolina State University		2426	Dept. Of Botany And Plant Pathology	23	333
North Dakota Agricultural Experiment Station, Farg	go	1292	Pennsylvania State University, University Park		317
Northeast Regional Project Ne-40 University Of Massachusetts, Amherst			1318 1319 1320 1634 2431 Pennsylvania State University, University Park	2432	
Dept. Of Veterinary Science		2042	College Of Agriculture		
Northeastern Forest Experiment Station, New Haven, Forest Disease Laboratory	, Conn.	1293	Dept. Of Veterinary Science Pesticide Research Institute, London, Canada)64 33
Northern Illinois University, Ore		1273	Philippine Packing Corp., Bugo		134
Lorado Taft Field Campus		1294	Phytopathological Station, Patras, Greece		135
Northwestern State College Nova Scotia Museum Of Science, Halifax		1295 884	Pineapple Research Institute Of Hawaii, Honolulu 1321	9	24
Nova Scotia Museum, Halifax		829	Pitman-Moore Co.		
Nova Scotia Research Foundation, Kentville	nco	2556 2043	Biological Laboratories Pitman-Moore Co., Indianapolis, Ind.	20)65
Off. Intern. Des Epizooties, 30th General Conferer Off. Internat. Epizoot. Bull., 62, (Jan Feb., 1			Research Division	20	66
2044			Pitman-Moore Company, Indianapolis, Ind.		
Ohio Agricultural Experiment Station Ohio Agricultural Experiment Station, Wooster	2045	2046 1296	Research Division Pathology Laboratory	20	67
1298 1300 2356		1250	Plant Disease Laboratory, Yoakum, Tex.		35
Ohio Agricultural Experiment Station, Wooster	1007	4200	Plant Industry Station, Beltsville, Md.	13	323
Dept. Of Botany And Plant Pathology 1630	1297	1299	Plant Quarantine Division, Glenn Dale, Md. U. S. Plant Introduction Station	13	324
Ohio Agricultural Experiment Station, Wooster			Pomona, California	20	8 30
	2048	2050	Potlatch Forests Inc., Lewiston, Idaho	_	325
Ohio Agricultural Experiment Station, Wooster			Poultry Disease Diagnostic Laboratory, Dade City, 2069	ria.	
Depts. Of Veterinary Science And Animal Science		2049	Purdue University	24	36
Ohio Agricultural Field Station, Wooster Dept. Of Botany And Plant Pathology		1301	Purdue University Agricultural Experiment Station		
Ohio Dept. Of Health, Columbus		2052	Dept. Of Veterinary Science	20	70
Ohio State University			Purdue University	1226 20	127
College Of Veterinary Medicine Dept. Of Veterinary Pathology	2054	2055	Dept. Of Biochemistry Purdue University	1326 24	137
Ohio State University			Dept. Of Biology And Plant Pathology	13	327
Dept. Of Bacteriology Ohio State University	2053	2056	Purdue University Dept. Of Botany And Plant Pathology	23	18
Dept. Of Botany And Plant Pathology		1302	Purdue University	23	
Ohio State University		2057	Dept. Of Horticulture	17	703
Dept. Of Veterinary Pathology Ohio State University, Columbus		2057	Purdue University, Lafayette, Ind Dept Of Botany And Plant Pathology, And Agronom	ıy 13	329
Dept. Of Veterinary Pathology 2058	2059	2060	Purdue University, Lafayette, Ind	Ī.,	
Okayama University, Kurashiki, Japan The Ohara Institute For Agricultural Biology		2427	Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind.	13	128
	1303	1700	Dept. Of Botany And Plant Pathology	1636 24	38
Oklahoma State University		2557	Purdue University, Lafayette, Ind.		
Agricultural Engineering Dept. Oklahoma State University		2557	Dept. Of Botany And Plant Pathology Purdue Agricultural Experiment Station	13	30
Dept. Of Veterinary Parasitology		2300	Purdue University, Lafayette, Ind.		
Ontario Agricultural College, Guleph Depts. Of Microbiology And Poultry Science.		2061	Depts. Of Botany And Plant Pathology, And Agron Purdue University, Lafayette, Ind.	юљу 13	31
Ontario Veterinary College		2001	School Of Veterinary Science And Medicine	20	72
Dept. Of Physiological Sciences		1785	Purdue University, Lafayette, Ind.		
Ontario Veterinary College, Guelph, Canada Division Of Pharmacology		2524	School Veterinary Science And Medicine Pathology And Public Health		
Oregon Agricultural Experiment Station	1304	1305	Dept. Of Microbiology		71
Oregon Agricultural Experiment Station, Corvallis 1701		1306	Purdue University, Lafayette, Indiana 2359	1332 13	133
Oregon State College			Quaker Oats Co., Decatur, Ala.		74
Agricultural Experiment Station		2558	Ralston Purina Co., St. Louis, Mo.		75
Oregon State College Dept. Of Agricultural Chemistry		2428	Research Institute (Animal Virus Diseases) 2079	2077 20	78
Oregon State College			Research Institute (animal Virus Diseases) Pirbri	ght, Surre	у
Dept. Of Entomology Oregon State College		1307	2076 Research Institute (Animal Virus Diseases), Pirbr	igt. Eng	
Oregon Agricultural Experiment Station			2080	rge, mg.	
Dept) Of Veterinary Medicine		2357	Research Institute For Natural Drugs, Praha, Czec	hoslovakia	
Oregon State College, Corvallis Dept. Of Agricultural Chemistry		2429	2439 Roswell Park Memorial Institute, Buffalo, N. Y.	2.0	81
Oregon State Dept. Of Agriculture, Salem		1631	Royal Veterinary College		
Oregon State University 1309 2	2358	2430	Dept. Of Pathology Royal Veterinary College, Stockholm	20	82
Dept. Of Agricultural Chemistry		2332	Medical Dept.		
Oregon State University	1300	1210	Dept. Of Food Hygiene		83
Oregon State University, Corvallis	1308 923	1310 1314	Rubber Research Institute Of Ceylon, Agalawatta Rutgers - The State University, New Brunswick, N.		134
Oregon State University, Corvallis			Dept. Of Plant Pathology		35

199

Rutgers State University, New Brunswick, N. J.	1637	The Connecticut Agricultural Experiment Station, New Haven	
Rutgers State University, New Brunswick, N. J.	2084	2448 The Corrections Agriculturel Bureauteet Station New Management	
Dept. Of Poultry Scinece Rutgers University, New Brunswick, N J	2441	The Connecticut Agricultural Experiment Station, New Haven Dept. Of Plant Pathology And Botany 1353 24	447
Rutgers University, New Brunswick, N. J. 1638	2324	The Dow Chemical Co., Midland, Mich.	77,
2442			363
Rutgers University, New Brunswick, N. J.		The Dow Chemical Co., Seal Beach, Calif.	
Dept. Of Entomology	1336		525
Rutgers University, New Brunswick, N.J.	2440 2085	The Farm, Stormont, Belfast	000
San Diego County Livestock Laboratory School Of Veterinary Medicine, Cambridge	2086	Veterinarary Research Division 20 The Farm, Stormont, Belfast	099
Scottish Horticultural Research Institute, Dundee, Scott			101
1337		The Hebrew University Of Jerusalem, Israel	
Scottish Horticultural Research Institute, Invergowrie			354
1338	4705	The Hebrew University, Jerusalem, Israel	255
South Dakota Agricultural Experiment Station 1704	1705		355
South Dakota Agricultural Experiment Station, Brookings 1639		The Norwegian Plant Protection Institute, Vollebekk, Norwa Division Of Entomology	у 885
South Dakota State College, Brookings	2360	The Pennsylvania State University	003
South Dakota State College, Brookings			356
Dept. Of Plant Pathology 1339	1340		102
South Dakota State University, Brookings	1706		907
Southern General Hospital, Glasgow	2550		357
Dept. Of Pathology	2559 1342		103
Southern Illinois University, Carbondale 1341 Southwestern Great Plains Field Station, Bushland, Tex.	1342	The University Of British Columbia, Vancouver Dept. Of Poultry Science 2104 2	105
Texas Agricultural Experiment Station	170 7	The University, Edinburgh	
Southwestern Great Plains Research Center, Bushland, Ter			886
Texas Agricultural Experiment Station	2443	The University, Reading	
Spencer Chemical Co., Kansas City, Mo.			364
Research Dept.	1708	The Veterinary Laboratory, Salisbnry, Southern Rhodesia	
Sri Venkateswara University College, Tirupati, India	2000	2106	
Dept. Of Botany Stanford Research Institute, South Pasadena, Calif.	2444	The Victorian Research Institute, Bnrnley, Victoria Dept. Of Agriculture	887
Southern California Labobatories		Tobacco Research Board Fo Rhodesia And Nyasaland, Salisbur	
Agricultural Research Center	1343		358
Stanford Research Institute, South Pasadena, Calif.		Tokyo Medical And Dental University, Tokyo, Japan	
Southern California Laboratories		Dept. Of Medical Zoology	908
Agricultural Research Center	1344	Tuskegee Institute, Alabama	
State Plant Board Of Florida	1345		710
State University Of New York, Buffalo	2445	U. P. Coll. Of Vet. Sci. And Animal Husbandry, India	107
State-federal Animal Disease Eradication, Lansing, Mich. 2087	Lyan	Dept. Of Parisitology U. P. College Of Vet. Sci. And Animal Husbandry, India	107
State-Federal Livestock Disease Eradication Program	2361	2108	
Syracuse University			711
State University College Of Forestry	1709	U. S. Atomic Energy Commission, Oak Ridge, Tenn.	
Syracuse University, N. y.	1346		109
Tela Railroad Company, La Lima, Honduras			359
Vining C Dunlap Laboratories	1347	U. S. Dept Of Agriculture, Riverside, Calif	
Tennesse Agricultural Experiment Station, Knoxville Tennessee Agricultural Experiment Station, Knoxville	1640 1641	Agricultural Research Service Crops Research Division 13	360
Texas A And M College, College Station	1041	U. S. Dept Of Agriculture, Tifton, Ga.	300
Dept. Of Veterinary Microbiology		Agricultural Research Service	
Cage Layer Fatigue	2096		361
Texas A And M University		U. S. Dept Of Agriculture, Wenatchee, Wash.	
Dept. Of Veterinary Medecine And Surgery	2088	Agricultural Research Service	363
Texas A And M University, College Station	2091		362
College Of Veterinary Medecine Texas A And M University, College Station	2091	U. S. Dept. Of Agr., Univ. Of North Carolina, Raleigh Agricultural Research Service	
College Of Veterinary Medicine			449
Dept. Of Veterinary Medicine And Surgery	2090		366
Texas A And M University, College Station		U. S. Dept. Of Agriculture	
Dept. Of Veterinary Microbiology	2089	Agricultural Research Division	370
Texas A. And M. University	2362		372
Dept. Of Plant Sciences Texas Agricultural And Mechanical College System	2302	U. S. Dept. Of Agriculture Agricultural Research Service 1715 24	450
Dept. Of Plant Physiology And Pathology	1348	U. S. Dept. Of Agriculture	
Texas Agricultural And Mechanical College System		Agricultural Research Service	
School Of Veterinary Medicine		Agricultural Engineering Research Division 25	562
Dept. Of Veterinary Parasitology 1786	2301	U. S. Dept. Of Agriculture	
Texas Agricultural Experiment Station	2002	Agricultural Research Service	
Substation No. 3, Angelton	2092	Animal Disease And Parasite Research Division Plum Island Animal Disease Laboratory 2112 21	114
Texas Agricultural Experiment Station, Bushland, Tex. Southwestern Great Plains Field Station	2446	Plum Island Animal Disease Laboratory 2112 21 U. S. Dept. Of Agriculture	114
Texas Agricultural Experiment Station, College Station	2440	Agricultural Research Service	
Dept. Of Veterinary Microbiology 2093 2094	2095		788
Texas Agricultural Experiment Station, Jacksonville		U. S. Dept. Of Agriculture	
Tomato Disease Laboratory	1349	Agricultural Research Service	
Texas Agricultural Experiment Station, Yoakum	1350	Animal Husbandry Research Division	112
Plant Disease Laboratory Texs Agricultural And Mechanical College System	1350		113
School Of Veterinary Medicine		U. S. Dept. Of Agriculture Agricultural Research Service	
Dept. Of Veterinary Parasitology	178 7	Animal Husbandry Research Division	
The A. And M. College Of Texas, College Station	1351	Sheep And Fur Animal Research Branh 21	110
The Animal Health Trnst, Stock, Essex		U. S. Dept. Of Agriculture	
Farm Livestock Research Center	2097	Agricultural Research Service	27.0
The Animal Health Trust, Stock, Essex	2000		370 717
Farm Livestock Research Centre The Connecticut Agricultural Experiment Station	2098		453
Dept. Of Soils And Climatology	13 52	2560 2561	

U. S. Dept. Of Agriculture		Agricultural Research Service Crops Research Division 1379 1380 1381	1382
Agricultural Research Service Crops Research Division		Crops Research Division 1379 1380 1381 1383 1385 1386 1389 1393 1395	1397
Regional Smut Research Laboratory	1371	1398 1644 1645 1720 2455	,
U. S. Dept. Of Agriculture		U. S. Dept. Of Agriculture, Beltsville, Md.	
Agricultural Research Service	2246	Agricultural Research Service	
Meat Inspection Division	2316	Crops Research Division Plant Industry Station 1387 1394	1396
U. S. Dept. Of Agriculture Agricultural Research Service		Plant Industry Station 1387 1394 U. S. Dept. Of Agriculture, Beltsville, Md.	1390
Meat Inspection Division		Agricultural Research Service	
Procedures And Requirements	2334	Entomology Research Division 888	1399
U. S. Dept. Of Agriculture		U. S. Dept. Of Agriculture, Beltsville, Md.	
Agricultural Research Service	2444	Agricultural Research Service	
Regional Animal Disease Research Laboratory U. S. Dept. Of Agriculture	2111	Soil And Water Conservation Research Division U. S. Soils Laboratory	2325
Agricultural Research Station		U. S. Dept. Of Agriculture, Beltsville, Md.	2323
Crops Research Division	1363	Crops Research Division	
U. S. Dept. Of Agriculture		Plant Virology Laboratory	1391
Fcrest Service		U. S. Dept. Of Agriculture, Berkeley, Calif.	
Pacific Southwest Forest And Range Experiment Station		Forest Service	
U. S. Dept. Of Agriculture, Albany, N. Y.		Pacific Southwest Forest And Range Experiment Station 2366	
Agricultural Research Service		U. S. Dept. Of Agriculture, Chicago, Ill.	
Western Utilization Research And Development Division		Agricultural Marketing Service	
Western Regional Research Laboratory	2115	Market Quality Research Division 1400	1401
U. S. Dept. Of Agriculture, Alburn, Ala.		U. S. Dept. Of Agriculture, College Station	
Agricultural Research Service	1789	Agricultural Research Service	1402
Regional Animal Disease Research Laboratory U. S. Dept. Of Agriculture, Ames, Iowa	1703	Crops Research Division U. S. Dept. Of Agriculture, College Station, Texas	1402
Agricultural Research Service		Texas A. + M. University	
Crops Research Division	1375	Agricultural Research Service	1403
U. S. Dept. Of Agriculture, Asheville, N.C.		U. S. Dept. Of Agriculture, Corvallis, Ore.	
Forest Service	205	Agricultural Research Service	4 0.5
Southeastern Forest Experiment Station	925	Crops Research Division 1404 1405 1406	1407
U. S. Dept. Of Agriculture, Auburn, Ala. Agricultural Research Service		U. S. Dept. Of Agriculture, Denver, Colo. Agricultural Research Service	
Regional Animal Disease Research Laboratory	1790	Animal Disease And Parasite Research Division	
2116 2302		Animal Disease Research Laboratory	2125
U. S. Dept. Of Agriculture, Baton Rouge, La.		U. S. Dept. Of Agriculture, Durham, N. C.	
Agricultural Research Service	4540	Forest Service	4.000
Crops Research Division 1376	1642	Southeastern Forest Experiment Station	1408
U. S. Dept. Of Agriculture, Belle Glade, Fla. Agricultural Research Service		U. S. Dept. Of Agriculture, Fargo, N D Agricultural Research Service	
Crops Research Division	1643	Crops Research Division	1409
U. S. Dept. Of Agriculture, Beltsville, Maryland		U. S. Dept. Of Agriculture, Fort Lauderdale, Fla.	
Agricultural Research Service		Agricultural Research Service	
Crops Research Division	1377	Crops Research Division	1721
U. S. Dept. Of Agriculture, Beltsville, Md Agricultural Research Service		U. S. Dept. Of Agriculture, Fort Valley, Ga. Agricultural Research Service	
Crops Research Division	1378	Crops Research Division	1410
U. S. Dept. Of Agriculture, Beltsville, Md. 1384	1390	U. S. Dept. Of Agriculture, Gainesville, Fla.	1410
1392 2454		Crops Research Division	
U. S. Dept. Of Agriculture, Beltsville, Md.		University Of Florida	
Agricultural Research Service	1388	Plant Pathology Dept.	1646
U. S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service		U. S. Dept. Of Agriculture, Greenport, Long Island Agricultural Research Service	
Animal Disease And Parasite Research Control		Animal Disease And Parasite Research Division	
Beltsville Parasitological Laboratory	2117	Plum Island Animal Disease Laboratory	2126
U. S. Dept. Of Agriculture, Beltsville, Md.		U. S. Dept. Of Agriculture, Greenport, Long Island, N. Y	Y .
Agricultural Research Service		Agricultural Research Service	
Animal Disease And Parasite Research Division	2120	Animal Disease And Parasite Research Division	2120
2121 2305 U. S. Dept. Of Agriculture, Beltsville, Md.		Plum Island Animal Disease Laboratory 2127 2129 2130 2131 2132	2128
Agricultural Research Service		U. S. Dept. Of Agriculture, Greenport, N. Y.	
Animal Disease And Parasite Research Division		Agricultural Research Service	
Beltsville Parasitological Laboratory	2118	Animal Disease And Parasite Research Division	
U. S. Dept. Of Agriculture, Beltsville, Md.		Plum Island Animal Disease Laboratory	2133
Agricultural Research Service		U. S. Dept. Of Agriculture, Gulfport, Miss.	
Animal Disease And Parasite Research Division Helminthological Investigations	2304	Southern Forest Experiment Stations Southern Institute Of Forest Genetics	2456
U. S. Dept. Of Agriculture, Beltsville, Md.	2304	U. S. Dept. Of Agriculture, Ithaca, N.Y.	2430
Agricultural Research Service		Agricultural Research Service	
Animal Disease And Parasite Research Division		Crops Research Division	1411
National Animal Disease Laboratory 2119	2124	U. S. Dept. Of Agriculture, Jackson, Tenn.	
O. S. Dept. Of Agriculture, Beltsville, Md.		Agricultural Research Service	1607
Agricultural Research Service Animal Disease And Parasite Research Division		Crops Research Division U. S. Dept. Of Agriculture, Jackson, Tenn.	1647
Parasitological Laboratory	2303	Crops Research Division	1648
U. S. Dept. Of Agriculture, Beltsville, Md.		U. S. Dept. Of Agriculture, Kerrville, Tex.	
Agricultural Research Service		Agricultural Research Service	
Animal Disease And Parasite Research.division	1701	Animal Disease And Parasite Research Division	1792
National Animal Disease Laboratory	1791	1793	
U. S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service		U. S. Dept. Of Agriculture, Laconia, N. H. Forest Service	
	2422	Northeastern Forest Experiment Station	1413
Animal Disease And Research Division	2123		
Animal Disease And Research Division U. S. Dept. Of Agriculture, Beltsville, Md.	2123	U. S. Dept. Of Agriculture, Laconia, N. H.	
U. S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service	2123	U. S. Dept. Of Agriculture, Laconia, N. H. Northeastern Forest Experiment Station	1412
U. S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service Animal Husbandry Research Division		U. S. Dept. Of Agriculture, Laconia, N. H. Northeastern Forest Experiment Station U. S. Dept. Of Agriculture, Las Cruces, N. Mex.	1412
U. S. Dept. Of Agriculture, Beltsville, Md. Agricultural Research Service	2123	U. S. Dept. Of Agriculture, Laconia, N. H. Northeastern Forest Experiment Station	1412

Jornada Experimental Range	2563	Northeastern Forest Experiment Station	1/127
U. S. Dept. Of Agriculture, Logan, Utah Agricultural Research Service		Laconia Research Project U. S. Dept. Of Agriculture, Washington State University	1437
Crops Research Division 1414	2457	Agricultural Research Service	
U. S. Dept. Of Agriculture, Mayaguez, Puerto Rico Agricultural Research Service		Crops Research Division U. S. Dept. Of Agriculture, Washington, D C	1727
Federal Experiment Station 1415 1416	1722	Agricultural Marketing Service	
U. S. Dept. Of Agriculture, New Haven, Conn. Forest Service		U. S. Dept. Of Agriculture, Washington, D. C.	2134
Northeastern Forest Experiment Station		Agricultural Research Service 1438	2280
Forest Insect Laboratory 830 889	890	U. S. Dept. Of Agriculture, Washington, D. C.	
U. S. Dept. Of Agriculture, New Orleans, La. Forest Service		Agricultural Research Service Crops Research Division	1728
Southern Forest Experiment Station	1417	U. S. Dept. Of Agriculture, Washington, D. C.	
U. S. Dept. Of Agriculture, New York, N. Y. Agricultural Marketing Service		Agricultural Research Service Plant Quarantine Division	
Market Quality Research Division		Plant Inspection Station	2319
Market Pathology Laboratory U. S. Dept. Of Agriculture, Orlando, Fla.	2458	U. S. Dept. Of Agriculture, Welasco, Tex. Agricultural Research Service	
Agricultural Research Service		Crops Research Division	1729
Crops Research Division 1418	2459	U. S. Dept. Of Agriculture, Weslaco, Tex.	1820
U. S. Dept. Of Agriculture, Orlando, Fla. Crops Research Division	1419	U. S. Dept. Of Agricuture, East Lansing, Mich.	1439
U. S. Dept. Of Agriculture, Prosser, Washington	0,00	Animal Husbandry Research Division	
Agricultural Research Service U. S. Dept. Of Agriculture, Pullman, Wash.	2460	Poultry Research Branch Regional Poultry Research Laboratory	2135
Agricultural Research Service		U. S. Dept. Of Health, Education, And Welfare, Atlanta,	
Crops Research Division 1420 U. S. Dept. Of Agriculture, Pullman, Washington	1723	Public Health Service Communicable Disease Center	2136
Agriculture Research Service		U. S. Public Health Service	2130
Crops Research Division	1421	Communicable Disease Center	2137
U. S. Dept. Of Agriculture, Raleigh Agricultural Research Service		U. S. Public Health Service, Atlanta, Ga. Communicable Disease Center	2138
Crops Research Division	1649	U. S. Rubber Co., Bethany, Conn.	
U. S. Dept. Of Agriculture, Raleigh, N. C. Agricultural Research Service		Naugatuck Chemical Division Research And Development Dept.	1440
Crops Research Division	1423	U.S. Dept. Of Agriculture	
U. S. Dept. Of Agriculture, Raleigh, N. C. Agricultural Research Service		Agricultural Research Service Crops Research Division 1730 1731 2463	2567
Crops Research Division		U.S. Dept. Of Agriculture, Beltsville, Md.	2301
University Of North Carolina	1424	Agricultural Research Service	2226
U. S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service		Crops Research Division 1732 1733 1734 U.S. Dept. Of Agriculture, Clarkedale, Ark.	2336
Crops Research Division 1422	2461	Agricultural Research Service	04.54
U. S. Dept. Of Agriculture, Riverside, California Agricultural Research Service		U.S. Dept. Of Agriculture, Reno, Nev.	2464
Crops Research Division	1425	Agricultural Research Service	
U. S. Dept. Of Agriculture, St. Paul Agricultural Research Service		Crops Research Division U.S. Dept. Of Agriculture, Stoneville, Miss.	1735
Plant Pest Control Division	1426	Agricultural Research Service	
U. S. Dept. Of Agriculture, State College, Miss		Crops Research Division 1736	1737
Agricultural Research Division Crops Research Division	1427	U.S. Dept. Of Agriculture, Stuttgart, Ark. Agricultural Research Service	
U. S. Dept. Of Agriculture, State College, Miss.		Crops Research Division	1738
Agricultural Research Service Crops Research Division		U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service	
Mississippi Agricultural Experiment Station	1724	Crops Research Division	2564
U. S. Dept. Of Agriculture, Stoneville, Miss. Agricultural Research Service		U.S. Dept. Of Agriculture, University Of Nebraska Agricultural Research Service	
Crops Research Division 1650 1725	2367	Crops Research Division	1739
U. S. Dept. Of Agriculture, Stoneville, Miss. Forest Service		U.S. Dept. Of Health, Education, And Welfare Communicable Disease Center, Atlanta, Ga.	2139
Southern Forest Experiment Station		Union Carbide Chemicals Company, Fresno, Calif.	2570
Southern Hardwoods Laboratory 1428	1429	United Fruit Co., La Lima, Honduras	2465
U. S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service		Division Of Tropical Research United Fruit Co., Norwood, Mass.	
Crops Research Division	1651	Central Research Laboratories	1442
U. S. Dept. Of Agriculture, Tifton, Ga. Agricultural Research Division		United Fruit Co., Norwood, Mass. Plant Pathology And Plant Physiology Sections	
Crops Research Division	1434	Central Research Laboratories	1441
U. S. Dept. Of Agriculture, Tifton, Ga. Agricultural Research Service		Univ. Of Idaho Branch Agricultural Experiment Station, 1443	Parma
Crops Research Division 1430 1432	1726	University Botany Laboratory, Madras 5, India	1444
U. S. Dept. Of Agriculture, Tifton, Ga. Agricultural Research Service		University College Hospital Medical School, London Dept. Of Chemical Pathology	2140
Crops Research Service	1433	University College, Ibadan, Nigeria, West Africa	2.70
U. S. Dept. Of Agriculture, Tifton, Ga.		Faculty Of Agriculture	2141
Agricultural Research Service Georgia Coastal Plain Experiment Station	1431	University Delaware Dept. Plant Pathology	1445
U. S. Dept. Of Agriculture, Tucson, Ariz.		University Of Adelaide, Australia	1446
Agricultural Research Service Crops Research Division	1435	University Of Alberta, Edmonton Dept. Of Entomology 831	891
U. S. Dept. Of Agriculture, Twin Falls, Idaho		University Of Arizona	926
Agricultural Research Service Crops Research Division		University Of Arizona Mesa Branch Station	1447
Bean Research Laboratory	1436	University Of Arizona, Mesa	
U. S. Dept. Of Agriculture, Univ. Of Florida, Gainesvill Agricultural Research Service	1e 2462	Agricultural Experiment Station Dept. Of Plant Pathology	1449
U. S. Dept. Of Agriculture, Upper Darby, Pa.	2.02	University Of Arizona, Mesa	
Forest Service		Horticultural Dept.	1448
PAGE 202			

	ORGANIZA	ATION INDEX	
University Of Arizona, Tucson	1450	Agricultural Experiment Station	2529
University Of Arizona, Tucson	1051	University Of California, Riverside	
Dept. Of Plant Pathology University Of Arkansas, Fayetteville	1451 1452	Citrus Research Center Agricultural Experiment Station	2478
University Of Arkansas, Fayetteville		University Of California, Riverside	
Dept. Of Plant Pathology	1453	Citrus Research Center And Agricultural Experiment	Station
University Of Birmingham Dept. Of Zoology And Comparative Physiology	832	1747 University Of California, Riverside	
University Of Bristol	0442	Dept Of Nematology	1657
Dept. Of Veterinary Anatomy University Of Bristol	2143	University Of California, Riverside Dept. Of Horticultural Science 1486 2528	2530
Dept. Of Veterinary Medicine	2142	University Of California, Riverside	
University Of British Columbia, Vancouver, B. C. Dept. Of Zoology	833	Dept. Of Nematology 928 1484 University Of California, Riverside	1658
University Of British Columbia, Vancouver, Canada	033	Dept. Of Plant Pathology 1483 1485 1487	1488
Dept. Of Zoology	892	1489 1490 2368 2371	
University Of California University Of California	1454	University Of California, Riverside Dept. Of Plant Pathology And Plant Nematology	2369
Agricultural Experiment Station	1740	University Of California, Riverside	
University Of California Citrus Experiment Station		Soils And Plant Nutrition Dept. Of Plant Nematology	1659
Dept. Of Horticulture	2526	University Of California, San Francisco	1033
University Of California, Berkeley 834 1459	2467	George Williams Hooper Foundation For Medical Resea	rch
University Of California, Berkeley Dept. Of Entomology And Parasitology	893	2160 2161 University Of Cambridge	
University Of California, Berkeley		Dept. Of Animal Pathology	2162
Dept. Of Plant Pathology 1455 1456 1457 1460 1461 1462 1463 1464 1465	1458 1466	University Of Cambridge Dept. Of Pathology	2166
1467 1468 1469 2466 2468	1400	University Of Cambridge	2100
University Of California, Berkeley		School Of Veterinary Medicine	2164
Dept. Of Soils And Plant Nutrition Dept. Of Plant Pathology	1470	University Of Cambridge School Of Veterinary Medicine	
University Of California, Davis 1471 1472	1474	Dept. Of Animal Pathology 2163 2165	2167
1744 2471 2527 University Of California, Davis		University Of Chicago American Meat Institute Foundation	
Dept. Of Agronomy 1477 1652	2470	Division Of Bacteriology	2168
University Of California, Davis Dept. Of Botany 1741 1743 1745	2473	University Of Colorado Medical Center, Denver	2306
University Of California, Davis	2473	Dept. Of Surgery University Of Colorado, Denver	2500
Dept. Of Entomology And Parasitology	1475	School Of Medicine	2160
University Of California, Davis Dept. Of Medecine	2151	Dept. Of Pathology University Of Connecticut, Storrs	2169
University Of California, Davis	2.5.	Dept. Of Animal Diseases 2170 2171 2172	2174
Dept. Of Medicine, Surgery And Clinics	2147	2176 2177 2178 2321	
School Of Veterinary Medicine University Of California, Davis	2147	University Of Connecticut, Storrs Dept.of Animal Diseases	2173
Dept. Of Nematology 1654	1655	University Of Connecticut, Storrs	
University Of California, Davis Dept. Of Plant Nematology	1653	Storrs Agricultural Experiment Station Dept. Of Animal Diseases	2175
University Of California, Davis		University Of Delaware	
Dept. Of Plant Pathology 927 1473 1476 1479 2469 2472 2474	1478	Delaware Agricultural Experiment Station Dept. Of Plant Pathology	1491
University Of California, Davis		University Of Delaware	
Dept. Of Vegetable Crops 1656 University Of California, Davis	1742	Dept. Of Animal And Poultry Industry University Of Delaware, Newark	2179 2181
School Of Veterinary Medecine 2153	2158	University Of Delaware, Newark	2101
University Of California, Davis	21111	Dept. Of Animal And Poultry Science	2180
School Of Veterinary Medicine 1794 1796 2148 2149 2150 2156	2144	University Of Durham Dept. Of Zoology	894
University Of California, Davis		University Of Edinburgh	
School Of Veterinary Medicine Department Of Avian Disease	2-145	Royal (dick) School Of Veterinary Studies Dept. Of Veterinary Bacteriology	2182
University Of California, Davis		University Of Edinburgh	
School Of Veterinary Medicine Department Of Avian Medicine	2152	Royal (Dick) School Of Veterinary Studies Dept. Of Veterinary Hygiene And Preventive Medicine	
University Of California, Davis	2.52	2531	
School Of Veterinary Medicine Dept. Of Anatomy	1795	University Of Edinburgh Royal (Dick) School Of Veterinary Studies	
University Of California, Davis	1790	Dept. Of Veterinary Pharmacology	2183
School Of Veterinary Medicine	2450	University Of Florida	240#
Dept. Of Avian Medicine 2154 2155 2157 University Of California, Davis	2159	Cancer Research Laboratory University Of Florida	2184
School Of Veterinary Medicine		Dept. Of Plant Pathology	1492
Dept. Of Veterinary Microbiology University Of California, Los Angeles	2146 1746	University Of Florida Dept. Of Veterinary Science 1797 1798	2185
University Of California, Los Angeles		2186 2307	
Dept. Of Botany University Of California, Los Angeles	1480	University Of Florida Citrus Experiment Station, Lake 1661 1662	Alfred
Dept. Of Plant Pathology 1481 1482 2475	2476	University Of Florida, Gainesville	
University Of California, Los Anges	2477	Dept. Of Plant Pathology 1493	1495
Dept. Of Ploriculture And Ornamental Horticulture University Of California, Riverside	1660	University Of Florida, Gainesville Plant Pathology Division	1494
University Of California, Riverside		University Of Florida, Lake Alfred	
Citrus Experiment Station Dept. Of Horticulture	2337	Citrus Experiment Station University Of Georgia	2479
University Of California, Riverside		School Of Veterinary Medicine	2187
Citrus Experiment Station Dept. Of Plant Pathology	2370	University Of Georgia School Of Veterinary Medicine	
University Of California, Riverside		Dept. Of Pathology And Parasitology	2188
Citrus Reseach Center		University Of Georgia, Athens	

	OHORBE	DELIGE INDE		
College Experiment Station	1497	University Of Liverpool		2524
Dept. Of Plant Pathology And Plant Breeding 1498	1437	Dept. Physiology University Of Liverpool		2534
University Of Georgia, Athens College Of Agricultural Experiment Station		School Of Tropical Medicine Dept. Of Parasitology And Entomology		2206
Dept. Of Plant Pathology And Plant Breeding		University Of Maine, Orono 1514	2207	2565
College Experiment Station University Of Georgia, Athens	1496	University Of Maine, Orono Dept. Of Animal Pathology	2208	2209
Dept. Of Veterinary Microbiology And Preventive Med		University Of Manitoba, Winnepeg	2200	2203
Poultry Disease Research Center University Of Georgia, Athens	2189	Dept. Of Entomology University Of Maryland		898
Poultry Dept. And Poultry Disease Research Laborato	ry	Baltimore College Of Dental Surgery		
2190 University Of Georgia, Tifton		Dental School Dept. Of Pathology		2212
Coastal Plain Experiment Station	1499	University Of Maryland		2212
University Of Georgia, Tifton College Of Agriculture Experiment Stations		Dept. Of Botany University Of Maryland	2485	2486
Coastal Plain Experiment Station	1500	Live Stock Saniatry Service Laboratory		2210
University Of Glasgow Dept. Of Animal Husbandry And Preventive Veterinary	Medicine	University Of Maryland Live Stock Sanitary Service Laboratory		2211
2532	neutothe	University Of Maryland, College Park		835
University Of Glasgow Dept. Of Zoology	895	University Of Massachusetts, Amherst Dept. Of Bacteriology And Public Health		2217
University Of Glasgow Veterinary School		University Of Massachusetts, Amherst		
Dept. Of Veterinary Pathology University Of Hawaii	2191	Dept. Of Veterinary And Animal Sciences University Of Massachusetts, Amherst		2219
Dept. Of Plant Pathology 1501	2480	Dept. Of Veterinary Science 2213	2214	2215
University Of Hawaii Hawaii Agricultural Experiment Station		2218 2220 University Of Massachusetts, Amherst		
Dept. Of Parasitology	2308	Massachusetts Agricultural Experiment Station		2216
University Of Hawaii, Hilo Hawaii Branch Station	1502	University Of Massachusetts, East Wareham Cranberry Experiment Station		
University Of Hawaii, Honolulu		Dept. Of Entomology And Plant Pathology		1663
Dept. Of Plant Pathology University Of Iceland	2481	University Of Massachusetts, Waltham Avian Diagnosis Laboratory		
Institute For Experimental Pathology	2192	Dept. Of Environmental Sciences		2221
University Of Idaho Agricultural Experiment Station 1503	1504	University Of Massachusetts, Waltham Waltham Field Station	1515	1516
University Of Idaho		University Of Melbourne, Australia		
Agronomy Dept. University Of Idaho	2533	Dept. Of Pathology University Of Michigan, Ann Arbor		2222
College Of Forestry	1505	Dept. Of Wildlife Management	4540	2223
University Of Idaho Agricultural Experiment Stat., Ca Veterinary Research Laboratory	Idaell	University Of Minnesota University Of Minnesota	1518	1519
Caldwell Branch Station	2193 1506	College Of Veterinary Medicine		1800
University Of Idaho Agricultural Experiment Station 1507	1500	Division Of Veterinary Obstetrics University Of Minnesota		1600
University Of Idaho, Moscow 1508 University Of Illinois 1748	2482 2483	College Of Veterinary Medicine Division Of Veterinary Pathology And Parasitol	OGY	2225
University Of Illinois	2403	University Of Minnesota	LOG J	2223
College Of Veterinary Medecine University Of Illinois	2194	College Of Veterinary Medicine Division Of Veterinary Surgery And Radiology		2226
College Of Veterinary Medicine 2195 2309	2310	University Of Minnesota		
University Of Illinois College Of Veterinary Medicine		Dept. Of Agronomy And Plant Genetics University Of Minnesota	2338	2372
Dept. Of Veterinary Physiology And Pharmacology	1799	Dept. Of Bacteriology And Immunology		2224
University Of Illinois, Urbana University Of Illinois, Urbana	2484	University Of Minnesota Dept. Of Horticulture		1749
College Of Pharmacy	896	University Of Minnesota		
University Of Illinois, Urbana College Of Veterinary Medicine		Dept. Of Plant Pathology And Botany University Of Minnesota		1517
Dept. Of Pathology And Hygiene	2198	Lake States Forest Experiment Station		899
University Of Illinois, Urbana College Of Veterinary Medicine		University Of Minnesota, St. Paul University Of Minnesota, St. Paul		1523
Dept. Of Veterinary Pathology And Hygiene University Of Illinois, Urbana	2196	Dept Of Plant Pathology University Of Minnesota, St. Paul		1525
Dept Of Plant Pathology	1510	Dept. Of Horticulture		1750
University Of Illinois, Urbana Dept. Of Plant Pathology 1509	1511	University Of Minnesota, St. Paul Dept. Of Plant Pathology And Botany	1520	1522
University Of Illinois, Urbana	1311	1529 2487	1320	1322
Dept. Of Veterinary Pathology And Hygiene University Of Illinois, Urbana	2197	University Of Minnesota, St. Paul Dept. Of Plant Pathology And Physiology	1528	1530
Dept. Plant'Pathology	1512	University Of Minnesota, St. Paul	.520	.550
University Of Illinois, Urbana, Ill. Dept. Of Entomology	897	Institute Of Agriculture Dept. Of Plant Pathology And Botany	1524	1526
University Of Illinois, Urbana, Illinois		1527 1531 2488		
College Of Veterinary Medicine University Of Kansas	2199	University Of Minnesota, St. Paul Institute Of Agriculture		
Dept. Of Medical Microbiology	2200	Dept. Of Plant Pathology And Physiology		1521
University Of Kansas School Of Medicine		University Of Minnesota, St. Paul Medical School		
Dept. Of Pediatric	2201	Division Of Veterinary Obstetrics	1751	1801 1752
Hixon Memorial Laboratory University Of Kentucky, Lexington	1513	University Of Missouri University Of Missouri		
University Of Liverpool Dept. Of Pharmacology And General Therapeutics	2204	Dept. Of Horticulture University Of Missouri	1532	1533
University Of Liverpool		Dept. Of Horticulture		
Dept. Of Physiology University Of Liverpool	2205	Missouri Agricultural Experiment Station University Of Missouri		2489
Dept. Of Veterinary Pathology 2202	2203	School Of Veterinary Medicine		

Dept. Of Veterinary Pathology University Of Missouri, Columbia	2227	Dept. Of Animal Husbandry - Veterinary Science University Of Texas	2245
Dept. Of Plant Pathology	1534	Medical Branch Dept. Of Pathology	2246
University Of Missouri, Columbia Field Crops Dept.	2490	University Of Texas	
University Of Missouri, Columbia School Of Veterinary Medecine		Radiobiological Laboratory University Of Texas, Austin	1804
Dept. Of Veterinary Pathology University Of Nebraska	2228 1535	Dept. Of Zoology University Of Texas, Dallas	900
University Of Nebraska Dept. Of Agronomy 1753 1754 2326 2327	2339	Southwestern Medical School Dept. Of Microbiology	2247
University Of Nebraska Dept. Of Animal Pathology	2312	University Of Texas, Galveston Medical Branch	
University Of Nebraska		Dept. Of Pathology	2248
Dept. Of Animal Pathology And Hygiene 1802 University Of Nebraska	2229	University Of Toronto, Ontario Dept. Of Zoology	2566
Dept. Of Plant Pathology University Of Nebraska	2491	University Of Utah University Of Utah, Salt Lake City	1805 838
Dept. Of Veterinary Science University Of Webraska, Lincoln	2311 1536	University Of Vermont Dept. Of Agronomy	1757
University Of Nebraska, Lincoln Dept. Of Plant Pathology	1537	University Of Western Ontario, London University Of Western Ontario, London, Canada	839
University Of Nebraska, Lincoln Plant Pathology Dept.	2492	Dept. Of Botany 1546 University Of Wisconsin 2250	1547 2497
University Of Nevada		University Of Wisconsin	
Agriculthral Experiment Station University Of Nevada	2313	Dept. Of Entomology University Of Wisconsin	840
Max C. Fleischmann College Of Agriculture Dept. Of Agricultural Chemistry	2230	Dept. Of Forestry University Of Wisconsin	1758
University Of Nevada Agricultural Experiment Station, 1 2231	Reno	Dept. Of Plant Pathology 1548 1550 1551 1554 1555 1556 1557 1558 1559	1552 1560
University Of New Hampshire, Durham University Of New Hampshire, Durham	1538	1561 1562 2340 2373 2496 University Of Wisconsin	
Agricultural Experiment Station	2002	Dept. Of Veterinary Science 1806 1807	2249
Botany Dept. University Of Newcastle Upon Tyne	2493	University Of Wisconsin	2254
Royal Victoria Infirmary University Of North Carolina, Raleigh	2232 1539	Dept. Of Veterinary Science And Bacteriology University Of Wisconsin	2251
University Of North Carolina, Raleigh North Carolina State		Plant Pathology Dept. 1549 University Of Wisconsin	1553
Dept. Of Plant Pathology University Of Notre Dame	1540	Wisconsin Agricultural Experiment Station University Of Wisconsin, Madison 1564 2499	1563 2503
Dept. Of Biology University Of Oklahoma	1541	University Of Wisconsin, Madison Dept. Of Biochemistry	2501
Dept. Of Zoology	836	University Of Wisconsin, Madison	1759
University Of Penna. School Of Veterinary Medecine		Dept. Of Horticulture University Of Wisconsin, Madison	
Dept. Of Applied Veterinary Medical Sciences University Of Pennsylvania	2233	Dept. Of Plant Pathology 1565 1566 1568 1570 1571 1572 1664 2498 2502	1569
School Of Veterinary Medicine 2234 2236 2238	2237	University Of Wisconsin, Madison Dept. Of Veterinary Science	2253
University Of Pennsylvania School Of Veterinary Medicine		University Of Wisconsin, Madison Plant Pathology Dept. 1567	2500
Dept. Of Veterinary Surgery University Of Pennsylvania	1803	University Of Wisconsin, Madison, Wis. Dept. Of Entomology	901
School Of Veterinary Medicine Laboratory Of Pathology	2235	University Of Wisconsin, St. Paul Dept. Of Plant Pathology And Botany	1573
University Of Pennsylvania, Kennett Square	2233	University Of Wyoming	
New Bolten Center School Of Veterinary Medicine		Plant Science Division University Of Wyoming, Laramie	1760
Depts. Of Clinical Studies And Animal Biology University Of Pennsylvania, Philadelphia	2239	Plant Science Division University Of Zagreb, Yugoslavia	1761
School Of Veterinary Medicine Laboratory Of Physiology And Pharmacology	2240	Veterinary Faculty Dept. Of Parasitology And Parasitary Diseases	1808
University Of Pnerto Rico, Mayagnez College Of Agriculture		University Sub Post Office, Saskatoon, Saskatchewan Dept. Of Forestry	1574
Dept. Of Agronomy University Of Pnerto Rico, San Juan	1542	University, Of Kentucky, Lexington Utah State University	902
School Of Medicine	837	Crops Research Laboratory 1575	1665
University Of Purdue Purdue University Experiment Station	2494	Utah State University Dept. Of Agronomy 929	2504
University Of Queensland, Brisbane, Australia Veterinary School		Utah State University Dept. Of Botany And Plant Pathology	1576
Dept. Of Animal Husbandry University Of Rajastan, Jodhpur, India	2241	Utah State University, Logan 1577 Utah State University, Logan	1578
Dept. Of Botany University Of Rhode Island, Kingston	1543	Crops Research Laboratory Utah State University, Logan	1666
Dept. Of Animal Pathology 2242 University Of Rhode Island, Kingston	2243	Dept. Of Agronomy Utter Pradesh Coll. Of Veterinary Science, Mathura, Ind	1579
Dept. Of Botany	1544	Dept. Of Pathology And Bacteriology	2254
University Of Saskatchewan, Canada Dept. Of Plant Ecology	1755	Veterinary Bulletin, 32, (Jan., 1962): Item 255 Veterinary Research Laboratory, Kabete, Kenya	2255 2256
University Of Saskatchewan, Saskatoon, Canada Dept. Of Plant Ecology	1756	2257 2258 2259 Veterinary Research Laboratory, Khartonm	2260
University Of Science And Technology, Ames, Iowa Veterinary Medical Research Institute, Iowa State	2244	Virginia Agricultural Experiment Station, Blacksburg Dept. Of Plant Pathology And Physiology	1580
University Of Sydney, Anstralia Dept. Of Agriculture	1545	Virginia Agricultural Experiment Station, Chatham Bright Tobacco Disease Research Station	1581
University Of Tennessee University Of Tennessee, Knoxville	2495	Virginia Polytechnic Institute Virginia Polytechnic Institute	1762
		-argania rolicomito incluinto	

Dept. Of Veterinary Science 1809 Virginia Polytechnic Institute, Blacksburg Virginia Agricultural Experiment Station	2261	2262
Dept. Of Veterinary Science Washington Agricultural Experiment Station, Pross	2263 ser	2264
Irrigation Experiment Station Washington State University 1583 Washington State University College Of Veterinary Medicine	1584	1582 1585
Dept. Of Veterinary Microbiology		2265
Washington State University, Prosser Irrigation Experiment Station Washington State University, Pullman College Of Veterinary Medicine		1586
Dept. Of Veterinary Science Washington Agricultural Experiment Station Washington State University, Pullman College Of Vetinary Medicine		2266
Dept. Of Vetinary Microbiology		2267
Washington State University, Pullman Dept. Of Plant Pathology West African Cocoa Research Institute, Tafo, Ghan West Virginia University	1587 1a	1588 1589
Agricultural Experiment Station West Virginia University		2268
Mcrgantown And Wardensville West Virginia University School Of Medicine		2270
Dept. Of Microbiology		2374
West Virginia University Wardensville And Morgantown West Virginia University, Morgantown 1590	1667	2269 1668
2505 West Virginia University, Morgantown Dept. Of Animal Husbandry		2271
West Virginia University, Morgantown Dept. Of Plant Pathology, Bacteriology, And Ent 1591	omology	
West Virginia University, Morgantown And Wardensv Dept. Of Animal And Veterinary Science Reymann Memorial Farm	ille	
Dept. Of Agricultural Biochemistry And Nutrition Western Reserve University, Cleveland, Ohio	n	2272
Developmental Biology Center Wisconsin Agricultural Experiment Station 2506	2273	903 2322
Wisconsin Agricultural Experiment Station, Madison Wisconsin Conservation Dept., Madison Wisconsin State Dept. Of Agriculture, Madison World Health Organization, Kuala Lumpur, Malaya Wyeth Institute For Medical Research, Radnor, Pawyoming State Veterinary Laboratory, Laramie		2274 1810 1592 909 2275 2276
Yale University, New Haven, Conn. Zoological Society Of San Diego, Calif. Biological Research Institute Zoophysiological Laboratory, Copenhagen, Denmark	1333	2507 2277 904



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 AGRICULT