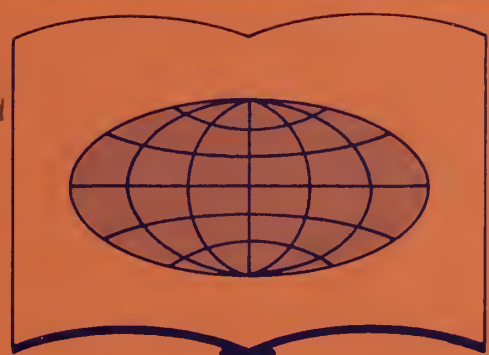


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Pesticides DOCUMENTATION BULLETIN

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Volume 5
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Number 16



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PESTICIDES DOCUMENTATION BULLETIN

Volume 5
August 8, 1969
Number 16

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

OBJECTIVES AND SCOPE

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

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

FORMAT

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

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

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

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

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

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

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

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

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

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BIBLIOGRAPHY

ENTOMOLOGY

- 9249-69
ORGANOPHOSPHORUS INSECTICIDES.
PATENT 3,432,599.
J T Hackman
Us Patent Office Offic Gaz 860(2):580
11 Mar 1969 156.65 OF2
Chemical control (insects), Chemical structure, Insecticides, Organophosphorus compounds, Patents, Toxicity.

SYSTEMATICS

- 9250-69
PHTHORIMAEA OPERCULELLA ZELL. (DA)
C H Aastrup
Flora Fauna 75(2):63-64
Jun 1969 410 F662
Insect taxonomy, Phthorimaca operculella.
- 9251-69
THE SCARABAEIDAE, COLEOPTERA OF PAKISTAN. PART IV. ADORETINT (RUTELINAE) WITH DESCRIPTIONS OF EIGHT NEW SPECIES OF ADORETUS FROM WEST PAKISTAN.
M Abdullah R A Roohi
Pakistan J Sci Indus Res 11(4):415-422
Oct 1968 475 P174
Insect taxonomy, Scarabaeidae, Surveys.
- 9252-69
NEOBLEDIUS KARACHIENSIS, A NEW GENUS AND SPECIES OF THE OXYTELINAE (COLEOPTERA: STAPHYLINIDAE) FROM WEST PAKISTAN.
M Abdullah N N Qadri
Pakistan J Sci Indus Res 11(4):394-395
Oct 1968 475 P174
Insect taxonomy, Staphylinidae.
- 9253-69
ASHRAFIA ANWARULLAHI, A NEW GENUS AND SPECIES OF THE GALERUCINAE (COLEOPTERA: CHRYSOMELIDAE) FROM WEST PAKISTAN.
M Abdullah S S Qureshi
Pakistan J Sci Indus Res 11(4):425-426
Oct 1968 475 P174
Chrysomelidae, Insect taxonomy.
- 9254-69
THE DUNG-ROLLERS OF PAKISTAN WITH OBSERVATIONS ON THE GENUS ANOMALA INCLUDING THE ECONOMIC IMPORTANCE AND DESCRIPTIONS OF NEW SPECIES FROM KARACHI (COLEOPTERA: SCARABAEIDAE).
M Abdullah R A Roohi
Pakistan J Sci Indus Res 11(4):427-440
Oct 1968 475 P174
Economic entomology, Insect taxonomy, Scarabaeidae, Surveys.
- 9255-69
A NEW GENUS AND SPECIES OF OF THE GALERUCINAE (COLEOPTERA: CHRYSOMELIDAE) FROM PEAR TREE IN WEST PAKISTAN.
M Abdullah S S Qureshi
Pakistan J Sci Indus Res 11(4):423-424
Oct 1969 475 P174
Chrysomelidae, Insect taxonomy, Pears.
- 9256-69
UNDESCRIBED SPECIES OF NEARCTIC TIPULIDAE (DIPTERA). X.
C P Alexander
Great Basin Natur 39(1):1-10 REF
28 Mar 1969 410 G79
Diptera, Insect morphology, Insect taxonomy, Tipulidae, Zoogeography.

- 9257-69
NEW SCARABAEIDAE SPECIES. 129. CONTRIBUTION TO THE SCARABAEOIDEA (COLEOPTERA). (GE)
V Balthasar
Beitr Entomol 18(7-8):953-958
1968 421 B392
Insect taxonomy, Zoogeography.
- 9258-69
MATERIALS CONCERNING THE KNOWLEDGE OF SYRPHIDAE (DIPTERA) OF AFGHANISTAN. (GE)
R Bankowska
Fragmenta Faunistica 14(9):195-208 REF
01 Mar 1968 410.9 W26F
Diptera, Insect taxonomy, Syrphidac, Zoogeography. Description of 53 species.
- 9259-69
A NEW FALCUNA SPECIES FROM WESTERN NIGERIA (LEPIDOPTERA: LYCAENIDAE).
N H Bennett
Entomologist (london) 102(1273):143-144
Jun 1969 421 EN8
Insect taxonomy, Lycaenidae.
- 9260-69
STUDIES OF THE MEXICAN DELTOCEPHALINAE: NEW SPECIES OF EUTETIX AND TWO ALLIED NEW GENERA (HOMOPTERA: CICADELLIDAE).
B M BeLong H J Harlan
Ohio J Sci 68(3):139-152
May 1968 410 OH3
Cicadellidae, Insect taxonomy.
- 9261-69
LARVAL DEVELOPMENT OF MANSONIA MOSQUITOES IN CENTRAL FLORIDA.
W L Bidlingmayer
Mosquito News 28(1):51-57 REF
Mar 1968 421 M85
Insect ecology, Insect physiology, Insect populations, Larvae, Light, Mansonia, Temperature.
Abstract: The use of a trap for Mansonia larvae made it possible to collect smaller instars to follow the progression of broods and also make quantitative evaluation of larval densities in different marshes. Environmental factors were investigated and also the effect of temperature and light upon submergence time. The annual life cycle was studied by comparing light trap data with the proportion of different larval instars present each month.
- 9262-69
A HYMENOPTEROUS PRIMARY PARASITE OF MORABINE GRASSHOPPERS.
R E Blackith
Australian J Zool 15(1):93-102 MAP REF
Feb 1967 410 AU73
Acrididae, Braconidac, Insect biology, Insect taxonomy, Parasitic insects, Zoogeography.
A new species of braconid wasps parasitic on the Morabine grasshoppers is described and its distribution and life cycle are discussed.
- 9263-69
A NEW MEGASCLIA FROM HAWAII (DIPTERA: PHORIDAE).
T Borgmeier
Hawaii Entomol Soc Proc 19(3):373-374
Jun 1967 420 H312
Insect taxonomy, Megasclia, Phoridac, Zoogeography.
- 9264-69
NEW RECORDS OF CHIGGERS FROM THE WEST INDIES.
J M Brennan
Hague Stud Fauna Curacao Carrib Islands 24:146-156 REF
1967 411.2 W122
Insect anatomy, Insect taxonomy, Trombiculidae, Zoogeography.

- 9265-69
RHYNCHOSCIARA BASCHANTI (DIPTERA, NEMATOCERA, SCIARIDAE), A NEW BRAZILIAN SPECIES.
M E Bruer
Sao Paulo Dep Zool Papeis Avulsos 20(21):259-263
1967 410.9 SA63
Bananas, Experimental insects, Insect anatomy, Insect biology, Insect identification, Insect morphology, Insect taxonomy, Larvae, Potassium hydroxide, Rhynchosciara baschanti, Sciariidae, Zoogeography.
- 9266-69
APHANOSPERMA, A NEW GENUS OF CERAMBYCIDAE (COLEOPTERA) FROM WOODY FRUITS OF HAKEA SPP. IN AUSTRALIA.
E B Britton
Entomol Soc Australia (nsw) J 8(1):33-36
30 Jun 1969 423.92 EN84
Biological control (weeds), Cerambycidae, Insect taxonomy, Weed control.
Larvae of Aphanosperma occidentalis, n. sp., live within the mature woody fruits of Hakea spp. in south western Australia. The species may be of value for the control of Hakea in South Africa.
- 9267-69
A NEW SUBSPECIES OF CALLOPHRYIS FOTIS FROM THE SAN FRANCISCO BAY AREA (LYCAENIDAE).
R M Brown
Lepidopterists Soc J 23(2):95-96
29 May 1969 421 L554
Insect taxonomy, Lycaenidae.
- 9268-69
A NEW SPECIES OF PYRRHALTA FROM SABLE ISLAND (COLEOPTERA: CHRYSOMELIDAE).
W J Brown
Can Entomol 101(1):109
Jan 1969 421 C16
Chrysomelidae, Cranberries, Insect identification, Insect taxonomy, Pyrrhalta sablensis, Zoogeography.
- 9269-69
INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE.
W E China
Entomologist (london) 102(1273):148
Jun 1969 421 EN8
Insect names, Insect taxonomy, Legislation.
- 9270-69
THE MATURE FEMALE AND MALE GRADUNGULA WOODWARDI FORSTER (ARANEAE: HYPOCHILOMORPHAE: GRADUNGULIDAE).
V T Davies
Entomol Soc Australia (nsw) J 8(1):95-97
30 Jun 1969 423.92 EN84
Araneae, Imagos, Insect taxonomy.
- 9271-69
A NEW SPECIES OF SCHIZOTETRANYCHUS (ACARINA: TETRANYCHIDAE) FROM QUEENSLAND.
J J Davis
Entomol Soc Australia (nsw) J 8(1):107-109
30 Jun 1969 423.92 EN84
Insect taxonomy, Tetranychidae.
- 9272-69
A NEW GENUS AND SPECIES OF THE TRIBE HYSTRICHONYCHINI (ACARINA: TETRANYCHIDAE) FROM QUEENSLAND.
J J Davis
Entomol Soc Australia (nsw) J 8(1):103-106
30 Jun 1969 423.92 EN84
Insect taxonomy, Tetranychidae.
- 9273-69
THE SOFT SCALES (HOMOPTERA: COCCIDAE) OF SOUTH AFRICA. I.
G De Lotto

S Afr J Agr Sci 10(3):781-795 REF

Sep 1967 24 SU3

Catalogs, Coccidiae, Insect geography, Insect taxonomy.

9274-69

NOTES ON PHILIPPINE BLACK FLIES (DIPTERA: SIMULIIDAE).

M P Delfinado

J Med Entomol 6(2):199-207

May 1969 421 J828

Insect taxonomy, Simuliidae.

9275-69

CONTRIBUTION TO THE STUDY OF HYMENOPTERA PROCTOTRUPOIDEA (XII). WITH REGARD TO CERAPHRONIDAE MEGASPILINAE MALES WITH BRANCHING ANTENNAE. (FR)

P Dessart

Inst Roy Sci Natar Belg Bull 42(32):16P REF

31 Dec 1966 504 B835B

Antennae, Ceraphronidae, Hymenoptera, Insect identification, Insect names, Insect taxonomy, Proctotrupoidea. English summary.

9276-69

RESULTS OF THE ZOOLOGICAL RESEARCH OF DR. Z. KASZAB IN MONGOLIA. NO. 163: HOMOPTERA, AUCHENORRHYNCHA. (GE)

J Dlabola

Acta Ent Bohemoslov 65(5):364-374 REF

20 Sep 1968 420 C33

Achirus, Auchenorrhyncha, Erythroneura, Hardya, Insect identification, Insect taxonomy, Issus, Zoogeography. Listing of many other species english and Czech summaries

9277-69

THE SPIDERS OF MISSISSIPPI.

P R Dorris Y J McGaha

Miss Acad Sci J 13:124-125

1967 500 M697

Insect ecology, Insect taxonomy, Research, Spiders, Zoogeography.

9278-69

A REVISED SYNONYMIC LIST OF THE NEARCTIC MELITAEINAE WITH TAXONOMIC NOTES (NYMPHALIDAE).

C F Dos Passos

Lepidopterists Soc J 23(2):115-125

29 May 1969 421 L554

Insect taxonomy, Nymphalidae, Zoogeography.

9279-69

DESCRIPTIONS OF SOME NEW CHEYLETID MITES FROM THE UNITED ARAB REPUBLIC. (ACARINA: CHEYLETIDAE).

E A Elbadry

Rev Zool Bot Afr 78(3/4):233-245 REF

30 Dec 1968 410 R26

Acaropsis africanus, Cheletogenes arboreous, Cheyletidae, Cheyletus denticus, Insect identification, Insect taxonomy, Ker lanecolatus, Mites, Nodele philippinensis, Paracheyletia citri, Zoogeography.

9280-69

THE BEES OF FINLAND. (GE)

R Elfving

Soc Fauna Flora Fenn Fauna Fenn 21, 69P REF MAP

Feb 1968 511 SO1

Bees, Hymenoptera, Insect taxonomy, Zoogeography. Collecting records, representing 33 genera.

9281-69

ON A SIMULIUM OF THE GROUP NEAVEI CAPTURED IN ETHIOPIA. (PRELIMINARY REPORT). (FR)

A Fain A P Oomen

Rev Zool Bot Afr 78(3/4):246-250

30 Dec 1968 410 R26

Insect identification, Insect taxonomy, Simulium neavei, Simulium woodi, Zoogeography.

9282-69

REDESCRIPTION OF OPIUS SCAEVOLAE (CAMERON) (HYMENOPTERA, BRACONIDAE, OPIINAE). (GE)

M Fischer

Entomophaga 13(3):237-239

1968 421 EN835

Braconidae, Insect taxonomy, Opius. English abstract.

9283-69

NEW SPECIES AND A REVISED KEY TO THE HAWAIIAN CYRTOPELTIS FIEB. WITH NOTES ON CYRTOPELTIS (ENGYTATUS) HAWAIIENSIS KIRKALDY (HETEROPTERA: MIRIDAE).

W C Gagne

Hawaii Entomol Soc Proc 20(1):35-44

Jun 1968 420 H312

Insect taxonomy, Miridae, Zoogeography.

9284-69

A CATALOG OF HAWAIIAN ACARINA.

L E Garrett F H Haramoto

Hawaii Entomol Soc Proc 19(3):381-414 REF

Jun 1967 420 H312

Acarina, Bibliography, Catalogs, Zoogeography.

9285-69

ONYCHIURUS SEVERINI WILLEM, 1902 (COLLEMBOLA). (FR)

H Gisin

Rev Suisse Zool 75(1):1-3

Apr 1968 410 R324

Collembola, Insect taxonomy.

9286-69

ECTOBIUS PALLIDUS OLIVIER (DICTYOPTERA, BLATTIDAE SENSU LATO) IN GUERNSEY.

F D Goodliffe

Entomologist (London) 102(1273):142

Jun 1969 421 EN8

Blattidae, Insect taxonomy, Zoogeography.

9287-69

MORPHOLOGICAL CRITERIA AS INDICATORS OF SPECIES LIMITS IN SPIDERS OF THE SUBFAMILY ARANEINAE. (ARACHNIDA: ARANEAE: ARANEIDAE). (GE)

M Grasshoff

Senckens Natarforsch Ges Frankfurt Main Abhandl (516):100P MAP REF

15 Feb 1968 410.9 SE52

Araneus diadematus, Araneus marmoratus, Araneus pallidulus, Araneus quadratus, Insect identification, Insect morphology, Insect taxonomy, Spiders. English summary.

9288-69

THE TAXONOMIC STATUS OF DIALECTICA SOFFNERI (GREGOR AND POVOLNY) AND PARECTOPA CUPEDIELLA (HERRICH-SCHAFFER) (LEPIDOPTERA, LITHOCOLLETIDAE). (GE)

F Gregor D Povolny

Acta Ent Bohemoslov 65(5):391-394

20 Sep 1968 420 C33

Dialectica soffneri, Gracillariidae, Insect identification, Insect taxonomy, Parectopa cupediella. English and Czech summaries.

9289-69

CENTIPEDS (CHILOPODA) OF THE LODZ PLATEAU. (POL)

J Gronska

Fragmenta Faunistica 14(8):183-193 REF

15 Feb 1968 410.9 W26F

Chilopoda, Climate, Forests, Humidity, Insect taxonomy, Zoogeography. German and Russian summary. description of 19 species.

9290-69

A TROGLOBITIC STAPHYLINID FROM MEXICO (COLEOPTERA, STAPHYLINIDAE, PAEDERINAE).

L J Herman

Amer Mas Novitates (2367):1-9

24 Apr 1969 500 N483N

Cave fauna, Insect taxonomy, Staphylinidae.

9291-69

DISTRIBUTION OF ANT SPECIES OF HAWAII.

E W Huddleston S S Fluker

Hawaii Entomol Soc Proc 20(1):45-69 REF

Jun 1968 420 H312

Formicidae, Habitats, Surveys, Zoogeography.

9292-69

PICTORAL KEY OF THE ANTS OF HAWAII BASED ON THE WORKER FORMS.

E W Huddleston A A Laplante S S Fluker

Hawaii Entomol Soc Proc 20(1):71-79

Jun 1968 420 H312

Formicidae, Illustrations, Insect identification, Insect taxonomy.

9293-69

FLEAS OF THE SUBFAMILY CTENOPHTHALMINAE (HYSTRICHOPSYLLIDAE, SIPHONAPTERA) IN TAIWAN.

E W Jameson P Y Hsieh

J Med Entomol 6(2):179-185

May 1969 421 J828

Insect taxonomy, Siphonaptera.

9294-69

A NEW HORNET, VESPULA AUSTRIACA, FOR DENMARK. (DA)

P Johnsen

Flora Fauna 75(2):61-

Jun 1969 410 F662

Insect taxonomy, Vesputa.

9295-69

THE DONACIINAE OF NORTH AFRICA (COL. CHRYSOMELIDAE). (FR)

P Jolivet

Arch Hyg Bakteriol 37(7):307-315 MAP

Sep 1968 505 L992B

Chrysomelidae, Insect biology, Insect ecology, Insect taxonomy, Zoogeography. English summary. description of 7 species of Donacia.

9296-69

SCALPONOTATUS, A NEW GENUS NEAR SLATEROCORIS, WITH DESCRIPTIONS OF NEW SPECIES (HETEROPTERA: MIRIDAE).

L A Kelton

Can Entomol 101(1):15-23

Jan 1969 421 C16

Illustrations, Insect anatomy, Insect taxonomy, Miridae, Scalponotatus, Slaterocoris, Strongylocoris. The author lists nine new species of the new genus Scalponotatus. Strongylocoris albivasis is also placed in this genus.

9297-69

RESULTS OF THE ZOOLOGICAL RESEARCH OF DR. Z. KASZAB IN MONGOLIA. 115. HOMOPTERA: PSYLLODEA OF THE III. EXPEDITION. (GE)

S M Klimaszewski

Fragmenta Faunistica 25(8):403-418 REF

01 Mar 1968 410.9 W26F

Homoptera, Insect identification, Insect taxonomy, Psyllidae, Zoogeography. Polish and Russian summaries. description of many other species

9298-69

A NEW SPECIES OF BATYLE FROM UTAH (COLEOPTERA: CERAMBYCIDAE).

J N Knull

Ohio J Sci 68(4):233-234

Jul 1968 410 OH3

Cerambycidae, Insect taxonomy.

9299-69

STUDIES OF THE MEXICAN DELTOCEPHALINE: ALIGIA AND SOME NEW ALLIED GENERA AND SPECIES (HOMOPTERA: CICADELLIDAE).

J P Kramer D M Delong

Ohio J Sci 68(3):169-175

May 1968 410 OH3

Cicadellidae, Insect taxonomy.

- 9300-69
SUSA AUDY AND NADCHATRAM, A SUBGENUS OF CHELADONTA LIPOVSKY ET AL., (NEW STATUS), WITH DESCRIPTIONS OF TWO NEW SPECIES OF CHELADONTA FROM THAILAND.
P Lakshana
J Med Entomol 6(2):135-139
May 1969 421 J828
Insect taxonomy, Trombididae.
On the basis of 2 new species of chiggers described below Cheladonta (Cheladonta) gouldi and C. (Suga) prachongaetha the genus Susa Audy and Nadehatram is reduced to a subgenus and placed within the expanded genus Cheladonta Lipovsky et al. A key to the known species of the subgenus Susa is given.
- 9301-69
HELICONIUS HECALE AND XANTHOCLES IN VENEZUELA (NYMPHALIDAE).
J H Masters
Lepidopterists Soc J 23(2):104-105
29 May 1969 421 L554
Insect taxonomy, Nymphalidae, Surveys.
- 9302-69
SEVERAL NEW TACHINIDAE OF MELANESIA (DIPT., TACHINIDAE). (FR)
L P Mesnil
Entomophaga 13(3):203-208
1968 421 EN835
Insect taxonomy, Tachinidae, Zoogeography. English abstract.
- 9303-69
DETAILED DESCRIPTION OF LARVA OF POLYDORUS ARISTOLOCHIAE.
G H Munshi S A Moiz
Lepidopterists Soc J 23(2):107-108
29 May 1969 421 L554
Insect taxonomy, Larvae, Papilionidae.
- 9304-69
A NEW SUBSPECIES OF PYRRHOPYGE CROW (HESPERIIDAE) FROM PANAMA.
S S Nicolay G B Small
Lepidopterists Soc J 23(2):127-130
29 May 1969 421 L554
Hesperiidae, Insect taxonomy.
- 9305-69
A SAWFLY, CEPHALCIA RETICULATA (L.) (HYMENOPTERA: PAMPHILIIDAE), NEW FOR DENMARK. (DA)
B O Nielsen
Flora Fauna 75(2):65-67 REF
Jun 1969 410 F662
Cephalcia, Insect taxonomy. English abstract.
- 9306-69
THE HETEROPTERA OF THE NETHERLANDS ANTILLES. VI. NOTONECTIDAE.
N Nieser
Haqae Sted Fauna Curacao Carrib Islands 24:157-189 MAP REF
1967 411.2 W122
Entomology, Heteroptera, Insect anatomy, Insect taxonomy, Notonectidae, Zoogeography. Nine species are described.
- 9307-69
BEETLES NEW TO FAUNA OF BABIA GORA MOUNTAINS. (COLEOPTERA). III. (POL)
J Pawlowski
Fragmenta Fauristica 14(10):209-229 REF
15 Mar 1968 410.9 W26F
Coleoptera, Insect taxonomy, Zoogeography. English and Russian summary. 269 species are discussed.
- 9308-69
CHALCIDOID (HYMENOPTERA) PARASITES OF THE ALFALFA LEAF-CUTTER BEE, MEGACHILE ROTUNDATA, IN CANADA.
O Peck
Can Entomol 101(4):418-422 REF
Apr 1969 421 C16
Hymenoptera, Insect taxonomy, Megachile rotundata, Parasitic insects.
- 9309-69
CATALOGUE OF THE TYPES IN THE COLLECTIONS OF THE GERMAN ENTOMOLOGICAL INSTITUTE--I. EPHEMEROPTERA, ODONATA, PLECOPTERA. (GE)
G Petersen H Gaedike
Beitr Entomol 18(7-8):959-969
1968 421 B392
Catalogs, Ephemeroptera, Odonata, Plecoptera, Zoogeography. English and Russian abstracts.
- 9310-69
OCHODAEINAE AND ACANTHOCERINAE FROM THE FAUNISTIC REGION OF ETHIOPIA AND MADAGASCAR. (COLEOPTERA SCARABAEIDAE). (GE)
R Petrovitz
Rev Zool Bot Afr 78(3/4):251-262
30 Dec 1968 410 R26
Acanthocera, Ochodaeinae, Scarabaeidae, Zoogeography. Among others, eight new species are described.
- 9311-69
SUPPLEMENTAL NOTES ON THE FAR EASTERN BIANNULARIS GROUP OF TABANUS.
C B Philip
J Med Entomol 6(2):197-198
May 1969 421 J828
Insect taxonomy, South-East Asia, Tabanus.
- 9312-69
CATALOGUE OF NEW WORLD DERMAPTERA (INSECTA). PART I: INTRODUCTION AND PYGIDICRANOIDEA.
H Reichardt
Sao Paulo Dep Zool Papeis Avulsos 21(19):183-193
05 Mar 1968 410.9 SA63
Catalogs, Dermaptera, Insect identification, Insect taxonomy, Pygidicranoidea, Zoogeography.
- 9313-69
THE RHAPHIDOPHORIDAE (ORTHOPTERA) OF AUSTRALIA. PART 5. THE RHAPHIDOPHORIDAE OF FLINDERS ISLAND.
A M Richards
Linnean Soc New South Wales Proc 92(414,PT 2):151-156
22 Dec 1967 514 SY2
Gryllacrididae, Insect geography, Insect taxonomy, Surveys.
- 9314-69
DREPANAPHIS PALLIDA, A NEW APHID COLLECTED ON ACER SACCHARUM IN ONTARIO (HOMOPTERA: APHIDIDAE).
W R Richards
Can Entomol 101(1):107-108
Jan 1969 421 C16
Acer saccharum, Aphididae, Drepanaphis granovskiy, Drepanaphis pallida, Insect anatomy, Insect identification, Insect morphology, Insect taxonomy, Zoogeography.
- 9315-69
A NEW SPECIES OF TUBERCULATUS FROM TURKEY, WITH REVISIONARY, DESCRIPTIVE NOTES ON TUBERCULOIDES (HOMOPTERA: APHIDIDAE).
W R Richards
Can Entomol 101(1):51-61
Jan 1969 421 C16
Aphididae, Insect anatomy, Insect morphology, Insect taxonomy, Tuberculatus, Tuberculoides, Zoogeography.
- 9316-69
THE LARVAE OF AUSTRALIAN IXODIDAE (ACARINA: IXODOIDEA).
F H S Roberts
Entomol Soc Australia (nsw) J 8(1):37-78 REF
30 Jun 1969 423.92 EN84
Insect identification, Ixodidae, Larvae, Surveys.
- 9317-69
THE PROBLEM OF INSECT IDENTIFICATION AND THE UNIVERSITY OF ARKANSAS REFERENCE COLLECTION.
E P Rouse
Ark Acad Sci Proc 21:45-48
1967 500 AR42
Insect collection, Insect identification, Insect taxonomy, Research, Sarcophagidae.
- 9318-69
DETERMINATION OF MOSQUITO HOSTS IN SALT MARSH AREAS OF LOUISIANA.
R E Schaefer C D Steelman
J Med Entomol 6(2):131-134 REF
May 1969 421 J828
Aedes sollicitans, Animals, Culicidae, Insect feeding, Surveys.
- 9319-69
THE BANANA CORM WEEVIL, COSMOPOLITES SORDIDUS IN THE COCOA REGION OF BAHIA, BRAZIL.
P Silva J M De Abreu
China Plant Protect Bull 16(6):111-113 MAP REF
Dec 1968 464.9 C47
Cosmopolites sordidus, Surveys, Zoogeography.
- 9320-69
NOTE ON THE CHANGE OF A SPECIFIC NAME OF NEW GUINEA CULEX (LOPHOCERAOMYIA) (DIPTERA: CULICIDAE).
S Sirivanakarn
J Med Entomol 6(2):119
May 1969 421 J828
Culex, Insect names, Insect taxonomy.
- 9321-69
THE AEADES MOSQUITOES OF NEW ENGLAND (DIPTERA: CULICIDAE). II. LARVAE: KEYS TO INSTARS, AND TO SPECIES EXCLUSIVE OF FIRST INSTAR.
M E Smith
Can Entomol 101(1):41-51 REF
Jan 1969 421 C16
Aedes, Culicidae, Insect identification, Insect taxonomy, Larvae, Zoogeography.
- 9322-69
PARASARCOPHAGA (CURRANEA) TIBIALIS (MACPQUAT, 1850) A NEW SPECIES FOR THE CZECHOSLOVAK FAUNA (DIPTERA).
M Stanek
Acta Ent Bohemoslov 65(5):395-396 REF
20 Sep 1968 420 C33
Insect identification, Insect taxonomy, Parasarcophaga, Sarcophagidae. Czech summary.
- 9323-69
HAWAIIAN TOXORHYNCHITES (DIPTERA: CULICIDAE).
W A Steffan
Hawaii Entomol Soc Proc 20(1):141-155
Jun 1968 420 H312
Insect taxonomy, Toxorhynchites, Zoogeography.
- 9324-69
OCCURRENCE OF THYMELICUS LINEOLA (HESPERIIDAE) IN VIRGINIA.
G B Straley
Lepidopterists Soc J 23(2):76
29 May 1969 421 L554
Hesperiidae, Zoogeography.
- 9325-69
TAXONOMIC AND BIOLOGICAL STUDIES OF HAWAIIAN SPHAEROCERIDAE (DIPTERA).
J A Tenorio
Hawaii Entomol Soc Proc 20(1):169-212 REF
Jun 1968 420 H312
Insect biology, Insect taxonomy, Sphaeroceridae, Zoogeography.

9326-69

9326-69
TWO NEW SPECIES OF LEPTOCERA OLIVIERA FROM HAWAII (DIPTERA: SPHAEROCERIDAE).

J A Tenorio

Hawaii Entomol Soc Proc 19(3):425-429

Jun 1967 420 H312

Insect taxonomy, Sphaeroceridae, Zoogeography.

9327-69

9327-69
CONCORDANCE AND DISCORDANCE OF TAXONOMIC CHARACTERS IN DROSOPHILA CLASSIFICATION.

L H Throckmorton

Syst Zool 17(4):355-387

Dec 1968 410 SY8

Drosophila, Insect taxonomy, Methodology, Statistical analysis.

9328-69

9328-69
ARTHROPODA ASSOCIATED WITH A NEST OF THE HAWAIIAN CROW.

P Q Tomich

Hawaii Entomol Soc Proc 19(3):431-432

Jun 1967 420 H312

Arthropoda, Bird nests, Insect ecology, Surveys.

9329-69

9329-69
SYSTEMATIC INVESTIGATIONS ON EAST-INDIAN AND AUSTRALIAN HEMIPEPSIS. VIII. ON THE SPECIES OF THE SUB-GENUS MOROPEPSIS BANKS, 1934 (HYMENOPTERA POMPILIDAE, PEPSINAE). (FR)

R Wahis

Inst Roy Sci Natur Belg Bull 42(12):17P REF

26 Oct 1966 504 B835B

Hemipepsis, Insect taxonomy, Pompilidae, Zoogeography.

9330-69

9330-69
BOLORIA POLARIS (NYMPHALIDAE) IN NORTHERN BRITISH COLUMBIA.

R E Woodley

Lepidopterists Soc J 23(2):113-115

29 May 1969 421 L554

Insect taxonomy, Nymphalidae, Zoogeography.

9331-69

9331-69
SYSTEMATIC STUDIES OF THE CENTRAL EUROPEAN SPECIES OF THE GENUS AUSTROMENOPON BEDF. (MALLOPHAGA, AUSTROMENOPONINAE). (GE)

J Zlotorzyczka

Pol Pismo Entomol 38(2):301-340 REF

1968 421 P76

Austromenopon, Birds, Insect taxonomy, Mallophaga, Menoponidae, Parasitic insects, Zoogeography. Polish summary. 43 species and their host animals are discussed.

PHYSIOLOGY AND BIOCHEMISTRY

9332-69

9332-69
REARING THE FOREST TENT CATERPILLAR ON AN ARTIFICIAL DIET.

N D Addy

J Econ Entomol 62(1):270-271

17 Feb 1969 421 J822

Diet, Experimental insects, Insect nutrition, Insect physiology, Insect rearing, Malacosoma disstria, Microbial contamination, Mortality.

9333-69

9333-69
THE BREEDING OF PLANOCOCCUS CITRI (HOMOPTERA: PSEUDOCOCCIDAE) ON SPROUTING POTATO.

A Z Al-Ali

Roy Entomol Soc London Proc Ser A Gen Entomol 44(1-3):45-47

22 Apr 1969 420 L84PA

Insect rearing, Life cycle, Planococcus citri, Potatoes.

9334-69

9334-69
A STUDY OF THE HIBERNATION OF BUMBLEBEES (HYMENOPTERA: BOMBIDAE) IN SOUTHERN ENGLAND.

D V Alford

J Anim Ecol 38(1):147-170 REF

Feb 1969 410 J826

Bombinae, Habitats, Hibernation, Insect behavior, Insect ecology, Insect physiology, Surveys.

9335-69

9335-69
BIOLOGICAL EXAMINATION OF PSYLLIODES CHRYSOCEPHALA L. (BU)

R Angelova

Vissh Selskostopanski Inst Vasil Kolarov Nauch Tr 16(2):229-240

1967 106.3 P72

Chrysomelidae, Diapause, Insect biology, Insect morphology, Insect pests, Larvae, Oviposition, Psylliodes chrysocephala, Vegetables. German and Russian summaries.

9336-69

9336-69
CAPSULE CONTROLS FIRE ANT.

Anonymous

Tennessee Farmer 16(2):4F

Feb 1969 S115.T42

Baits, Chemical control (insects), Chlorinated hydrocarbons, Insect pests, Insecticides, Mirex, Solenopsis geminata, Venoms, Zoogeography.

9337-69

9337-69
BATTLE AGAINST THE CORN BORER.

Anonymous

Tennessee Farmer 16(2):27

Feb 1969 S115.T42

Corn, Enzymes, Glycosides, Insect pests, Ostrinia nubilalis, Plant biochemistry. Insect feeding thought to set off reaction between plant enzymes and glucoside, producing DIMBOA which rapidly breaks down into MBOA.

9338-69

9338-69
BIG CODLING MOTH CONTROL PROJECT IN CANADA.

Anonymous

Orchardist New Zealand 41(10):368,370

Nov 1968 80 OR19

Biological control (insects), Carpocapsa pomonella, Fruit, Insect pests, Irradiation, Sterility.

9339-69

9339-69
PERIODICITY IN THE PROPORTIONS OF HAEMOCYTE CATEGORIES IN THE GIANT COCKROACH, BLABERUS GIGANTEUS.

J W Arnold

Can Entomol 101(1):68-77

Jan 1969 421 C16

Blaberus giganteus, Cytoplasm, Haemocytes, Insect behavior, Laboratory animals, Light, Photoperiodism, Serum.

9340-69

9340-69
THE PROBLEM OF THE OOTHECA SECRETION IN ORTHOPTEROIDS IN THE LIGHT OF THE MOST RECENT ACQUISITIONS. (IT)

B Baccetti

Accad Naz Ital Entomol Atti 8:112-136 REF

1960 420 AC2

Acridoidea, Colleterial glands, Epithelium, Glands (insects), Insect biochemistry, Insect eggs, Insect physiology, Orthoptera, Oviducts, Secretion. English summary.

9341-69

9341-69
PRELIMINARY RESULTS OF A NEW SEASONAL INVESTIGATION ON BROOK HYDRACARINAE (ACARI-TROMBIDI FORMES). (GE)

C Bader

Rev Suisse Zool 75(3):498-505

Sep 1968 410 R324

Aquatic insects, Hydrachnellae, Hygrobatas fluviatilis, Insect biology, Insect ecology, Insect populations, Mites, Panisus michaeli, Sex ratios, Sperchon glandulosus, Trombidiformes, Zoogeography.

9342-69

9342-69
OBSERVATIONS ON THE PARASITES (HYMENOPTERA, DIPTERA) OF TRICHOTAPHE LEVISSELLA FYLES (GELECHIIDAE, LEPIDOPTERA) WITH NOTES ON THE HOST.

W V Balduf

Ohio J Sci 69(1):36-52

Jan 1969 410 OH3

Braconidae, Eulophidae, Gelechiidae, Ichneumonidae, Insect biology, Predaceous insects, Pteromalidae, Tachinidae.

9343-69

9343-69
A SUCTION-ELECTRODE STUDY OF THE HOUSE FLY HEART.

R C Ballard M S Hall

Entomol Soc Amer Ann 62(2):375-379 REF

Mar 1969 420 EN82

Dorsal vessel, Electrophysiology, Musca domestica.

9344-69

9344-69
ALKALI BEES: RESPONSE OF ADULTS TO PATHOGENIC FUNGI IN BROOD CELLS.

S W T Batra G E Bohart

Science 165(3893):607-608 REF

08 Aug 1969 470 SC12

Aspergillus, Aspergillus flavus, Entomogenous fungi, Fusarium solani, Insect behavior, Insect diseases, Larvae, Mucor, Nomia melanderi, Rhizopus, Social insects, Spore germination.

9345-69

9345-69
COMPARATIVE ACTION OF AN OLIGO-INFECTION OF BACILLUS THURINGIENSIS AND OF TOTAL STARVATION ON THE WATER, LIPID, AND NITROGEN CONTENTS OF A LEPIDOPTERAN. (FR)

L Baud

Entomophaga 13(3):229-231

1968 421 EN835

Bacillus thuringiensis, Bombyx mori, Insect metabolism, Lipids, Nitrogen, Water. English abstract.

9346-69

9346-69
PARATHION AND LINDANE IN THE CONTROL OF THE SPRUCE GALL APHID. (FR)

R Baurant E Seutin A Plasman R Caussin

Bull Recherch Agron Gembloux (N s) 3(1):3-14

1968 S5.B8

Adelges, Chemical control (insects), Chermes tardus, Insect behavior, Insect biology, Insecticide application, Insecticide residues, Lindane, Parathion, Picea. English and German summaries.

9347-69

9347-69
PRELIMINARY STUDIES ON THE ISOLATION OF PTERINS FROM THE WINGS OF HELICONIID BUTTERFLIES.

J G Baust

Zoologica (new York) 52(1, SPRING):15-20 REF

1967 410 Z722

Amino-4-pteridinol, 2-, Insect biochemistry, Lepidoptera, Wings (insects).

9348-69

9348-69
AMMONIUM-INDUCED TERMINATION OF DIAPAUSE IN THE EUROPEAN CORN BORER, OSTRINIA NUBILALIS.

S D Beck J L Shane J A Garland

J Insect Physiol 15(6):945-951 REF

Jun 1969 421 J825

Ammonium acetate, Ecdysone, Insect physiology, Ostrinia nubilalis.

9349-69

9349-69
A DECADE WITH THE ALFALFA WEEVIL IN TENNESSEE.

S E Bennett

Tenn Agr Exp Sta Bull (446):33P MAP REF

Oct 1968 100 T25S (1)

Alfalfa, Biological control (insects), Chemical control (insects), Cultural control (insects), Hypera postica, Insect pests, Insect physiology.

- 9350-69
A NOTE ON THE COMPARATIVE BIOLOGY OF SOME ITALIAN CASSIDAE. (COL., CHRYSOMELIDAE). (IT)
C Bibolini
Accad Naz Ital Entomol Atti 8:180-190
1960 420 AC2
Cassida algirica, Cassida rubiginosa, Cassida viridis, Chrysomelidae, Hibernation, Host indexing (plants), Insect biology, Insect physiology, Zoogeography. English summary.
- 9351-69
A THESIS BY G. STREBLER ON THE GALL MIDGE OF ALFALFA. (FR)
L Bonnemaïson
Phytoma 20(199):37-39
Jun 1968 464.8 P563
Alfalfa, Cecidomyiidae, Contarinia medicaginis, Insect biology, Insect ecology, Insect morphology, Parasitic insects. Review of doctoral dissertation by Strebler entitled: Etude d'un itonidide cecidogene (Contarinia medicaginis Kieffer) et son hôte.
- 9352-69
PRELIMINARY RESULTS OF THE REARING OF A HYMENOPTEROUS CHALCID (PTEROMALUS PUPARUM L.) ON THE HEMOLYMPH OF A LEPIDOPTERAN.
M Bouletreau
Entomophaga 13(3):117-122
1968 421 EN835
Hemolymph, Insect nutrition, Insect rearing, Pieris brassicae, Pteromalidae. English abstract.
- 9353-69
EFFECTS OF DIETARY AMINO ACIDS, SALTS, AND PROTEIN STARVATION ON FECUNDITY OF THE PARASITOID EXERISTES COMSTOCKII (HYMENOPTERA: ICHNEUMONIDAE).
G K Bracken
Can Entomol 101(1):91-96 REF
Jan 1969 421 C16
Amino acids, Diet, Exeristes comstockii, Fertility, Ichneumonidae, Insect eggs, Parasites, Proteins, Salts, Starvation.
- 9354-69
PHEROMONE-MEDIATED BEHAVIOUR LEADING TO GROUP OVIPOSITION IN THE BLOWFLY LUCILIA CUPRINA.
L B Browne R J Bartell H H Shorey
J Insect Physiol 15(6):1003-1014 REF
Jun 1969 421 J825
Insect behavior, Olfactory response, Oviposition, Phaenicia cuprina, Pheromones, Sex.
Females of Lucilia cuprina oviposit in groups, the formation of which depends, in part, on the responses of females to stimulation from other flies. This stimulation is important in causing females to oviposit and in influencing them to lay near already ovipositing females. Both types of action have a strong contact component; in addition, there is a weaker olfactory component which plays some part in the aggregative response.
- 9355-69
HORMONAL INHIBITION OF THE PROTHORACIC GLAND BY THE BRAIN IN LOCUSTS.
D B Carlisle P E Ellis
Nature 220(5168):706-707 REF
16 Nov 1968 472 N21
Brain, Glands (insects), Hormones, Insect physiology, Locusta migratoria migratorioides, Prothoracic glands, Ribonucleic acid, Schistocerca gregaria.
- 9356-69
HEIGHT PREFERENCES FOR OVIPOSITION OF APHIDOPHAGOUS SYRPHIDAE (DIPTERA).
A E F Chandler
Entomophaga 13(3):187-195
1968 421 EN835
Aging, Insect behavior, Oviposition, Parasitic insects, Syrphidae
- 9357-69
ASEPTIC REARING OF COPROPHAGOUS BEETLE: APHODIUS CONSTANS DUFT. (COL., SCARABAEIDAE). (FR)
R Charpentier
Ann Epiphyt 19(3):533-538 REF
1968 464.9 F84AN
Aphodius, Germ-free life, Insect rearing, Methodology. English abstract.
- 9358-69
THE LIGHT THRESHOLD CONTROLLING THE PERIODICITY OF INVERTEBRATE DRIFT.
I Chaston
J Anim Ecol 38(1):171-180
Feb 1969 410 J826
Aquatic insects, Diurnal rhythm, Insect dissemination, Larvae, Light.
- 9359-69
THE DISTRIBUTION OF FACTOR S IN THE COCKROACH, PERIPLANETA AMERICANA, AND ITS ROLE IN STRESS PARALYSIS.
B J Cook M De la Cuesta J G Pomonis
J Insect Physiol 15(6):963-975 REF
Jun 1969 421 J825
Biological assay, Insect physiology, Musca domestica, Nervous system, Periplaneta americana, Stress.
- 9360-69
OBSERVATIONS ON POLYMORPHISM IN TWO SPECIES OF HELICONINE BUTTERFLIES FROM TRINIDAD, WEST INDIES.
L M Cook L P Browner
Entomologist (london) 102(1273):125-128
Jun 1969 421 EN8
Color, Insect morphology, Nymphalidae, Polymorphism, Wings (insects).
- 9361-69
TREES FOR BEES.
V A Cook
New Zeal J Agr 118(6):45, 47
Jun 1969 23 N48J
Apiculture, Apis mellifera, Crataegus, Currants, Insect nutrition, Surveys, Trees.
- 9362-69
CHANGES IN SUSCEPTIBILITY OF SCREW-WORM FLIES TO THE CHEMOSTERILANT N,N'-TETRAMETHYLENEBIS(I-AZIRIDINECARBOXAMIDE), WITH TIME OF ADMINISTRATION.
M M Crystal
J Econ Entomol 62(1):275-276
17 Feb 1969 421 J822
Biological control (insects), Chemical control (insects), Chemosterilants, Cochliomyia hominivorax, Insecticide resistant insects, Susceptibility, Tetramethylene bis(1-aziridinecarboxamide), N,N', Time.
- 9363-69
POPULATION DYNAMICS OF THE WEEVIL SITONA REGENSTEINENSIS (HBST.) ON BROOM.
W Danthanarayana
J Anim Ecol 38(1):1-18 REF
Feb 1969 410 J826
Curculionidae, Cytisus, Insect biology, Insect nutrition, Insect physiology, Mortality, Population, Sitona.
- 9364-69
CHANGES IN TEMPERATURE TOLERANCE DURING THE LIFE CYCLE OF CALLIPHORA ERYTHROCEPHALA.
T F Davison
J Insect Physiol 15(6):977-988 REF
Jun 1969 421 J825
Calliphora vicina, Insect acclimatization, Insect biology, Insect physiology, Temperature.
- 9365-69
STUDY OF SOCIAL RELATIONSHIPS IN ANTS OF THE GENUS APHAENOASTER. (FR)
B Delage P Jaisson
Acad Sci Compt Rend Ser D Sci Nat 268(4, 1ST SEMESTER):701-703
27 Jan 1969 505 P21
Aphaenogaster, Formicidae, Gastrointestinal system, Insect behavior, Insect morphology, Social insects.
- 9366-69
RESEARCH ON MESSOR OF THE BASIN OF AQUITAINE: ECOLOGY AND BIOLOGY. (FR)
B Delage
Bull Biol France Belg 102(3):315-367 MAP REF
1968 473 B87
Formicidae, Insect biology, Insect ecology, Messor, Zoogeography. English summary.
- 9367-69
THE PROLIFERATION OF AQUATIC PLANTS IN LAKE TRASIMENO AND ITS CONSEQUENCES ON THE DIFFUSION OF PHYTOCHIRONOMUS SEVERINI GOETGH. (IT)
M V Di Giovanni
Accad Naz Ital Entomol Atti 8:262-268 REF
1960 420 AC2
Aquatic plants, Chemical control (insects), Chironomidae, Chlorinated hydrocarbons, Herbicides, Insect ecology, Insect outbreaks, Insect pests, Larvae, Myriophyllum spicatum, Nymphs, Phytochironomus severini, Population, Potamogeton perfoliatus, Toxicity, Zoogeography. English summary.
- 9368-69
CONTROL OF PLANT BUG COMPLEX.
R L Dinkins J R Brazzell C A Wilson
Miss Farm Res 33(5):8
May 1969 100 M69MI
Anthonomus grandis, Beneficial insects, Biological control (insects), Chemical control (insects), Dimethoate, Disulfoton, Fenthion, Fleahoppers, Insecticides, Isopropoxyphenyl methylcarbamate, o-, Miridae, Organophosphorus compounds, Trichlorfon.
- 9369-69
THE ENEMIES OF THE PREDACEOUS MITES AS A REDUCING FACTOR OF SPIDER MITES. (GE)
G Dosse
Entomophaga 7(3):227-236 REF
1962 421 EN835
Anthocoris nemorum, Apples, Biocenosis, Biological control (insects), Chrysopa vulgaris, Mites, Orius minutus, Panonychus ulmi, Predaceous insects, Tetranychidae, Typhlodromus pyri. English summary. report from First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.
- 9370-69
NEW OR LITTLE KNOWN FEEDING HABITS IN EMPIDIDAE (DIPTERA).
J A Downes S M Smith
Can Entomol 101(4):404-408 REF
Apr 1969 421 C16
Empididae, Food habits, Insect biology, Pollen, Predaceous insects.
- 9371-69
THE RECOGNITION OF NULLIPAROUS AND PAROUS CULICOIDES (DIPTERA: CERATOPOGONIDAE) WITHOUT DISSECTION.
A L Dyce
Entomol Soc Australia (nsw) J 8(1):11-15
30 Jun 1969 423.92 EN84
Color, Culicoides, Insect identification, Insect physiology, Insect rearing, Reproduction.
- 9372-69
POST-ECYDIAL SETAL DEVELOPMENT IN THE ALEYRODIDAE (HEMIPTERA).
V F Eastop
Roy Entomol Soc London Proc Ser A Gen Entomol 44(1-3):48
22 Apr 1969 420 L84PA
Aleyrodidae, Insect physiology, Molting (insects).

9373-69

9373-69

THE NEURAL CONTROL OF CERCAL GROOMING BEHAVIOUR IN THE COCKROACH, PERIPLANETA AMERICANA.

R C Eaton R D Farley

J Insect Physiol 15(6):1047-1065 REF

Jun 1969 421 J825

Insect behavior, Insect physiology, Nervous system, Periplaneta americana.

9374-69

ON THE ACTION OF BRACON VENOM.

J S Edwards T J Sernka

Toxicon 6(4):303-305

May 1969 391.8 T66

Bracon, Galleria mellonella, Insect respiration, Metamorphosis, Paralysis, Toxicology, Venoms.

9375-69

THE DISTRIBUTION OF BENTHIC INVERTEBRATES ON SUBSTRATA IN FAST-FLOWING STREAMS.

H J Eglishaw

J Anim Ecol 38(1):19-33 REF

Feb 1969 410 J826

Aquatic insects, Habitats, Insect ecology, Insect nutrition, Marine biology, Streams.

9376-69

VITAMIN REQUIREMENTS IN A SIEVE TUBE SUCKING APHID, NEOMYZUS CIRCUMFLEXUS BUCKT. (HOMOPTERA, INSECTA). (GE)

P Ehrardt

Z Vergleichende Physiol 60(4):416-426 REF

30 Sep 1968 444.8 Z3

Aphididae, Avitaminosis, Insect nutrition, Insect physiology, Insect rearing, Neomyzus circumflexus, Vitamins. English summary.

9377-69

TAXONOMIC COMPOSITION, TROPHIC STRUCTURE AND SEASONAL OCCURRENCE IN A GRASSLAND INSECT COMMUNITY.

F C Evans W W Murdoch

J Anim Ecol 37(1):259-273 REF

Feb 1968 410 J826

Grassland communities, Insect ecology, Insect nutrition, Insect taxonomy, Surveys.

9378-69

METHODS TO INVESTIGATE THE POPULATION DYNAMICS OF APHIDS AND APHID PARASITES IN ORCHARDS.

H H Evenhuis

Entomophaga 7(3):215-220

1962 421 EN835

Aphelinus mali, Aphididae, Aphis pomi, Dysaphis plantaginea, Eriosoma lanigerum, Insect populations, Methodology, Orchards, Parasitism, Rhopalosiphum insertum. German summary. report from First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

9379-69

SEASONAL DISTRIBUTION OF SOME ARTHROPOD PARASITES OF RABBITS IN LOUISIANA.

J E Farlow E C Burns J D Newsom

J Med Entomol 6(2):172-174

May 1969 421 J828

Amblyomma americanum, Cediopsylla simplex, Cuterebra, Dermacentor variabilis, Haemaphysalis leporispalustris, Rabbits.

9380-69

MORPHOLOGY OF HEMOCYTES OF RHYNCHOSCIARA ANGELAE NONATO AND PAVAN, 1951 (DIPTERA, MYCETOPHILIDAE). (POR)

M D G Ferri M Tokumaru T U Worsmann

Rev Brasil Biol 28(3):225-234 REF

Sep 1968 442.8 R326

Blood cells, Insect morphology, Insect physiology, Mycetophilidae, Rhynchosciara. English summary.

9381-69

THE INFLUENCE OF LIGHT AND TEMPERATURE ON THE PUPAL EMERGENCE ACTIVITY OF CHIRONOMUS NUDITARSIS STR. (GE)

J Fischer S Rosin

Rev Suisse Zool 75(3):538-549 REF

Sep 1968 410 R324

Aquatic insects, Chironomus nuditarsis, Diurnal rhythm, Emergence, Insect ecology, Insect physiology, Light, Pupae, Temperature, Water. English and French summaries.

9382-69

A NOTABLE INTERGENERIC MATING (LYCAENIDAE).

D Frechin

Lepidopterists Soc J 23(2):115

29 May 1969 421 L554

Lycenidae, Sex behavior.

9383-69

STUDIES ON THE ECOLOGY OF ADULT TIPULIDAE (DIPTERA) IN SOUTHERN ENGLAND.

B E Freeman

J Anim Ecol 37(2):339-362 REF

Jun 1968 410 J826

Drying, Imagos, Insect ecology, Population, Tipulidae.

9384-69

MIGRATION OF LAPHYGMA EXIGUA HUBNER (LEPIDOPTERA: NOCTUIDAE) TO THE BRITISH ISLES IN RELATION TO LARGE-SCALE WEATHER SYSTEMS.

R A French

J Anim Ecol 38(1):199-210 MAP REF

Feb 1969 410 J826

Insect migration, Spodoptera exigua, Weather, Zoogeography.

9385-69

PARASITIC CHANGING IN HOSTS AND ITS ECOLOGICAL IMPORTANCE FOR THE PARASITE. (GE)

E Fuhrer

Entomophaga 13(3):241-250

1968 421 EN835

Insect ecology, Insect physiology, Parasitism, Predaceous insects. English abstract.

9386-69

INSECT PARASITES OF THE INSECT GALLS IN EUROPE. (GE)

L Fulmek

Beitr Entomol 18(7-8):719-952 REF

1968 421 B392

Coleoptera, Diptera, Gall-making insects, Hymenoptera, Insect taxonomy, Lepidoptera, Parasitic insects, Surveys, Thysanoptera, Zoogeography. English and Russian abstracts.

9387-69

PARASITIZATION OF WORKER BUMBLE BEES OF MISSISSIPPI BY PHYSOCEPHALA LARVAE.

R Fulton W H Norman

Miss Acad Sci J 13:125

1967 500 M697

Abdomen, Bombus, Larvae, Ovation, Parasitic insects, Physocephala.

9388-69

RESEARCH ON THE ECOLOGICAL SYSTEM OF THE FOREST. SERIES B: THE MIXED, CALCICOLOUS OAKS OF VIRELLESBLAIMENT. CONTRIBUTION NO. 18. COLEOPTERA CAUGHT IN 1965 AND 1966. (FR)

C Gaspar

Bull Recherch Agron Gembloux (N s) 3(1)76-82

1968 S5.B8

Carabidae, Coleoptera, Forests, Insect ecology, Insect taxonomy, Insect traps, Quercus.

9389-69

TESTS ON THE CONTROL OF PRAYS CITRI MILL. BY MEANS OF BACILLUS THURINGIENSIS. (PRELIMINARY REPORT). (IT)

G Giammanco M Militello G Mineo

Palermo Univ Ist Entomol Agr Boll

6,1965/1966:17-27

15 Mar 1967 423.92 P17

Bacillus thuringiensis, Bacteria, Biological control (insects), Citrus, Insect diseases, Insect pests, Larvae, Mortality, Prays citri, Yponomeutidae. English and French summaries.

9390-69

THE COCCID SACCHARICOCCUS SACCHARI (COCKERELL) (HEMIPTERA PSEUDOCOCCIDAE) OF SUGAR CANE IN MOZAMBIQUE. (POR)

M L Goncalves

Agron Mocambicana 2(1 JAN-MAR):57-64 REF

1968 S15.A3

Economic entomology, Hemiptera, Insect morphology, Insect pests, Larvae, Nymphs, Pseudococcidae, Saccharicoccus sacchari, Sugarcane. English and French summaries.

9391-69

SOME UNUSUAL CELL INCLUSIONS IN THE MID-GUT OF A MOTH BUG, GYARINA NIGRITARSIS KARSCH (HOMOPTERA: FLATIDAE), AND THEIR POSSIBLE SIGNIFICANCE IN NUTRITION.

A J P Goodchild

Roy Entomol Soc London Proc Ser A Gen Entomol

44(1-3):11-16

22 Apr 1969 420 L84PA

Flatidae, Homoptera, Insect histology, Intestines.

9392-69

NOTES ON PARASITES OF IMMATURE TABANIDAE (DIPTERA) AND DESCRIPTIONS OF THE LARVA AND PUPARIUM OF CARINOSILLUS PRAVUS (DIPTERA: TACHINIDAE).

J T Goodwin

Tenn Acad Sci J 43(4):107-109

Oct 1968 500 T25A

Carinosillus pravius, Insect behavior, Insect morphology, Larvae, Parasitic insects, Pupae, Tabanidae, Tachinidae.

9393-69

ULTRASTRUCTURE OF THE TROPHIC BANDS IN THE OVARIES OF SEVERAL HOMOPTERAN AUCHENORRHYNCHA. (FR)

C Hamon R Folliot

Acad Sci Compt Rend Ser D Sci Nat 268(3, 1ST

SEMESTER):577-580

20 Jan 1969 505 P21

Auchenorrhyncha, Cicadellidae, Cicadidae, Insect cytology, Insect morphology, Ovaries, Ribosomes, Ultraplast.

9394-69

PROPAGATION OF A CERAMBYCID BORER ON A MERIDIC DIET.

K L S Harley B W Willson

Can J Zool 46(6):1265-1266

Nov 1968 470 C16D

Biological control (insects), Cerambycidae, Insect physiology, Insect rearing, Lantana camara, Larvae, Meridic diets, Plagiohammus spinipennis.

9395-69

THE APPRAISAL OF DELAYED AND DIRECT DENSITY-INDEPENDENCE.

M P Hassell C B Huffaker

Can Entomol 101(4):353-361

Apr 1969 421 C16

Insect ecology, Models, Population, Statistical analysis.

9396-69

NOCTURNAL COPULATION OF RHOPALOCERA.

J R Heitzman

Lepidopterists Soc J 23(2):105-106

29 May 1969 421 L554

Butterflies, Insect behavior, Sex behavior, Time.

- 9397-69
POSTEMBRYONIC DEVELOPMENT OF THE MALE AND FEMALE REPRODUCTIVE SYSTEMS OF FRANKLINIELLA FUSCA (HINDS) (THRIPIDAE) AND HAPLOTHIRIPS VERBASCI (OSBORN) (PHILAEOTHIRIPIDAE) (THYSANOPTERA).
 B S Heming
Diss Abstr Sect B 29(3):1052B
 Sep 1968 Z5055.U49D53
 Frankliniella fusca, Haplothrips verbasci, Insect anatomy, Insect morphology, Philaeothripidae, Reproductive organs, Sex behavior, Spermatophores, Thripidae.
- 9398-69
LEGAL ASPECTS OF CROP SPRAYING.
 J Henderson
Ill Univ Ext Circ (990):8P
 Nov 1969 275.29 IL62C
 Crops, D, 2,4-, Insecticide residues, Licenses, Phenoxy acid compounds, Poisons, Spraying.
- 9399-69
THE COMPARATIVE MORPHOLOGY OF THE DORSAL VESSEL AND ACCESSORY STRUCTURES OF THE LEPIDOPTERA AND ITS PHYLOGENETIC IMPLICATIONS.
 J H Hessel
Entomol Soc Amer Ann 62(2):353-370 REF
 Mar 1969 420 EN82
 Dorsal vessel, Insect evolution, Insect morphology, Insect taxonomy, Lepidoptera.
- 9400-69
AN ELECTRON MICROSCOPE STUDY OF THE DIFFRACTION GRATINGS OF SOME CARABID BEETLES.
 H E Hinton D F Gibbs
J Insect Physiol 15(6):959-962
 Jun 1969 421 J825
 Carabidae, Electron microscopy, Insect morphology, Light.
- 9401-69
EFFECT OF MITOMYCIN-C ON THE DEVELOPMENT OF THE EYE-DISKS IN DROSOPHILA MELANOGASTER.
 Y Hirose S Kaji
Experientia 25(2):199-200
 15 Feb 1969 475 EX7
 Autoradiography, Drosophila melanogaster, Eyes, Insect biochemistry, Insect physiology, Mitomycin-C, Morphology.
- 9402-69
THE ACTION OF THE ENDOCRINE SYSTEM AND THE OVARIES ON THE HEMOGRAM OF LOCUSTA MIGRATORIA L. (ORTHOPTERA). THE ROLE OF THE CORPORA CARDIACA. (FR)
 J A Hoffmann M Cazal
Acad Sci Compt Rend Ser D Sci Nat 268(16, 1ST SEMESTER):2113-2115
 21 Apr 1969 505 P21
 Corpora cardiaca, Endocrine glands, Hemograms, Insect biochemistry, Insect physiology, Locusta migratoria, Ovaries, Secretion.
- 9403-69
SELECTION FOR GENERATION TIME IN DROSOPHILA MELANOGASTER.
 W Hopper W St. Amand
Miss Acad Sci J 13:143
 1967 500 M697
 Diurnal rhythm, Drosophila melanogaster, Insect mating, Insect physiology, Reproduction, Temperature.
- 9404-69
THE DIEL PATTERN OF FEEDING ACTIVITY OF LARVAL PSEUDOSARCOPHAGA AFFINIS (DIPTERA: SARCOPHAGIDAE).
 H L House
Can Entomol 101(4):409-415 REF
 Apr 1969 421 C16
 Food habits, Insect behavior, Larvae, Photoperiodism, Pseudosarcophaga affinis.
- 9405-69
SOME ASPECTS OF ASSESSING EFFICIENCY OF NATURAL ENEMIES.
 C B Huffaker C E Kennett
Can Entomol 101(4):425-447 REF
 Apr 1969 421 C16
 Biological control, Insect ecology, Mites, Models, Parasites, Population, Predators, Reviews.
- 9406-69
STUDIES ON LONGEVITY OF ADULT ERETMAPODITES CHRYSOGASTER, AEDES TOGOI AND AEDES (STEGOMYIA) ALBOPIC-TUS FEMALES DIPTERA: CULICIDAE).
 A R Hylton
J Med Entomol 6(2):147-149
 May 1969 421 J828
 Aedes, Culicidae, Insect biology, Longevity.
- 9407-69
ENTOMOLOGICAL AND GENERAL BIOLOGICAL INTEREST IN A COMPARATIVE ENDOCRINOLOGY OF SOCIAL INSECTS. (ABSTRACT). (IT)
 C Jucci
Accad Naz Ital Entomol Atti 8:23-27
 1960 420 AC2
 Chromatography, Endocrine glands, Endocrinology, Entomology, Glands (insects), Hormones, Insect biology, Social insects.
- 9408-69
ACOUSTIC SIGNALLING AND ITS POSSIBLE RELATIONSHIP TO ASSEMBLING AND NAVIGATION IN THE MOTH, HELIOTHIS ZEA.
 R E Kay
J Insect Physiol 15(6):989-1001 REF
 Jun 1969 421 J825
 Heliopsis zea, Insect behavior, Sense organs, Stridulation, Ultrasonic waves.
- 9409-69
INVESTIGATIONS OF THE WING MECHANISM OF DERMAPTERA. (GE)
 W Kleinow
Munich Univ Naturwiss Fak (Inaug-Diss) (96):363-416 REF
 1965 509 M923
 Dermaptera, Forficula auricularia, Insect anatomy, Insect flight, Insect morphology, Labia minora, Wings (insects). English summary.
 Reprint from: Zeitschrift fur Morphologie und Okologie der Tiere 56(4):363-416, 1966.
- 9410-69
A PHOTOMETRIC TECHNIQUE FOR QUANTITATIVE EVALUATION OF FEEDING PREFERENCES OF PHYTOPHAGOUS INSECTS.
 M Kogan R D Goeden
Entomol Soc Amer Ann 62(2):319-322
 Mar 1969 420 EN82
 Food habits, Methodology, Photometry, Phytophagous insects.
- 9411-69
THE INTESTINE OF A HIGHER TERMITE (MICROCROTREMES EDENTATUS, WASMAN, AMITERMITINAE). HISTOPHYSIOLOGY AND SYMBIOTIC BACTERIAL FLORA. (FR)
 J Kovoov
Bull Biol France Belg 102(1):45-84 REF
 1968 473 B87
 Bacteria, Histochemistry, Insect anatomy, Insect histology, Insect physiology, Intestines, Microcrotremes edentatus, Termites. English summary.
- 9412-69
DESCRIPTION OF NEW SOCIAL PARASITES OF LEPTOTHORAX ACERVORUM F. (FORMICIDAE). (GE)
 H Kutter
Schweiz Entomol Ges Mitt 40(1/2):78-91
 20 Jul 1967 420 SW6
 Formicidae, Insect morphology, Insect mutation, Insect taxonomy, Leptothorax acervorum, Parasitism, Social insects.
- 9413-69
THE NEUROSECRETORY CELLS OF THE BRAIN OF AEDES AEGYPTI IN RELATION TO LARVAL MOLT, METAMORPHOSIS AND OVARIAN DEVELOPMENT.
 J R Larson A Broadbent
Amer Microscop Soc Trans 87(4):395-410 REF
 Oct 1968 440.9 AM33
 Aedes aegypti, Brain, Insect morphology, Insect physiology, Larvae, Metamorphosis, Molting (insects), Nerves, Neurosecretion.
- 9414-69
ON THE WEIGHT DECLINE OF EGGS IN ONE OVIPOSITION BATCH OF BOMBYX MORI. (FR)
 J-m Legay L Baud
Acad Sci Compt Rend Ser D Sci Nat 268(6, 1ST SEMESTER):970-973
 10 Feb 1969 505 P21
 Bombyx mori, Insect eggs, Oviposition, Weight.
- 9415-69
REPRODUCTIVE ISOLATION AND SIZE VARIATION IN THE MUSCIDIFURAX RAPTOR COMPLEX.
 E F Legner
Entomol Soc Amer Ann 62(2):382-385 REF
 Mar 1969 420 EN82
 Insect evolution, Insect physiology, Muscidifurax raptor, Pteromalidae, Sex behavior, Zoogeography.
- 9416-69
THE EFFECT OF VARYING THE INITIAL NUMBERS ON THE OUTCOME OF COMPETITION BETWEEN TWO TRIBOLIUM SPECIES.
 P H Leslie T Park D B Mertz
J Anim Ecol 37(1):9-23 REF
 Feb 1968 410 J826
 Competition, Insect ecology, Insect populations, Tribolium.
- 9417-69
BIOLOGICAL OBSERVATIONS ON ZEUSERA PYRINA L. IN SICILY. (LEP. COSSIDAE). (IT)
 G Liotta I Giuffrida
Palermo Univ Ist Entomol Agr Boll 6,1965/1966:29-60 REF
 15 Mar 1967 423.92 P17
 Biological control (insects), Ceratonia siliqua, Chemical control (insects), Cossidae, Hymenoptera, Insect biology, Insect pests, Insecticides, Kaki persimmons, Larvae, Organophosphorus compounds, Parasitic insects, Parathion, Zeusera pyrina, Zoogeography. English, French and German summaries.
- 9418-69
A CONTROL UNIT FOR THE AUTOMATIC OPERATION OF A PORTABLE 115 VOLT 60 CYCLE A.C. POWER PLANT FOR INSECT LIGHT TRAPS.
 R B Lowe
Can Entomol 101(4):422-424
 Apr 1969 421 C16
 Insect collecting equipment, Light traps.
- 9419-69
HISTOLOGICAL DATA ON THE CUTICULAR ACIDIC MUCOPOLYSACCHARIDES IN ORTHOPTERA. (FR)
 R Martoja A-m Cantacuzene
Acad Sci Compt Rend Ser D Sci Nat 268(4, 1ST SEMESTER):697-700
 27 Jan 1969 505 P21
 Cuticle, Insect histology, Insect morphology, Orthoptera, Polysaccharides.
- 9420-69
NOTE ON A PARASITIC ASPERGILLUS ON LARVAE OF AMSACTA MOOREI BUTLER.
 Y K Mathur B L Mathur
China Plant Protect Bull 16(4):66
 Aug 1968 464.9 C47

Amsacta moorei, *Aspergillus fumigatus*, Entomogenous fungi, Insect diseases, Larvae.

9421-69

PRELIMINARY STUDIES ON THE EFFECTS OF GAMMA IRRADIATION OF EGGS AND ADULTS OF THE SOUTHERN GREEN STINK BUG, *NEZARA VIRIDULA* (L.).

R Mau W C Mitchell M Anwar
Hawaii Entomol Soc Proc 19(3):415-417
Jun 1967 420 H312

Gamma rays, Imagoes, Insect eggs, Insect physiology, *Nezara viridula*, Radiation.

9422-69

AN OBSERVATION ON THE ILEUM OF THE EUROPEAN CORN BORER, *OSTRINIA NUBILALIS*.

D G R McLeod W G Graham C L Hannay
J Insect Physiol 15(6):927-929
Jun 1969 421 J825

Electron microscopy, Gastrointestinal system, Insect morphology, Insect physiology, Lysosomes, *Ostrinia nubilalis*.

Preliminary work with the electron microscope on the ileum of the corn borer has shown that the paraldehyde-fuchsin-positive granules associated with fluorescence are lysosomes.

9423-69

ESTERASE INHIBITION IN MALATHION POISONING IN THE DESERT LOCUST, *SCHISTOCERCA GREGARIA* FORSKAL.

K N Mehrotra A Phokela P Saxena
Indian J Exp Biol 7(2):110-113 REF
Apr 1969 442.8 IN2

Esterases, Insect biochemistry, Insecticides, Malathion, Organophosphorus compounds, *Schistocerca gregaria*, Toxicology.

9424-69

METABOLISM OF 2,2-DIMETHYL-2,3-DIHYDROBENZOFURANYL-7-NMETHYLCARBAMATE (FURADAN) IN PLANTS, INSECTS, AND MAMMALS.

R L Metcalf T R Fukuto C Collins K Borck S A El-Aziz R Munoz 6

J Agr Food Chem 16(2,MAR-APR):300-311 REF
1968 381 J8223

Animal physiology, *Aphis gossypii*, *Buceulatrix thurheriella*, Carbamates, Carhofuran, Estigmene aceris, Insect physiology, Insecticides, Metabolism, Mice, Phenols, Plant physiology, *Tetranychus cinaharinus*.

9425-69

NEW PREDACEOUS INSECTS OF PRAY CITRUS MILL. (CITRUS FLOWER MOTH) FOUND IN SICILY. (IT)

G Mineo
Palermo Univ Ist Entomol Agr Boll
6,1965/1966:1-6

15 Mar 1967 423.92 P17

Balance of nature, Citrus, Hymenoptera, Parasitic insects, Prays citri, Yponomeutidae, Zoogeography. English and French summaries.

9426-69

ON *CRYPTOLAEMUS MONTROUZIERI* MULS. (MORPHO-BIOLOGICAL OBSERVATIONS). (IT)

G Mineo
Palermo Univ Ist Entomol Agr Boll
6,1965/1966:99-143 REF

15 Mar 1967 423.92 P17

Aphididae, Coccinellidae, *Cryptolaemus montrouzieri*, Insect biology, Insect breeding, Insect morphology, Potatoes, *Pseudococcus adonidum*, *Pseudococcus citri*, Winter squash, Zoogeography. English and French summaries.

9427-69

FUNCTIONAL CHARACTERISTICS OF THE ALIMENTARY CANAL OF THE COCKROACH, *BLABERUS CRANIIFER* BURMEISTER.

W W D Modder
Ceylon J Sci Biol Sci 7(1/2):1-8 REF
Oct 1967 475 C33

Bacteria, *Blaberus craniifer*, Blattidae, Carbohydrates, Digestion, Gastrointestinal system, Hydrogen-ion concentration, Microorganisms, Nymphs.

9428-69

THE MODE OF FEEDING IN THE SILVERFISH *ACROTETSA COLLARIS* (F.) (THYSANURA; LEPISMATIDAE).

W W D Modder
Entomologist (London) 102(1273):129-132
Jun 1969 421 EN8

Acrotetsa collaris, Food habits, Insect behavior, Insect morphology, Lepismatidae, Mouth parts.

9429-69

ARTIFICIAL BIOLOGICAL CONTROL OF THE OLIVE FRUIT FLY (*DACUS OLEAE* GMEL.) BY MEANS OF *OPIUS CONCOLOR* SZ. *SICULUS MON.* ON THE LIPARI ISLANDS (SICILY). JULY-SEPTEMBER 1965. (IT)

S Monastero P Delanoue
Palermo Univ Ist Entomol Agr Boll 6,
1965/1966:61-97 MAP

15 Mar 1967 423.92 P17

Biological control (insects), *Ceratitis capitata*, Climate, *Dacus oleae*, Insect dissemination, Insect eggs, *Opius concolor*, Parasitism, Predaceous insects, Pupae, Tables (data), Zoogeography.

9430-69

ARTIFICIAL BIOLOGICAL CONTROL OF *DACUS OLEAE* GMEL. BY MEANS OF *OPIUS CONCOLOR* SZEP. *SICULUS MON.* (FR)

S Monastero
Palermo Univ Ist Entomol Agr Boll
6,1965/1966:7-16

15 Mar 1967 423.92 P17

Biological control (insects), *Dacus oleae*, Insect eggs, *Opius concolor*, Predaceous insects, Zoogeography.

9431-69

A LARGE EXPERIMENT ON ARTIFICIAL BIOLOGICAL CONTROL OF THE OLIVE FRUIT FLY (*DACUS OLEAE* G.) BY MEANS OF *OPIUS* C. SZ. *SICULUS MON.* IN SICILY. (PALERMO JULY-OCTOBER 1966). (IT)

S Monastero P Delanoue
Palermo Univ Ist Entomol Agr Boll
6,1965/1966:145-194 MAP

15 Mar 1967 423.92 P17

Biological control (insects), *Dacus oleae*, Insect pests, Larvae, Olives, *Opius concolor*, Parasitic insects, Parasitism, Zoogeography. English and French summaries.

9432-69

THE LABORATORY BREEDING AND EMBRYONIC DEVELOPMENT OF *ORTHIPPUS BRUNNEUS* THUNBERG (ORTHOPTERA: ACRIDIDAE).

F Moriarty
Roy Entomol Soc London Proc Ser A Gen Entomol
44(1-3):25-34

22 Apr 1969 420 L84PA

Acrididae, Humidity, Insect biology, Insect eggs, Insect nutrition, Insect rearing, Temperature.

9433-69

LOGARITHMIC REGRESSION AS AN INDEX OF RESPONSES TO POPULATION DENSITY.

R F Morris T Royama
Can Entomol 101(4):361-364
Apr 1969 421 C16

Forest insects, Insect ecology, Mathematical analysis, Models, Parasitism, Population.

9434-69

A QUANTITATIVE STUDY OF FOOD CONSUMPTION AND GROWTH OF *PODISUS MACULIVENTRIS*. (HEMIPTERA: PEN-TATOMIDAE).

M K Mukerji E J LeRoux
Can Entomol 101(4):387-403 REF
Apr 1969 421 C16

Food consumption, Insect biology, Insect physiology, *Podisus maculiventris*, Quantitative analysis.

9435-69

ECOLOGICAL OBSERVATIONS ON THE SPECIES *SMICROMYRME SEPTENTRIONALIS* HFFR. (HYM. MUTILLIDAE). (FR)

C G Nagy
Acta Ent Bohemoslov 65(5):375-378
20 Sep 1968 420 C33

Insect behavior, Insect ecology, Insect taxonomy, Mutillidae, *Smicromyrme septentrionalis*, Zoogeography. English and Czech summaries

9436-69

COMPARISON OF SYSTEMIC INSECTICIDES BY DIP TREATMENTS FOR CONTROL OF THE COTTONWOOD LEAF BEETLE.

W W Neel
J Econ Entomol 62(1):265-267
17 Feb 1969 421 J822

Chemical control (insects), *Chrysomela scripta*, Dipping, Insect pests, Insecticides, *Populus deltoides*, *Saperda calcarata*. 8 insecticides were tested.

9437-69

BIOTIC FACTORS INFLUENCING POPULATIONS OF *DACUS DORSALIS* IN HAWAII.

I M Newell F H Haramoto
Hawaii Entomol Soc Proc 20(1):81-139
Jun 1968 420 H312

Biological control (insects), *Dacus dorsalis*, Insect biology, Insect ecology, Insect rearing, Mortality, Population.

9438-69

PSALLUS AMBIGUUS (FALL.) (HETEROPTERA, MIRIDAE). PART II, NUTRITION AND ROLE IN THE BIOCENOSIS OF ORCHARDS. (POL)

E Niemczyk
Pol Pismo Entomol 38(2):387-416 REF
1968 421 P76

Apples, Biocenosis, Braconidae, Insect physiology, Insect rearing, Larvae, Miridae, Orchards, Predaceous insects, *Psallus ambiguus*, Temperature. English summary.

9439-69

STIMULATION OF TWO INTERACTING SPECIES OF *TRIBOLIUM*.

B S Niven
Physiol Zool 42(2):248-255
Apr 1969 410 P56

Insect behavior, Insect rearing, *Tribolium castaneum*, *Tribolium confusum*.

9440-69

BIONOMICS OF THE JUNIPER WEBWORM.

G L Nordin J E Appleby
Entomol Soc Amer Ann 62(2):287-292
Mar 1969 420 EN82

Apanteles, *Dichomeris marginella*, Insect biology, Insect ecology, *Itoplectis conquisitor*, Juniperus, Natural control (insects).

9441-69

THE DETERMINATION OF LARVAL INSTARS OF THE RICE WEEVIL *SITOPHILUS ORYZAE* (L.) (COLEOPTERA: CURCULIONIDAE) IN WHEAT.

A E O'Donnell
Ark Acad Sci Proc 21:36-38
1967 500 AR42

Curculionidae, Insect biology, Insect physiology, Larvae, Measurement, *Sitophilus oryzae*, Wheat.

9442-69

THE BIOLOGY AND MORPHOLOGY OF *ERIOPHYES EMARGINATAE*, A *PRUNUS* FINGER GALL MITE, AND NOTES ON *E. PRUNIDEMISSAE*.

G N Oldfield
Entomol Soc Amer Ann 62(2):269-277
Mar 1969 420 EN82

Eriophyidae, Insect biology, Insect morphology, Population, *Prunus virginiana*.

- 9443-69
MECHANISMS OF ORIENTATION IN THE LEAF-CUTTER BEE MEGACHILE ROTUNDATA (FABRICIUS).
C E Osgood
Diss Abstr Sect B 29(3):1054B
Sep 1968 Z5055.U49D53
Alfalfa, Attractants, Color, Insect behavior, Insect migration, Megachile rotundata, Pollination, Research.
- 9444-69
EXPERIMENTAL STUDIES ON THE REGRESSION OF THE VENTRAL GLANDS OF THE EARWIG, ANISOLABIS MARITIMA, DURING METAMORPHOSIS.
K Ozeki
Tokyo Univ Coll Gen Educ Sci Pap 18(2):199-219
Dec 1968 330.9 T572
Anisolabis, Glands (insects), Insect physiology, Metamorphosis.
- 9445-69
THE IMPORTANCE OF THE TRANSPLANTATION OF FORMICA LUGUBRIS IN ITALY. (IT)
M Pavan
Accad Naz Ital Entomol Atti 8:102-111 MAP
1960 420 AC2
Biological control (insects), Forests, Formica rufa, Formicidae, Insect dissemination, Insect pests, Myrmecocystus lugubris, Population, Zoogeography. French summary.
- 9446-69
A POPULATION STUDY OF CIS BILAMEL-LATUS WOOD (COLEOPTERA, CIIDAE).
K Pavior-Smith
J Anim Ecol 37(1):205-228 REF
Feb 1968 410 J826
Cisidae, Habitats, Insect biology, Polyporus hetulinus, Population.
- 9447-69
ALKYL AND ARYL 4-(METHYLCARBAMOYLOXY) CARBANILATES. PATENT 3,450,745.
L K Payne M H J Weiden
Us Patent Office Offic Gaz 863(3):891
17 Jun 1969 156.65 OF2
Carbanilates, Insect pests, Lepidoptera, Patents, Systemic insecticides.
- 9448-69
ARTHROPOD PREDATORS OF IMMATURE DIPTERA DEVELOPING IN POULTRY DROPPINGS IN NORTHERN CALIFORNIA. PART II. LABORATORY STUDIES ON FEEDING BEHAVIOR AND PREDATION POTENTIAL OF SELECTED SPECIES.
J H Peck
J Med Entomol 6(2):168-171 REF
May 1969 421 J828
Fannia, Histeridae, Insect behavior, Insect feeding, Musca domestica, Predaceous insects, Staphylinidae.
- 9449-69
DIAPAUSE AND REPRODUCTION IN NEBRIA BREVICOLLIS (F.) (COLEOPTERA: CARABIDAE).
M M Penney
J Anim Ecol 38(1):219-233 REF
Feb 1969 410 J826
Carabidae, Insect physiology, Population, Reproduction.
- 9450-69
A STUDY OF THE CASHEW BORER, MECOCORYNUS LORIPES CHES. (COLEOPTERA, CURCULIONIDAE) I. THE ANATOMY OF THE PRINCIPAL ORGANS. (POR)
M F V Pinheiro
Agron Mocambicana 2(1 JAN-MAR):47-55
1968 S15.A3
Curculionidae, Insect anatomy, Larvae, Mecocorynus loripes. English and French summaries. to be continued.
- 9451-69
A LIGHTWEIGHT COLLAPSIBLE BAIT TRAP FOR LEPIDOPTERA.
A P Platt
Lepidopterists Soc J 23(2):97-101
29 May 1969 421 L554
Insect collecting equipment, Insect traps, Lepidoptera, Methodology.
- 9452-69
METABOLISM OF INSECTICIDES. MICROSYNTHESIS OF OF 14C-BETADIHROHEPTACHCOR.
N H Poonawalla F Korte
J Agr Food Chem 16(1 JAN-FEB):13-14 REF
1968 381 J8223
Biochemistry, Carbon isotopes, Dihydroheptachlor, beta-, Insecticides, Insects, Mammals, Metabolism, Synthesis.
- 9453-69
THE EFFECT OF CULTURAL MEASURES ON THE POPULATION DENSITY OF HARMFUL AND BENEFICIAL ORGANISMS IN ORCHARDS.
A Post
Entomophaga 7(3):257-262
1962 421 EN835
Aphis pomi, Brevipalpus oudmansi, Bryobia rubroculus, Cultural control (insects), Eotetranychus pomi, Eriosoma lanigerum, Insect populations, Orchards, Panonychus ulmi, Phytophagous mites. German summary. report from First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.
- 9454-69
FOOD PREFERENCE AS A FACTOR IN DISTRIBUTION AND ABUNDANCE OF PHOETALIOTES NEBRASCENSIS.
K P Pruess
Entomol Soc Amer Ann 62(2):323-327
Mar 1969 420 EN82
Acrididae, Food habits, Insect ecology, Population, Zoogeography.
- 9455-69
PRELIMINARY OBSERVATIONS ON THE BIOLOGY OF AMBLYSEIUS TARDI LOMB. (ACARINA-PHYTOSEIIDAE) A PREDATOR OF TETRANYCHUS URTICAE KOCH. (IT)
S Ragusa
Palermo Univ Ist Entomol Agr Boll 6,1965/1966:199-206 REF
15 Mar 1967 423.92 P17
Amblyseius tardi, Castorbeans, Experimental insects, Insect biology, Insect rearing, Mites, Phytoseiidae, Predaceous insects, Tetranychus urticae, Zoogeography. English and French summaries.
- 9456-69
FACTOR ANALYSIS AS A MULTIVARIATE STATISTICAL METHOD IN THE STUDY OF THE GROWTH PATTERN OF THE ANTENNAE OF GERRIS FLUVIORUM F. (HEM. GERRIDAE).
B Raja Rao M L Garg
Growth 31(4):331-343 REF
Dec 1967 442.8 G91
Antennae, Factor analysis, Gerridae, Growth factors, Insect biology, Insect physiology, Statistical analysis.
- 9457-69
THE BROWN RECLUSE SPIDER AND LOXOSCELIUM IN TENNESSEE.
H B Reed
Tenn Acad Sci J 43(4):110-114 MAP REF
Oct 1968 500 T25A
Human diseases, Insect geography, Insect morphology, Loxosceles reclusa, Surveys, Venoms.
- 9458-69
BINOMICS OF ENOCLERUS BARRI (COLEOPTERA: CLERIDAE).
R E Rice
Can Entomol 101(4):382-386 REF
- Apr 1969 421 C16
Cleridae, Insect biology, Insect rearing, Zoogeography.
- 9459-69
THE FUNDAMENTAL SCHEMA OF OOGENESIS IN THE FIREBRAT LEPISMODES INQUILINUS (THYSANURA, LEPISMATIDAE) AND ITS PERIODISATION IN CONNECTION WITH IMAGINAL MOULTING CYCLES.
E B Rohdendorf
Acta Ent Bohemoslov 65(5):341-348 REF
20 Sep 1968 420 C33
Insect biology, Insect physiology, Larvae, Lepismatidae, Lepismodes, Molting (insects), Oogenesis. Czech summary
- 9460-69
THE MYOBLASTIC MASSES AND NEURAL TISSUE ASSOCIATED WITH THE PROVENTRICULUS OF LARVAE OF AEDES TRISERIATUS, A. AEGYPTI, AND ANOPHELES QUADRIMACULATUS.
W S Romoser C E Venard
Entomol Soc Amer Ann 62(2):345-348
Mar 1969 420 EN82
Aedes aegypti, Aedes triseriatus, Anopheles quadrimaculatus, Head, Insect histology, Insect morphology, Larvae, Muscles, Nervous system.
- 9461-69
ON THE TRANSPLANTATION OF ANTS OF THE GROUP FORMICA RUFA IN ITALY. (IT)
G Ronchetti
Accad Naz Ital Entomol Atti 8:218-227
1960 420 AC2
Biological control (insects), Formica rufa, Formicidae, Insect dissemination, Myrmecocystus lugubris, Population, Predaceous insects, Zoogeography. French summary.
- 9462-69
AN EPIZOOTIC OF SERRATIA MARCESCENS (ENTEROBACTERIACEAE) IN PERIPLANETA FULIGINOSA (BLATTARIA) AND A SUGGESTED METHOD FOR CONTROL.
M E Rueger T A Olson
J Med Entomol 6(2):191
May 1969 421 J828
Drug therapy, Insect diseases, Periplaneta fuliginosa, Serratia marcescens, Zephiran chloride.
- 9463-69
RECENTLY INTRODUCED BEETLES IN THE PACIFIC NORTHWEST.
L Russell
Coleopt Bull 22(2):62-63
Jun 1968 421 C674
Coleoptera, Insect outbreaks, Zoogeography. Lists: Bembidion lampros, Rugilus rufipes, Sepedophilus testaceum, Coccinella undecimpunctata undecimpunctata, Aphodius haemorrhoidalis, and Apion longirostre.
- 9464-69
IRIDIUM-192 AS A TAG FOR CARPENTER ANTS OF THE GENUS CAMPONOTUS (HYMENOPTERA: FORMICIDAE).
C J Sanders W F Baldwin
Can Entomol 101(4):416-422 REF
Apr 1969 421 C16
Camponotus, Formicidae, Insect nests, Maps, Radioactive tracers.
- 9465-69
HORMONAL CONTROL OF TURNOVER OF TYROSINE AND TYROSINE AND TYROSINE PHOSPHATE DURING TANNING OF THE ADULT CUTICLE IN THE FLY, SARCOPHAGA BULLATA.
M Seligman S Friedman G Fraenkel
J Insect Physiol 15(6):1085-1101 REF
Jun 1969 421 J825
Cuticle, Hormones, Insect biochemistry, Insect physiology, Radioactive tracers, Sarcophaga bullata, Tannins, Tyrosine.

9466-69

9466-69

A COMPARISON OF THE EFFECT OF DIAZINON, CHLORFENVINPHOS AND OF BAYER 37289 AGAINST THE CABBAGE FLY. (FR)

E Scutin A J Plasman P H Martens

Bull Recherc Agron Gembloux (N s)3(1):190-195

1968 S5.B8

Chemical control (insects), Chlorfenvinphos, Chortophila brassicae, Diazinon, Ethyl O-2,4,5-trichlorophenyl ethylphosphonothioate, O-, Insecticides, Pesticide residues.

9467-69

TOXICITY AND EFFECTS ON MOTOR COORDINATION OF SOME NEUROTROPIC DRUGS ON THE COCKROACH NAUPHOETA CINEREA.

G F Shambaugh

Entomol Soc Amer Ann 62(2):370-375 REF

Mar 1969 420 EN82

Drugs, Insect behavior, Insect physiology, Nauphoeta cinerea, Toxicity, Toxicology.

9468-69

THE ASSAY OF GONADOTROPIC EFFECT OF JUVENILE HORMONE ON AEDES AEGYPTI OVARIES.

B R Shivers W H Norman

Miss Acad Sci J 13:142

1967 500 M697

Aedes aegypti, Assay, Diet, Gonadotropins, Hormones, Insect physiology, Ovaries.

9469-69

MATERIALS FOR IDENTIFICATION OF PARASITES OF SOME NOXIOUS FOREST INSECTS. (POL)

Z Sierpinski

Pol Pismo Entomol 38(2):429-439

1968 421 P76

Braconidae, Chalcidoidea, Cynipoidea, Forests, Ichneumonidae, Insect identification, Insect pests, Nomenclature, Parasitic insects, Tachinidae. English summary. The author presents a list of parasites belonging to each species.

9470-69

REMARKS ON THE MORPHOLOGY OF SOME RARE PALEARCTIC OPILONIDS (OPILIONIDEA). (GE)

V Silhavy

Acta Ent Bohemoslov 65(5):397-398

20 Sep 1968 420 C33

Insect morphology, Palearctic Region, Phalangida. English and Czech summaries.

9471-69

A METHOD FOR MASS COLLECTION OF WASP VENOMS.

R P Simon A W Benton

Entomol Soc Amer Ann 62(2):277-278

Mar 1969 420 EN82

Hymenoptera, Methodology, Venoms.

9472-69

THE EFFECT OF TWO HOST SPECIES ON THE LONGEVITY AND FERTILITY OF NASONIA VITRIPENNIS.

G J C Smith D Pimentel

Entomol Soc Amer Ann 62(2):305-308 REF

Mar 1969 420 EN82

Fertility, Longevity, Musca domestica, Nasonia vitripennis, Parasitic insects, Phaenicia sericata, Population, Pteromalidae.

9473-69

THE PATTERN OF PTERIDINE ACCUMULATION IN EGGS OF PYRRHOCORIS ACCUTERUS.

R L Smith H S Forrest

J Insect Physiol 15(6):953-957

Jun 1969 421 J825

Insect biochemistry, Insect eggs, Insect physiology, Pteridine, Pyrrhocoris apterus.

The pteridines occurring in the eggs of the bug

Pyrrhocoris apterus are erythropterin, isoxanthopterin, violapterin, chrysopterin, and a new compound which appears to be a 6-substituted derivative of violapterin. The changing content of all of these compounds with development has been determined. There are no simple precursor-product relationships among them.

9474-69

FEEDING RESPONSES TO SOUND WOOD BY THE EASTERN SUBTERRANEAN TERMITE, RETICULITERMES FLAVIPES.

R V Smythe F L Carter

Entomol Soc Amer Ann 62(2):335-337

Mar 1969 420 EN82

Food habits, Insect behavior, Reticulitermes flavipes, Termites, Wood.

9475-69

CYCLIC OVARIOLE CHANGES IN ANOPHELES FARAUTI LAVERAN (DIPTERA: CULICIDAE) IN PAPUA-NEW GUINEA.

M Spencer S H Christian

Entomol Soc Australia (nsw) J 8(1):16-20

30 Jun 1969 423.92 EN84

Anopheles, Insect behavior, Insect physiology, Ovaries, Reproduction.

The ovariole picture seen on dissection of exit window-trapped, fed Anopheles farauti females differed in three areas of Papua-New Guinea. The differences are described and explained. The contraction of the pedicels after oviposition is independent of development of the oocytes after feeding; the condition of pedicels and oocytes on dissection can give clues to the behaviour patterns and house-resting habits of this species in different areas of its distribution.

9476-69

ASPECTS OF THE RELATIONSHIP BETWEEN BURYING BEETLES, NECROPHORUS SSP. AND THE MITE, POECILOCHIRUS NECROPHORI VITZ.

B P Springett

J Anim Ecol 37(2):417-424 REF

Jun 1968 410 J826

Acarina, Insect ecology, Predaceous insects, Silphidae, Surveys.

9477-69

THE IMPORTANCE OF THE INDIFFERENT ARTHROPODS IN FRUIT ORCHARDS. (GE)

H Steiner

Entomophaga 7(3):263-267

1962 421 EN835

Apples, Arthropoda, Fruit culture, Insect populations. English summary discussion of arthropods which are neither beneficial nor noxious.

9478-69

NOTES ON THE BIOLOGY AND HOSTPLANT ASSOCIATIONS OF ORNITHOPTERA PRIAMUS URVILLEANUS AND O. VICTORIAE (PAPILIONIDAE).

R Straatman

Lepidopterists Soc J 23(2):69-76 MAP

29 May 1969 421 L554

Food habits, Insect behavior, Insect biology, Oviposition, Papilionidae, Plants.

9479-69

STUDY OF A BITING MIDGE, FORCIPOMYIA (LASIOHELEA) TAIWANA (SHIRAKI) (DIPTERA: CERATOPOGONIDAE). I. DESCRIPTION OF THE COMPLETE LIFE CYCLE OF THE MIDGE REARED IN THE LABORATORY.

W K C Sun

Tunghai Univ Coll Sci Dept Biol Bull 29:10P REF

Apr 1967 442.9 T83

Ceratopogonidae, Experimental insects, Forcipomyia taiwana, Humidity, Insect anatomy, Insect biology, Insect collecting equipment, Insect eggs, Larvae, Serum, Temperature. Chinese summary.

9480-69

SOME FACTORS INFLUENCING THE REPRODUCTION AND LONGEVITY OF COCCINELLA SEPTEMPUNCTATA LINNAEUS (COLEOPTERA: COCCINELLIDAE).

R A Sundby

Entomophaga 13(3):197-202

1968 421 EN835

Coccinella septempunctata, Insect biology, Insect nutrition, Longevity, Reproduction.

9481-69

FEEDING RESPONSE OF LEPOMIS CYANELUS TO BLISTER BEETLES (MELOIDAE).

R J Tafanelli J C Bass

Southwest Natur 13(1):51-54

28 May 1968 409.6 S08

Fish, Food preferences, Lepomis, Meloidae, Tettigoniidae.

9482-69

COMPARATIVE RESPONSE OF TWO STRAINS OF CALIFORNIA RED SCALE, AONIDIELLA AURANTII, MALES TO PHEROMONE EXTRACT AND TO FEMALES OF THE RECIPROCAL STRAIN.

H Tashiro J B Beavers D Moreno

Entomol Soc Amer Ann 62(2):279-280

Mar 1969 420 EN82

Aonidiella aurantii, Insect behavior, Pheromones, Sex behavior.

9483-69

DIAPAUSE IN CHRYSOPA CARNEA (NEUROPTERA: CHRYSOPIDAE). I. EFFECT OF PHOTOPERIOD ON REPRODUCTIVITY ACTIVE ADULTS.

M J Tauber C A Tauber

Can Entomol 101(4):364-370

Apr 1969 421 C16

Chrysopa carnea, Insect physiology, Photoperiodism, Reproduction.

9484-69

BIOCHEMICAL AND PHYSIOLOGICAL STUDIES OF CERTAIN TICKS (IXODOIDEA). EXPERIMENTAL FEEDING OF ARGAS (PERSICARGAS) ARBOREUS KAISER, HOOGSTRAAL AND KOHLS (AREASIDAE) THROUGH MEMBRANES.

M S Tawfik S S Guirgis

J Med Entomol 6(2):191-195 REF

May 1969 421 J828

Argasidae, Insect nutrition, Insect rearing, Ixodoidea, Molting (insects).

9485-69

WING COLORATION OF DENDROTHRIPS ORNATUS (JABLONOWSKI). (GE)

E Titschack

Hamburg Ver Naturwiss Heimatforsch Verhanol 37:17-28 REF

15 Mar 1967 509 H17V

Bibliography, Color, Dendrothrips ornatus, Insect identification, Insect names, Insect nutrition, Insect taxonomy, Thysanoptera, Wings (insects), Zoogeography.

9486-69

LABORATORY REARING OF PEPPER WEEVILS ON ARTIFICIAL DIETS.

H H Toba A N Kishaba R Pangaldan S Riggs

J Econ Entomol 62(1):257-258

17 Feb 1969 421 J822

Anthonomus eugeni, Anthonomus grandis, Diet, Insect nutrition, Insect pests, Insect physiology, Insect rearing, Redpeppers (vegetable).

9487-69

INFLUENCE BY MITOMYCIN ON THE BRISTLE DIFFERENTIATION AND PATTERN STRUCTURE IN DROSOPHILA MELANOGASTER. (GE)

H Tobler

Experientia 25(2):213-214

15 Feb 1969 475 EX7

Drosophila melanogaster, Insect morphology, Mitomycin-C, Morphology. English abstract

- 9488-69
CAUSES OF THE VARIED BEHAVIOR OF THE BLACK BARK BEETLE OF OLIVES (HYLESINUS OLEIPERDA FABR.) IN DALMATIA. (SE)
A Tominc
Zastita Bilja 18(93/95):75-83
1967 464.8 Z1
Chemical control (insects), Climate, Hylesinus oleiperda, Insect behavior, Insect ecology, Insect nutrition, Insect pests, Insecticides, Olives, Parasitism. French summary.
- 9489-69
ESTIMATED FOOD CONSUMPTION BY THE COLORADO BEETLE (LEPTINOTARSA DECEMLINEATA SAY) UNDER CONDITIONS OF NATURAL REDUCTION.
P Trojan
*Ekol Pol Ser A (SER A)*16(18):385-394
1968 512 W263
Food consumption, Insect ecology, Insect pests, Leptinotarsa decemlineata, Potatoes. Polish summary.
- 9490-69
AN IMPROVED CAGE FOR THE MASS REARING OF THE TRICHOGRAMMA EGG PARASITES (HYMENOPTERA, CHALCIDOIDEA). (GE)
H Ulrich
Entomophaga 13(3):233-236
1968 421 EN835
Insect rearing, Laboratory equipment, Methodology, Trichogramma. English abstract.
- 9491-69
SOME CONSEQUENCES OF IRRADIATING THE GYPSY MOTH EGGS WITH RADIOACTIVE COBALT 60. (SE)
L Vasiljevic M Injac
Zastita Bilja 18(93/95):55-65 REF
1967 464.8 Z1
Cobalt isotopes, Dosage, Insect diseases, Insect eggs, Irradiation, Polyhedroses, Porthetria dispar, Radioactivity, Viruses. English summary.
- 9492-69
THE COCKROACH INTEGUMENT: PAS-POSITIVE GRANULES AND THEIR POSSIBLE RELATIONSHIP WITH PHENOL STORAGE.
J M Viles R R Mills
J Insect Physiol 15(6):1079-1083 REF
Jun 1969 421 J825
Cuticle, Insect biochemistry, Insect histology, Periplaneta americana, Phenols.
- 9493-69
BIOLOGY AND MORPHOLOGY OF GRAPHOSOMA SEMIPUNCTATA FABRICIUS, (HETEROPTERA, PENTATOMIDAE). (FR)
J Vofgcle
Awamia (20):43-101 REF
Jul 1968 24 AW1
Graphosoma scimpunctata, Heteroptera, Insect biology, Insect eggs, Insect morphology, Insect rearing, Parasitism, Pentatomidae, Zoogeography. English, Spanish and Arabic summaries. description of 9 new forms and of 30 parasites is included.
- 9494-69
THE INFLUENCE OF NUTRITION ON THE FERTILITY AND LONGEVITY OF THE BEAN WEEVIL (ACANTHOSCELIDES OBTECTUS SAY). (SE)
P Voukassovitch S Glumac
Zastita Bilja 18(93/95):11-20
1967 464.8 Z1
Acanthoscelides obtectus, Beans, Fertility, Glucose, Honey, Insect eggs, Insect nutrition, Insect physiology, Longevity, Water. French summary.
- 9495-69
POPULATION STUDIES ON TWO SPECIES OF PSYLLIDAE (HOMOPTERA, STERNORHYNCHA) ON BROOM (SAROTHAMNUS SCOPARIUS (L.) WIMMER).
R H Watmough
J Anim Ecol 37(2):283-314 REF
Jun 1968 410 J826
Cytisus, Mortality, Population, Predaceous insects, Psyllidae, Surveys.
- 9496-69
LIFE HISTORY AND HABITS OF THE SHORT-TAILED CRICKET, ANUROGRYLLUS MUTICUS IN CENTRAL LOUISIANA.
J E Weaver R A Sommers
Entomol Soc Amer Ann 62(2):337-342
Mar 1969 420 EN82
Gryllidae, Insect behavior, Insect biology, Insect morphology.
- 9497-69
THE USE OF MUSHROOM ENZYMES FOR SOFTENING INSECT CUTICLE.
M Weinstock F J D McDonald
Entomol Soc Australia (nsw) J 8(1):115-116
30 Jun 1969 423.92 EN84
Cuticle, Enzymes, Insect physiology, Mushrooms.
- 9498-69
BIOLOGY OF CHEILONEVRUS NOXIUS, WITH EMPHASIS ON HOST RELATIONSHIPS AND OVIPOSITION BEHAVIOR.
R M Weseloh
Entomol Soc Amer Ann 62(2):299-305 REF
Mar 1969 420 EN82
Coccoidea, Encyrtidae, Food habits, Insect behavior, Insect biology, Parasitic insects, Sex behavior.
- 9499-69
LIFE HISTORY AND PREDATORY IMPORTANCE OF THE STRIPED LYNX SPIDER (ARANEIDA: OXYOPIIDAE).
W H Whitcomb R Eason
Ark Acad Sci Proc 21:54-58
1967 500 AR42
Beneficial insects, Insect biology, Oxyopes salticus, Oxyopidae, Predaceous insects.
- 9500-69
POLYMORPHISM OF PHILAENUS SPUMARIUS (L.) (HOMOPTERA, CERCOPIIDAE) IN ENGLAND.
J B Whittaker
J Anim Ecol 37(1):99-111 REF
Feb 1968 410 J826
Cercopidae, Color, Philaenus spumarius, Polymorphism, Population.
- 9501-69
THE BIOLOGY OF PIPUNCULIDAE (DIPTERA) PARASITISING SOME BRITISH CERCOPIIDAE (HOMOPTERA).
J B Whittaker
Roy Entomol Soc London Proc Ser A Gen Entomol 44(1-3):17-24 REF
22 Apr 1969 420 L84PA
Cercopidae, Insect biology, Parasitic insects, Pipunculidae, Zoogeography.
- 9502-69
THE ENDOCRINE CONTROL OF PROTEIN METABOLISM AS RELATED TO REPRODUCTION IN THE FLESHFLY SARCOPHAGA BULLATA.
J L Wilkens
J Insect Physiol 15(6):1015-1024 REF
Jun 1969 421 J825
Insect metabolism, Proteins, Reproduction, Sarcophaga bullata.
- 9503-69
THE NYMPHAL LABIAL GLAND OF DAMSELFLIES (ZYGOPTERA; ODONATA).
R L Willey
Amer Microscop Soc Trans 88(3):370-379 REF
Jul 1969 440.9 AM33
Insect histology, Insect morphology, Odonata, Salivary glands (insects).
- 9504-69
THE SPIRACULAR MORPHOLOGY OF THE HAWAIIAN DAMSELFLY MEGALAGRION BLACKBURNI (ODONATA).
R L Willey
Hawaii Entomol Soc Proc 20(1):213-237 REF
Jun 1968 420 H312
Electron microscopy, Insect morphology, Odonata, Spiracles.
- 9505-69
CELLULOLYTIC ENZYME SYSTEM OF TRICHODERMA KONINGII; SEPARATION OF COMPONENTS ATTACKING NATIVE COTTON.
T M Wood
Biochem J 109(2):217-227 REF
Sep 1968 382 B52
Assay, Biochemistry, Cellulose, Cotton, Culture media, Enzymes, Fibers, Insect pests, Trichoderma koningii. Proceeding from 483rd meeting Biochemical Society held on June 20-22 at Univ. Coll. of North Wales, Bangor.
- 9506-69
ABUNDANCE AND HABITAT OF FIVE SPECIES OF COCKROACHES ON A PERMANENT MILITARY BASE.
C G Wright H C McDaniel
J Econ Entomol 62(1):277-278
17 Feb 1969 421 J822
Blatta orientalis, Blattella germanica, Habits, Insect behavior, Periplaneta americana, Periplaneta fuliginosa, Supella supellectilium, Surveys, Zoogeography.
- 9507-69
PHOTOPERIODIC INDUCTION OF DIAPAUSE IN LARVAE OF THE WINTER TICK, DERMACEATOR ALBIPICTUS.
J Wright
Entomol Soc Amer Ann 62(2):285-287 REF
Mar 1969 420 EN82
Dermaceator albipictus, Insect physiology, Insect rearing, Larvae, Photoperiodism.
- 9508-69
STUDIES ON NICOTINOIDS AS AN INSECTICIDE. PART VII. CHOLINESTERASE INHIBITION BY NICOTINOIDS AND PYRIDYLALKYLAMINES--ITS SIGNIFICANCE TO MODE OF ACTION.
I Yamamoto Y Socda H Kamimura R Yamamoto
Agr Biol Chem 32(11):1341-1348
Nov 1968 385 AG8B
Chemical control (insects), Cholinesterases, Enzymes, Insect physiology, Insecticides, Ionization, Ions, Musca domestica, Pyridine compounds, Toxicity, Toxins.
- 9509-69
THE SOLAR-DAY ACTIVITY RHYTHM OF MYRMELEONTID LARVAE.
G J Youthed V C Moran
J Insect Physiol 15(6):1103-1116 REF
Jun 1969 421 J825
Diurnal rhythm, Insect behavior, Larvae, Myrmeleontidae.

GENETICS

- 9510-69
CORRELATIONS BETWEEN EGG PRODUCTION AND CHROMOSOMAL REGIONS IN DROSOPHILA MELANOGASTER.
W Chapco
Can J Genet Cytol 10(4):951-960 REF
Dec 1968 443.8 C16
Chromosomes, Drosophila melanogaster, Insect eggs, Insect genetics, Insect rearing.
- 9511-69
THE EFFECT OF TEMPERATURE ON THE NUMBER OF EGGS DEPOSITED AND ON THE PRODUCTION OF HATCHING LARVAE IN VERSENE-TREATED DROSOPHILA MELANOGASTER. (RUS)
N B Christoliubova Z S Nikoro
Genetika 4(9):40-46 REF
1968 QH431.A1G4

ENTOMOLOGY

9512-69

Cells, Chromosomes, *Drosophila melanogaster*, Ethylenediaminetetraacetic acid, Insect eggs, Insect genetics, Insect physiology, Larvae, Salivary glands (insects), Temperature, Variance analysis. English summary.

9512-69

DROSOPHILA MELANOGASTER TREATED WITH LSD: ABSENCE OF MUTATION AND CHROMOSOME BREAKAGE.

D Grace E A Carlson P Goodman
Science 161(3842):694-696 REF
16 Aug 1968 470 SC12

Chromosomes, *Drosophila melanogaster*, Insect genetics, Insect mutation, Insect rearing, LSD, Mutagens, Sex determination.

9513-69

A DROSOPHILA STOCK USEFUL FOR SIMULTANEOUS SCORING OF SEX-LINKED AND AUTOSOMAL RECESSIVE LETHALS.

P C Kesavan
Indian J Genet Plant Breeding 27(2):302-304
Jul 1967 64.8 IN2

Chromosomes, *Drosophila*, Insect genetics.

9514-69

CYTOGENETICS OF TICKS (ACARI: IXIDOIDEA). 5. COMPARATIVE SURVIVAL OF THREE SPECIES OF DERMACENTOR (IXODIDAE) FOLLOWING ETHERIZATION.

J H Oliver A Z Al-Ahmedi
J Med Entomol 6(2):216-218
May 1969 421 J828

Cytogenetics, Dermacentor, Ethyl ether, Ixodidae, Mortality.

9515-69

THE ROLE OF THE AMPHINUCLEOLUS IN MEIOSIS AND POLE PLASM DEVELOPMENT OF Aedes Aegypti.

R Scales W H Norman
Miss Acad Sci J 13:142-143
1967 500 M697

Aedes aegypti, Chromosomes, Cytoplasm, Deoxyribonucleic acid, Insect genetics, Insect morphology, Meiosis, Nucleic acids, Ovaries.

9516-69

A CHROMOSOME STUDY ON BISEXUAL AND PARTHENOGENETIC RACES OF SCEPTICUS INSULARIS ROELOFS (CURCULIONIDAE: COLEOPTERA).

Y Takenouchi
Can J Genet Cytol 10(4):945-950 MAP REF
Dec 1968 443.8 C16

Chromosomes, Curculionidae, Insect genetics, Insect rearing, Parthenogenesis, *Scepticus insularis*.

9517-69

A CHIASMATE SEX QUADRIVALENT IN THE MALE OF AN ALTICID BEETLE, CYRSYLUS VOLKAMERIAE (F.).

N Virkki
Can J Genet Cytol 10(4):898-907 REF
Dec 1968 443.8 C16

Alticinae, Chromosomes, Chrysomelidae, *Cyrsylus volkameriae*, Insect genetics, Insect rearing, Sex determination, *Volkameria aeuleata*, Zoogeography.

MEDICAL ENTOMOLOGY

9518-69

ON THE INEFFICIENCY OF TRANSMISSION OF WUCHERERIA BANCROFTI FROM MOSQUITO TO HUMAN HOST.

N G Hairston B De Meillon
World Health Organ Bull 38(6):935-941 REF
1968 449.9 W892B

Culex pipiens quinquefasciatus, Epidemiology, Human diseases, Insect vectors, Microfilarial infestations, Nematodes, Parasitism, *Wuchereria bancrofti*. French summary.

BIBLIOGRAPHY

9519-69

PARASITOLOGICAL AND CLINICAL INVESTIGATIONS ON INFECTIONS WITH THE VS ROMANIAN STRAIN OF PLASMODIUM MALARIAE TRANSMITTED BY ANOPHELES LABRANCHIAE ATROPARVUS.

G Lupascu P Constantinescu E Negulici P G Shute M E Maryon
World Health Organ Bull 38(1):61-67 REF
1968 449.9 W892B

Anopheles labranchiae atroparvus, Culicidae, Human diseases, Insect vectors, Malaria, Plasmodium, Plasmodium malariae. French summary.

9520-69

ARTIFICIAL FEEDING OF SIMULIUM VECTORS OF HUMAN AND BOVINE ONCHOCERIASIS.

J P McMahon
World Health Organ Bull 38(6):957-966
1968 449.9 W892B

Cattle, Experimental insects, Feeding, Human diseases, Humidity, Insect vectors, Light, Livestock diseases, *Onchocerca volvulus*, *Onchocerciasis*, *Simulium*, Temperature. French summary.

9521-69

EFFECTS OF ULTRA-LOW VOLUME APPLICATIONS OF MALATHION IN HALE COUNTY, TEXAS. I. WESTERN ENCEPHALITIS VIRUS ACTIVITY IN TREATED AND UNTREATED TOWNS.

C J Mitchell R O Hayes P Holden H R Hill T B Hughes
J Med Entomol 6(2):155-162 REF
May 1969 421 J828

Culex tarsalis, Insect vectors, Insecticides, Malathion, Organophosphorus compounds, Western equine encephalomyelitis.

9522-69

STUDIES ON THE YELLOW FEVER IN ETHIOPIA. 4. ENTOMOLOGICAL RESEARCH AT THE MANERA STATION. (FR)

P Neri C Serie L Andral A Poirier
World Health Organ Bull 38(6):863-872 MAP
1968 449.9 W892B

Culicidae, Epidemiology, Human diseases, Insect vectors, Tables (data), Yellow fever. English summary.

The following mosquitoes were found: *Aedes simpsoni*, *A. africanus*, *A. aegypti*, *A. luteocephalus*, *A. furcifer*, and *Eretmapodites*.

9523-69

PROGRESS REPORT OF LOW-VOLUME AERIAL SPRAY TESTS AGAINST ADULTS OF Aedes taeniorhynchus (WEID.) AND Culex nigripalpus THEOB.

C B Rathburn A H Boike A J Rogers
Fla Anti-mosquito Ass Rep 39:26-32
1968 420 F663

Aedes taeniorhynchus, Chemical control (insects), Imagos, Insect pests, Insecticide application, Insecticides, Magnesium oxide, Naled, Organophosphorus compounds, Spraying.

9524-69

STUDIES ON YELLOW FEVER IN ETHIOPIA. 5. ISOLATION OF VIRUS STRAINS FROM ARTHROPOD VECTORS. (FR)

C Serie L Andral J Casals M C Williams P Bres P Neri
World Health Organ Bull 38(6):873-877
1968 449.9 W892B

Aedes africanus, *Aedes dentatus*, *Culex*, *Eretmapodites*, Human diseases, Insect vectors, Yellow fever, Yellow fever virus. English summary.

CROP PROTECTION

9525-69

IDENTITY OF SPOROPOLLENIN WITH OLDER KEROGEN AND NEW EVIDENCE FOR

THE POSSIBLE BIOLOGICAL SOURCE OF CHEMICALS IN SEDIMENTARY ROCKS.

J Brooks G Shaw
Nature 220(5168):678-679 REF
16 Nov 1968 472 N21

Biochemistry, Geological surveying, Kerogens, Morphology, Organic compounds, Plants, Sedimentary rocks, Sporopollenins.

9526-69

ANNUAL REPORT, FISCAL YEAR 1967-1968.
Dep Forestry Rural Develop Rep 1967-1968, 64P
1968 HD1781.C3

Forest insects, Surveys, Tree diseases. French text, 71 p., on reverse. includes forest entomology, pathology, and pest surveys.

9527-69

TURFGRASS RESEARCH BY THE CALIFORNIA AGRICULTURE EXTENSION SERVICE.

W B Davis
Pest Contr Oper News 27(10-11, OCT-NOV):36
1967 SB951.A1P4

Grasses, Irrigation, Plant adaptation, Plant disease control, Research, Soil management, Turf, Weed control. The article is to be continued next month

9528-69

WEATHER, DEVELOPMENT OF VINES, DISEASES, PESTS AND DAMAGES IN THE WINE-GROWING AREAS OF THE FEDERAL REPUBLIC OF GERMANY IN 1967. (GE)

W Gartel M Hering
Weinberg Keller 15(5):229-262
May 1968 95.8 W435

Crop losses, Grape vineyards, Plant diseases, Plant injuries, Plant morphology, Plant pests, Tables (data), Virus diseases (plants), Weather. Discussion of many pests and diseases.

9529-69

PLANT PROTECTION UNDER STRICT CONTROLS. (GE)

E Gersdorf
Prakt Schadlingsbekämpfer 20(4):67-68
May 1967 421 P882

Food analysis, Legislation, Pest control, Pesticides, Plant protection, Public health, Toxicity, Vegetables.

9530-69

THE ECONOMIC AND HORTICULTURAL ASPECTS OF GROWING MACADAMIA NUTS COMMERCIALY IN HAWAII.

J T Keeler E T Fukunaga
Hawaii Agr Exp Sta Agr Econ Bull (27):47P
Jun 1968 280.9 H312

Agricultural production economics, Chemical control (weeds), Chlorinated hydrocarbons, Cultural control (weeds), Herbicides, Nuts, Phenoxy acid compounds.

The following herbicides are discussed: aromatic oil, pentachlorophenol, paraquat, 2,4,5-T, 2,4-D, dalapon, diuron, atrazine, and simazine.

9531-69

OCCURRENCE AND DISTRIBUTION OF DISEASES AND PESTS OF RICE AND THEIR CONTROL IN THAILAND.

T H King
China Plant Protect Bull 16(3):41-45
Jun 1968 464.9 C47

Bacterial diseases (plants), Fungus diseases (plants), Insect control, Pest control, Plant nematodes, Rice, Surveys, Virus diseases (plants), Weeds.

9532-69

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. O,O-DIETHYL O-(2-ISOPROPYL-4-METHYL-6-PYRIMIDINYL) PHOSPHOROTHIOATE.

J K Kirk
Fed Regist 34(40):3623-3624
28 Feb 1969 L1.451

Agricultural products, Chemicals, Diazinon, Organophosphorus compounds, Pesticide residues, Pesticides, Raw materials, Regulation (pesticides), Tolerances.

9533-69

ABOUT ASSUMPTIONS OF THE COMPLEX-CENTER BIOLOGICAL METHOD OF FOREST PROTECTION. (POL)

W Kochler

Sylvan 112(7):43-51

1968 99.8 SY52

Biological control (insects), Environment, Forest conservation, Forest management, Methodology.

9534-69

MISSISSIPPI HYBRID CORN PERFORMANCE TESTS, 1968.

L R Nelson G E Scott

Miss Agr Exp Sta Bull (769):11P MAP

Jan 1969 100 M69 (1)

Corn, Crop yields, Fertilizers, Harvesting, Tables (data).

9535-69

FABABEANS, A NEW CROP FOR MINNESOTA

R G Robinson

Minn Agr Exp Sta Misc Rep (83):8P

Dec 1968 100 M66 (2)

Broadbeans, Crop varieties, Food plants, Insect control, Insect pests, Weed control.

9536-69

ACCLIMATION OF PROSPALTELLA PERNICIOSI TOW. IN YUGOSLAVIA. (SE)

M Tadic

Zastita Bilja 18(93/95):147-154 MAP

1967 464.8 Z1

Aspidiotus perniciosus, Insect rearing, Plant protection, *Prospaltella perniciosi*, Pumpkins. English summary.

9537-69

HORTICULTURAL HANDBOOK.

J C Templer et. al.

Kenya Hort Handb 1:190P REF

1966 SB187.K4K4

Chemical control (insects), Dairy equipment, Dusting, Handbooks, Horticulture, Insect pests, Insecticides, Plant diseases, Plant injuries, Plant nematodes, Spraying, Weeds.

DISEASES

9538-69

ADVANCES IN MORPHOGENESIS. (MORPHOGENESIS OF CROWN GALL, BY S. KUPILA-AHVENNIEMI).

M Ahercrombie J Brachet T J King S Kupila-Ahvenniemi:

Advances Morphogenesis 7:342P REF

1968 450 AD9

Agrobacterium tumefaciens, Bacterial diseases (plants), Crown galls, Plant histology.

9539-69

INFLUENCE OF BOTRYTIS CINEREA INFECTION ON RIBOSOMAL PROPERTIES AND FUNCTIONS IN CABBAGE TISSUES.

V A Aksenova B A Ruhin R V Savchenko A I Brynza

Acad Sci U Ssr Dokl Bot Sci 178(JAN-FEB):9-12

REF

1968 511 P444AE

Botrytis cinerea, Cabbage, *Ceratocystis fimbriata*, Fungus diseases (plants), Parasitism, Plant physiology, Ribosomes, Tissues. Translated from Russian.

9540-69

STABLE INTERMEDIATE AGGREGATES FORMED BY THE POLYMERIZATION OF BARLEY STRIPE MOSAIC VIRUS PROTEIN.

J C Atabekov V K Novikov N A Kiselev A S

Kaftanova A M Egorov

Virology 36(4):620-638 REF

Dec 1968 448.8 V81

Barley, Calcium chloride, Nucleic acids, Polymerization, Proteins, Stripe mosaic, Virology, Virus diseases (plants).

9541-69

SEROLOGICAL STUDY ON BARLEY STRIPE MOSAIC VIRUS PROTEIN POLYMERIZATION. II. COMPARATIVE ANTIGENIC ANALYSIS OF INTACT VIRUS AND SOME STABLE PROTEIN INTERMEDIATES.

J G Atabekov S P Dementyeva N D

Schaskolskaya

Virology 36(4):601-612 REF

Dec 1968 448.8 V81

Antibodies, Antigens, Barley, Diffusion, Polymerization, Proteins, Serological tests, Stripe mosaic, Virology, Virus diseases (plants).

9542-69

SEROLOGICAL STUDY ON BARLEY STRIPE MOSAIC VIRUS PROTEIN POLYMERIZATION. I. IMMUNODIFFUSION, IMMUNOELECTROPHORETIC CHARACTERISTICS, AND ABSORPTION EXPERIMENTS.

J G Atabekov N D Schaskolskaya S P

Dementyeva G N Sacharovskaya E P Senchenkov

Virology 36(4):587-600 REF

Dec 1968 448.8 V81

Absorption, Barley, Diffusion, Electrophoresis, Immunology, Polymerization, Proteins, Serological tests, Stripe mosaic, Virology, Virus diseases (plants).

9543-69

A MODIFIED SOIL PERCOLATOR ZOOSPORE PRODUCTION AND INFECTION IN STUDIES ON ZOOSPORIC ROOT PATHOGENS.

R G Atkinson

Can J Plant Sci 47(3)332-334

May 1967 450 C16

Equipment, Phytophthora, Plant reproduction, Roots, Soil-borne plant diseases, Zoospores.

9544-69

STUDY ON THE PATHOGENICITY OF PYTHIUM VEXANS DE BARY, PHYTOPHTHORA SPP. AND PHYTOPHTHORA CACTORUM.

S Azcem

Pakistan J Sci Indus Res 11(4):446-448

Oct 1968 475 P174

Dianthus caryophyllus, Fungus diseases (plants), Phytophthora, *Phytophthora cactorum*, *Pythium vexans*.

9545-69

BOLL-ROT POTENTIAL, ORGANISMS INVOLVED, AND ACTUAL BOLL ROT IN SEVEN COTTON VARIETIES.

H S Bagga C D Ranney

Phytopathology 59(2):255-256

Feb 1969 464.8 P56

Alternaria tenuis, *Aspergillus*, Bacterial diseases (plants), Boll rot, Cotton, Crop losses, Crop varieties, *Diplodia gossypina*, Fungus diseases (plants), *Fusarium*, Microorganisms, Plant disease resistance, *Xanthomonas malvacearum*. Many fungus and bacterial diseases are presented in a table.

9546-69

SOIL TREATMENT BY MICROWAVE ENERGY TO DESTROY PLANT PATHOGENS.

K F Baker W H Fuller

Phytopathology 59(2):193-197 REF

Feb 1969 464.8 P56

Energy, Fungus diseases (plants), *Fusarium solani phaseoli*, Plant disease control, Soil fungi, Soil moisture, Soil sterilization, Spectroscopy.

9547-69

CHROMATOGRAPHIC PURIFICATION OF THE OAT BLUE DWARF VIRUS.

E E Bantari R J Zeyen

Phytopathology 59(2):183-186

Feb 1969 464.8 P56

Blue dwarf, Cellulose, Chromatography, Cicadellidae, Insect vectors, *Macrostelus fascifrons*, Oats,

Plant disease transmission, Polyethylene glycol, Purification procedures, Sodium chloride, Sucrose, Virology, Virus diseases (plants).

9548-69

THE IMPIETRATURA DISEASE OF CITRUS FRUITS.

A Bental B Dagan I Yoffe

China Plant Protect Bull 16(4):64-65 REF

Aug 1968 464.9 C47

Citrus, Impietatura, Plant disease transmission, Virus diseases (plants).

9549-69

FUSCOUS BLIGHT OF BEANS IN SOUTH AFRICA.

B H Boelema

S Afr J Agr Sci 10(4):1059-1061

Dec 1967 24 SU3

Bacterial diseases (plants), Beans, Biochemistry, Blight, *Xanthomonas phaseoli*.

The morphology and biochemical characteristics of *Xanthomonas phaseoli* and the symptoms of the blight it causes in beans are presented.

9550-69

IMPORTANCE OF IRREGULAR LOCAL AND SYSTEMIC INFECTIONS FOR THE INTERFERENCE OF TOBACCO MOSAIC VIRUS STRAINS.

J Break

Rev Roumaine Biol Ser Bot 11(1/3):53-56

1966 QK1.R4

Interference phenomenon, Mosaic (tobacco), *Nicotiana glutinosa*, Tobacco, Virus diseases (plants).

9551-69

SUPPRESSION OF OZONE TOXICITY SYMPTOMS IN VIRUS-INFECTED TOBACCO.

E Brennan I Leone

Phytopathology 59(2):263-264 REF

Feb 1969 464.8 P56

Mosaic, Ozone, Plant injuries, Plant physiology, Resistance, Tobacco, Toxicity, Virus diseases (plants).

9552-69

PHYSODERMA CITRI IN CITRUS ALBEDO AND CALLUS TISSUE.

G E Brown M F Oberbacher

Phytopathology 59(2):241-242

Feb 1969 464.8 P56

Callus (plants), Citrus, Fungus diseases (plants), Grapfruit, Lemons, *Physoderma citri*, Tissues.

9553-69

ETIOLOGICAL STUDIES ON ROOT ROT OF WHEAT CAUSED BY CERCOSPORELLA HEAPOTRICHOIDES FRON.

R S Byther

Diss Abstr Sect B 29(3):834B-835B

Sep 1968 Z5055.U49D53

Cercospora herpotrichoides, Fungus diseases (plants), Plant physiology, Plant temperature, Research, Root rot, Soil fungi, Wheat.

9554-69

VIVIPARY IN ZEA MAYS INDUCED BY DIPLODIA MAYDIS.

O H Calvert M S Zuber M G Neuffer

Phytopathology 59(2):239-240 REF

Feb 1969 464.8 P56

Corn, Corn ear, *Diplodia zeae*, Fungus diseases (plants), Hormones, Plant breeding, Plant physiology, Reproduction, Viviparity.

9555-69

DUTCH ELM DISEASE - THREAT TO COLORADO.

Colo Farm Home Res 19(3,APR-JUN):2-3

1969 100 C712CO

Chemical control (plant diseases), Dieback, Fertilizers, Fungus diseases (plants), Methoxychlor, Plant diseases, Spraying, Ulmus.

9556-69

9556-69

OCCURRENCE OF TOMATO RINGSPOT VIRUS IN RED RASPBERRIES IN THE EASTERN UNITED STATES.

R H Converse B Y Endo
Phytopathology 59(2):216-218 REF
Feb 1969 464.8 P56

Cucumbers, Epidemiology, Plant disease transmission, Raspberries, Ring spot, Seedlings, Serological tests, Tomatoes, Virus diseases (plants).

9557-69

1968 CRANBERRY INSECT AND DISEASE CONTROL CHART.

JP
1968 275.29 M3811

Accident prevention, Chemical control (insects), Chemical control (plant diseases), Cranberries, Insecticides.

9558-69

PEPPER PRODUCTION IN KENTUCKY.

H W Davis M E Fogleman
Ky Univ Ext Circ 620:16P
1969 275.29 K415

Chemical control (insects), Chemical control (weeds), Crop yields, Fertilizers, Harvesting, Herbicides, Insecticides, Plant disease control, Plant nutritional deficiencies, Redpeppers (vegetable), Transplanting.

9559-69

PYCNIDIAL PRODUCTION BY DIAPORTHE VEXANS (SACC. AND SYD.) GRATZ AND THE PATHOLOGICAL HISTOLOGY OF INFECTED STEMS AND LEAVES OF EGGPLANT.

G G Divinagracia
Diss Abstr Sect B 29(3):836-837B
Sep 1968 Z5055.U49D53

Diaporthe vexans, Eggplant, Fungus diseases (plants), Leaves, Parasitism, Plant histology, Pycnidia, Stems.

9560-69

STUDIES ON THE TUBERCULATE MYCORRHIZAE OF DOUGLAS FIR (PSEUDOTSUGA TAXIFOLIA BRITTON).

T Dominik I Majchrowicz
Ekol Pol Ser A 15(3):75-90 REF
1967 512 W263

Fungus diseases (plants), Microbiology, Mycorrhizae, Nodules (plants), Pseudotsuga menziesii, Pseudotsuga taxifolia. Polish summary. the paper listed 23 kinds of mycelia.

9561-69

DISEASE STATUS OF VARIOUS TROPICAL AND SUBTROPICAL FRUITS ON THE PARIS MARKET IN SUMMER. (FR)

J Foko P Joudrier S Smolikowski
Fruits 23(10):553-555,563,564,565,566
Nov 1968 80 F9492

Fruit, Fungus diseases (plants), Marketing, Parasitism. English, German, Spanish, and Russian summaries.

9562-69

A FUNGUS OF THE ONION, NEW FOR ITALY: BOTRYTIS SQUAMOSA WALKER. (IT)

A Garibaldi
Agr Ital 68(2,MAR-APR):96-100
1968 16 AG8259

Blast, Botrytis squamosa, Fungicides, Fungus diseases (plants), Humidity, Maneb, Onions, Plant morphology, Symptomatology, Temperature, Zinc plus ethylenebisdithiocarbamate manganese, Zineb. English summary.

9563-69

EVIDENCE FOR LONGEVITY OF SEEDS.

H Godwin
Nature 220(5168):708-709 REF
16 Nov 1968 472 N21

Albiza julibrissin, Canna, Longevity, Lupine, Nelumbium, Plant hardiness, Plant physiology, Rodents, Seedlings.

9564-69

THE PHYSICAL ACTION OF VIRUSES ON THE PLANT CELL.

M I Goldin
Rev Roumaine Biol Ser Bot 11(1/3):69-73 REF
1966 QK1.R4

Cells, Inclusion bodies, Mitosis, Plant physiology, Virology, Virus diseases (plants), Viruses.

9565-69

THE PROTECTION OF APPLE TISSUE AGAINST INFECTION BY ERWINIA AMYLOVORA AFFORDED BY AVIRULENT STRAINS OF E. AMYLOVORA, A SAPROPHYTIC BACTERIUM AND OTHER BACTERIAL PLANT PATHOGENS.

R N Goodman
Rev Roumaine Biol Ser Bot 11(1/3):75-79
1966 QK1.R4

Apples, Bacterial diseases (plants), Erwinia amylovora, Immunity, Pathogenic bacteria, Plant disease resistance, Tissues, Virulence.

9566-69

POTATO BLACKLEG AND TUBER SOFT ROT.

D C Graham P C Harper
Scot Agr 46(2,SPRING):68-74
1967 10 SCO82SO

Bacterial diseases (plants), Blackleg, Diagnosis, Etiology, Plant disease transmission, Potatoes, Soft rot.

9567-69

THE NATURE AND EFFECT OF ADULT PLANT RESISTANCE TO CROWN RUST IN SEVERAL COMMERCIAL OAT VARIETIES.

A S Heagle
Diss Abstr Sect B 29(3):837B
Sep 1968 Z5055.U49D53

Crop varieties, Crown rust, Fungus diseases (plants), Oats, Plant disease resistance, Plant genetics, Puccinia coronata, Research.

9568-69

AN UNKNOWN GRAPE VINE DISEASE, SPRAY DAMAGE OR RED BURN EPIDEMIC. (GE)

J Henner
Pflanzenarzt 20(8):92-93
01 Aug 1967 464.9 P482

Crop varieties, Epidemiology, Fungus diseases (plants), Grape vineyards, Plant injuries, Pseudopeziza tracheiphila, Spraying.

9569-69

SPECIFIC INHIBITION OF TMV-RNA SYNTHESIS BY BLASTICIDIN S.

A Hirai S C Wildman T Hirai
Virology 36(4):646-651
Dec 1968 448.8 V81

Blasticidin S, Inhibitors, Mosaic, Proteins, Ribonucleic acid, Sucrose, Synthesis, Tobacco, Tobacco mosaic virus, Virology, Virus diseases (plants).

9570-69

FIELD OBSERVATIONS ON ROOT ROT OF TEAK IN TANZANIA.

D Hocking A A Jaffer
China Plant Protect Bull 15(1):10-14
Feb 1967 464.9 C47

Field studies, Fungus diseases (plants), Plant diseases, Root rot, Tectona.

9571-69

SUSCEPTIBILITY OF POTATO VARIETIES TO POWDERY SCAB. (SPONGOSPORA SUBTERRANEA (WALLR.) JOHN). (SE)

F Janeczic
Zastita Bilja 18(93/95):21-23
1967 464.8 Z1

Crop varieties, Fungus diseases (plants), Plant disease resistance, Potatoes, Scab, Spongospora subterranea. English summary.

9572-69

CORN VIRUS TESTS IN GEORGIA IN 1968.

M D Jellum C W Kuhn

Ga Agr Exp Sta Res Rep (38):22 MAP

Jan 1969 S51.E22
Corn, Crop yields, Insect vectors, Plant geography, Virus diseases (plants).

9573-69

INTRACELLULAR APPEARANCE OF TURNIP MOSAIC AND BEAN YELLOW MOSAIC PARTICLES.

T Kamci Y Honda C Matsui
Phytopathology 59(2):139-144 REF
Feb 1969 464.8 P56

Broadbeans, Cells, Chinese cabbage, Electron microscopy, Mosaic, Turnips, Virus diseases (plants), Yellow mosaic.

9574-69

RELATIONSHIP OF LIVING AND DEAD CELLS TO SPREAD OF COLLETOTRICHUM GRAMINICOLA IN SORGHUM STALK TISSUE.

R A Katsanos A J Pappelis
Phytopathology 59(2):132-134
Feb 1969 464.8 P56

Cells, Colletotrichum graminicola, Crop varieties, Fungus diseases (plants), Leaves, Plant disease resistance, Plant injuries, Roots, Sorghum, Tissues.

9575-69

OCCURRENCE OF ROSE STREAK VIRUS IN SOUTH AFRICA.

P J Klesser
S Afr J Agr Sci 10(3):847-856
Sep 1967 24 SU3

Disease transmission, Rosaceae, Streak, Symptomatology, Virus diseases (plants).

9576-69

MWITUNDE GROUNDNUTS AND THEIR REACTION TO VIRUS INFECTION IN SOUTH AFRICA.

P J Klesser
S Afr J Agr Sci 10(3):675-686
Sep 1967 24 SU3

Peanuts, Plant disease resistance, Virus diseases (plants).

Mwitunde groundnuts in South Africa were found to be more tolerant of viruses infecting peanuts than other varieties.

9577-69

THE INFLUENCE OF IRRIGATION ON THE OCCURRENCE OF DISEASES AND PESTS OF AGRICULTURAL CROPS. (REVIEW). (CZ)

F Kodys
Stud Inform Ochrana Rost (1):40P REF
1967 SB599.S8

Crops, Cultural control (insects), Cultural control (plant diseases), Host indexing (plants), Insect pests, Irrigation, Microclimate, Plant diseases. English, German and Russian summaries.

9578-69

THE OCCURRENCE OF A PHYTOPHTHORA ROOT AND LEAF DISEASE OF BLACK PEPPER IN JAMAICA.

R I Leather
China Plant Protect Bull 15(1):15-16
Feb 1967 464.9 C47

Fungus diseases (plants), Pepper (spice), Phytophthora, Plant diseases.

9579-69

PRESENT KNOWLEDGE ON THE APHIDS IN THEIR RELATIONSHIPS WITH VIRUS DISEASES TRANSMISSION. (FR)

F Leclant
Ann Epiphyt 19(3):455-482 REF
1968 464.9 F84AN

Aphididae, Bibliography, Insect vectors, Virology, Virus diseases (plants). English abstract.

9580-69

INTRODUCED SEED-BORNE PATHOGENS ENDANGER CROP BREEDING AND PLANT INTRODUCTION.

E E Leppik
China Plant Protect Bull 16(4):57-63 REF
Aug 1968 464.9 C47

Fungus diseases (plants), Plant breeding, Plant quarantine, Seed-borne plant diseases, Virus diseases (plants).

9581-69

A CONTRIBUTION TO THE STUDY OF ALTERNARIA TENUIS NEES CAUSER OF THE LEAF SPOT OF TOMATO. (SE)

S Lucic

Zastita Bilja 18(93/95):161-168

1967 464.8 Z1

Alternaria tenuis, Chemical control (plant diseases), Conidia, Fungus diseases (plants), Leaf spot, Maneb, Plant disease transmission, Plant morphology, Plant physiology, Polyethylene thiuram sulfides, Seedlings, Temperature, Tomatoes. English summary.

9582-69

INHERITANCE OF RESISTANCE TO THREE RACES OF LEAF RUST IN WHEAT VARIETY BOWIE.

J K Luthra S M A Naqvi M C Tyagi R N

Sawhney

Indian J Genet Plant Breeding 27(3):423-425

Nov 1967 64.8 IN2

Fungus diseases (plants), Inheritance, Leaf rust, Plant disease resistance, Plant genetics, Wheat.

9583-69

THE INFLUENCE OF ECTOTROPHIC MYCORRHIZAL FUNGI ON THE RESISTANCE OF PINE ROOTS TO PATHOGENIC INFECTIONS. I. ANTAGONISM OF MYCORRHIZAL FUNGI TO ROOT PATHOGENIC FUNGI AND SOIL BACTERIA.

D H Marx

Phytopathology 59(2):153-163 REF

Feb 1969 464.8 P56

Bacterial diseases (plants), Fungus diseases (plants), Growth factors, Inhibitors, *Laccaria laccata*, *Lactarius deliciosus*, *Leucopaxillus cerealis*, Mycorrhiza, *Phytophthora cinnamomi*, *Pinus*, *Pisolithus tinctorius*, Plant disease resistance, Roots, Soil bacteria, Soil microorganisms, *Suillus luteus*.

9584-69

ENTYLOMA COMPOSITARUM FARLOW ON GAILLARDIA PULCHELLA, NEW PARASITE IN YUGOSLAVIA. (SE)

M Miric

Zastita Bilja 18(93-95):189-192

1967 464.8 Z1

Entyloma compositarum, Fungus diseases (plants), *Gaillardia pulchella*. English summary.

9585-69

DICARBAMATE DERIVATIVES OF ALKYLADAMANTANES. PATENT 3,450,744.

R E Moore

Us Patent Office Offic Gaz 863(3):891

12 Jun 1969 156.65 OF2

Carbamates, Mosaic, Patents, Poliomyelitis, Tobacco, Virucides, Viruses.

9586-69

3,4-DIHYDROXYBENZALDEHYDE, A FUNGICIDAL SUBSTANCE FROM GREEN CAVENDISH BANANAS.

D Mulvena E C Webb B Zerner

Phytochemistry 8(2):393-395

Feb 1969 450 P5622

Bananas, *Colletotrichum circinans*, Fungi, Fungicides, Fungus diseases (plants), *Gloeosporium inusarium*, Growth factors, Inhibitors, Protoacetaldehyde, Ripe rot, Toxicity, Tropical fruit.

9587-69

CONTROL OF POWDERY MILDEW WITH NITRONAPHTHONITRILES. PATENT 3,432,601.

I Okuda E Yoshinaga T Tsuboi

Us Patent Office Offic Gaz 860(2):581

11 Mar 1969 156.65 OF2

Bactericides, Chemical control (plant diseases), Fungi, Fungicides, Naphthonitrile compounds, Patents, Powdery mildew.

9588-69

DETERMINATION OF THE CRITICAL INJURY THRESHOLD FOR POTATO BLIGHT (PHYTOPHTHORA INFESTANS).

B Olofsson

Swed Stat Vaxtskyddsanst Medd 14(119):81-93

1968 464.9 SW3M

Blight, Fungus diseases (plants), *Phytophthora infestans*, Plant injuries, Plant protection, Potatoes. Swedish summary

9589-69

SYMPTOMS OF STUBBORN DISEASE IN CITRUS AND PONCIRUS FRUIT GRAFTED ONTO VIRUS-INFECTED SEEDLINGS.

E O Olson

Phytopathology 59(2):168-172 REF

Feb 1969 464.8 P56

Citrus, Fruit, Plant grafting, Plant physiology, Seedlings, Stubborn disease, Trifoliolate oranges, Virus diseases (plants).

9590-69

SIX POWDERY MILDEWS FROM JAMMU AND KASHMIR STATE.

V R Pandotra J L Kachrod K S M Sastry

Inc Acad Sci Proc 67(3):119-124

Mar 1968 513 IN25B

Economic plants, Erysiphe, *Phyllactinia*, *Pleochaeta*, Powdery mildew, *Sphaerotheca*, *Uncinula*.

9591-69

A STUDY OF THE BIOLOGY OF STEMPHYLIUM BOTRYOSUM WALL. -PLEOSPORA HERBARUM (PERS.) RABENH.- THE CAUSER OF BROWN SPOTS ON ALFALFA LEAVES. (SE)

M Perisic D Stojanovic

Zastita Bilja 18(93/95):37-44

1967 464.8 Z1

Alfalfa, Brown spot, Defoliation, Fungus diseases (plants), Leaves, Parasitism, Plant injuries, *Pleospora herbarum*, *Stemphylium botryosum*, Temperature. English summary.

9592-69

ACTIVITY OF MYXIN AGAINST CERATOCYSTIS ULMI.

E A Peterson

Can J Microbiol 15(1):133-135

Jan 1969 448.8 C162

Antibiotics, Bacterial diseases (plants), *Ceratocystis ulmi*, Dieback, Inhibitors, Microorganisms, Myxin, Ulmus.

9593-69

CLOVER YELLOW VEIN VIRUS IN NORTH AMERICA.

M J Pratt

Plant Dis Rep 53(3):210-212 REF

Mar 1969 1.9 P69P

Beans, *Chenopodium amaranticolor*, Clover, Host indexing (plants), Peas, Tobacco, Virus diseases (plants), White clover, Yellow vein.

9594-69

MECHANICAL TRANSMISSION OF COCONUT LETHAL YELLOWING.

W C Price A P Martinez D A Roberts

China Plant Protect Bull 15(6):105-108 REF

Dec 1967 464.9 C47

Coconuts, Lethal yellowing (coconuts), Plant disease transmission, Zoogeography.

9595-69

DISRUPTION OF WATERMELON MOSAIC VIRUS-INDUCED INCLUSIONS BY PHOSPHOTUNGSTATE.

D E Purcifull

Virology 36(4):690-693 REF

Dec 1968 448.8 V81

Electron microscopes, Inclusion bodies, Mosaic, Phosphotungstic acid, Plant extracts, Virology, Virus diseases (plants), Watermelons.

9596-69

MONILIA LAXA AS AN IMPORTANT FACTOR REDUCING THE YIELD OF SOME PLUM

VARIETIES (MONILIA LAXA (EHRENB.) ADERH. ET RUBL.). (SE)

L Radman

Zastita Bilja 18(93/95):85-92

1967 464.8 Z1

Crop varieties, Crop yields, Fruit, Fungus diseases (plants), *Grapholita funebrana*, *Hoplocampa*, *Monilia laxa*, Peaches, Plant disease resistance, Plums, Sour cherries. English summary.

9597-69

RIBONUCLEASE ISOZYMES IN CHINESE CABBAGE SYSTEMICALLY INFECTED WITH TURNIP YELLOW MOSAIC VIRUS.

J W Randles

Virology 36(4):556-563 REF

Dec 1968 448.8 V81

Chinese cabbage, Electrophoresis, Plant extracts, Ribonuclease, Turnips, Virology, Virus diseases (plants), Yellow mosaic.

9598-69

OCCURRENCE OF PADDY VIRUS AND VIRUSLIKE SYMPTOMS IN INDIA.

S P Raychaudhuri M D Mishra A Ghosh

Baltimore, John Hopkins Press. 59-65 REF

1969 NB633.C2

Cicadellidae, Leaf rust, Rice, Virus diseases (plants).

9599-69

RACES OF CROWN RUST IN SOUTH AFRICA.

D J Rossouw J A Truter

S Afr J Agr Sci 10(4):1065-1066

Dec 1967 24 SU3

Crown rust, Fungus diseases (plants), Oats, Plant pest resistance, *Puccinia coronata*.

Varieties of the fungus causing crown rust, *Puccinia coronata*, were surveyed on seven standard strains of oats to note any pathogenic changes in the occurrence and prevalence of the disease in South Africa.

9600-69

EFFECT OF INFECTION OF CORN BY THE FUNGUS USTILAGO ZEAЕ ON THE PROPERTIES OF THE CHLOROPHYLL-PROTEIN COMPLEX.

B A Rubin E N Lushchinskaya

Acad Sci U Ssr Dokl Bot Sci 179(MAR-APR):55-

57 REF

1968 511 P444AE

Chlorophylls, Corn, Fungus diseases (plants), Plant biochemistry, Plant physiology, Proteins, *Ustilago zeaе*. Translated from Russian.

9601-69

FUNCTIONS OF THE TWO PARTICLES OF TOBACCO RATTLE VIRUS.

H L Sanger

J Virology 3(3):304-312 REF

Mar 1969 QR360.J6

Electron microscopy, Physiology, Rattle disease, Ribonucleic acid, Serodiagnosis, Tobacco, Virus diseases (plants).

9602-69

INVESTIGATIONS ON THE SUSCEPTIBILITY OF POTATO TUBERS TO FUSARIUM CAERULEUM (LIB.) SACC., THE FUNGUS CAUSING DRY ROT. (GE)

K Schoene

Phytopathol Z 60(3):201-236 REF

Nov 1967 464.8 P562

Dry rot, Fungus diseases (plants), *Fusarium caeruleum*, Oxygen, Plant injuries, Potatoes, Storage, Temperature, Tubers. English summary.

9603-69

VALUE OF IMMUNE MOUSE ASCITIC FLUID IN PLANT VIRUS SEROLOGY.

H A Scott K S Kim J L Dale

Phytopathology 59(2):233-234

Feb 1969 464.8 P56

Antibodies, Ascites, Blood serum, Mice, Plant disease control, Serological tests, Virology, Virus diseases (plants).

9604-69

ANTIBIOTIC SL 2266. PATENT 3,432,598.

H Sigg C Stoll

Us Patent Office Offic Gaz 860(2):580

11 Mar 1969 156.65 OF2

Antibiotics, Antiseptics, Cells, Fungi, Fungicides, Neoplasms, Patents, S1 2266, Sordaria.

9605-69

BLASTEMOMORPHOUS STAGE OF FORMATION OF GALLS CAUSED BY USTILAGO MAYDIS (DC.) CDA ON CORN LEAVES.

E I Slepyan

Acad Sci U Ssr Dokl Bot Sci 178(JAN-FEB):17-19

1968 511 P444AE

Corn, Fungus diseases (plants), Leaves, Neoplasms, Plant galls, Ustilago maydis. Translated from Russian.

9606-69

BLASTEMOMORPHOUS STAGE OF FORMATION OF GALLS CAUSED BY INFECTION BY USTILAGO MAYDIS (D. C.) CDA ON LEAVES OF ZEA MAYS L.

E I Slepyan I V Karatygin

Acad Sci U Ssr Dokl Bot Sci 178(JAN-FEB):13-16

1968 511 P444AE

Corn, Erythrodermia, Fungus diseases (plants), Leaves, Necrosis, Symptomatology, Ustilago maydis. Translated from Russian.

9607-69

POSTHARVEST DISEASES OF GUAVA IN INDIA.

M P Srivastava R N Tandon

Plant Dis Rep 53(3):206-208 REF

Mar 1969 1.9 P69P

Fungus diseases (plants), Gloeosporium psidii, Guavas, Pestalotia psidii, Phoma psidii, Phomopsis psidii, Physalospora rhodina, Rhizopus stolonifer, Storage.

9608-69

DNA BASE COMPOSITION AND TAXONOMY OF PHYTOPATHOGENIC AND OTHER ENTEROBACTERIA.

M P Starr M Mandel

J Gen Microbiol 56(1):113-123 REF

Apr 1969 448.3 J823

Bacteria, Deoxyribonucleic acid, Methodology, Plant biochemistry, Taxonomy.

9609-69

HELMINTHOSPORIUM LEAF BLIGHT- A NEW DISEASE OF COTTON IN THE PUNJAB AND HARYANA.

D Suryanarayana P S Bedi N N Tripathi

Prog Farming 5(1):62-65

Mar 1968 S19.P8

Cotton, Crop varieties, Diagnosis, Fungus diseases (plants), Helminthosporium spiciferum, Leaf blight (cotton), Plant disease resistance.

9610-69

SOWBANE MOSAIC VIRUS INFECTING CHENOPODIUM TRIGONON IN QUEENSLAND.

D S Teakle

Australian J Biol Sci 21(4):649-653

Aug 1968 442.8 AU72

Chenopodium, Electron microscopy, Mosaic, Plant geography, Serological tests, Virus diseases (plants).

A virus isolated from fish weed, Chenopodium trigonon, in Australia, showed serological properties, host range, symptoms, and physical properties similar to those of sowhane mosaic virus.

9611-69

ELECTRON MICROSCOPIC OBSERVATION OF CRYSTALLINE ARRAYS OF VIRUS-LIKE PARTICLES IN TISSUES OF MINK WITH ALEUTIAN DISEASE.

K S Tsai I Grinyer I C Pan L Karstad

Can J Microbiol 15(1):138-140 REF

Jan 1969 448.8 C162

Aleutian disease, Electron microscopy, Foot-and-mouth disease virus, Kidneys, Laboratory animals, Minks, Teschen disease virus, Virus diseases (animals).

9612-69

COCOA DIEBACK- A REVIEW OF PRESENT KNOWLEDGE.

P D Turner

China Plant Protect Bull 15(5):81-101 REF

Oct 1967 464.9 C47

Cocoa, Dieback, Plant ecology, Plant nutrition, Reviews, Zoogeography.

9613-69

SYSTEMIC CONTROL OF EXOBASIDIUM VEXANS ON TEA WITH 1,4-OXATHIIN DERIVATIVES.

C S Venkata Ram

Phytopathology 59(2):125-128 REF

Feb 1969 464.8 P56

Blister blight, Chemical control (plant diseases), Exobasidium vexans, Fungus diseases (plants), Oxathiins, 1,4-, Seed treatment, Spraying, Systemic insecticides, Tea.

9614-69

PROGRESS ON CITRUS VIRUS DISEASES THROUGH INTERNATIONAL CO-OPERATION AND SOME PROBLEMS AND RESEARCH NEEDS IN THE PACIFIC REGION.

J M Wallace

China Plant Protect Bull 15(6):109-114 REF

Dec 1967 464.9 C47

Citrus, Surveys, Virus diseases (plants).

9615-69

SEQUENCE STUDIES OF SATELLITE TOBACCO NECROSIS VIRUS RNA; ISOLATION AND CHARACTERIZATION OF A 5'-TERMINAL TRINUCLEOTIDE.

E Wimmer A Y Chang J M Clark M E

Reichmann

J Molec Biol 38(1):59-73 REF

28 Nov 1968 442.8 J8224

Kinases, Necrosis, Nucleotidases, Phosphorylation, Ribonucleic acid, Tobacco, Virus diseases (plants).

9616-69

RECENT ADVANCES IN THE CONTROL OF SOIL FUNGI.

G A Zentmyer

China Plant Protect Bull 15(1):1-5

Feb 1967 464.9 C47

Biological control, Fungicides, Phytophthora, Plant disease resistance, Soil fungi, Steam.

9617-69

VIRUS RATINGS OF CORN STRAINS IN MISSOURI, 1968.

M S Zuber A J Keaster N G Weir C F Stark P J

Loesch

Mo Agr Exp Sta Res Bull (102):15P

Nov 1968 100 M693 (3)

Corn, Crop varieties, Tables (data), Virus diseases (plants).

ARTHROPODS

9618-69

OVICIDAL AND LARVICIDAL ACTIONS OF PETKOLIN AGAINST RED SPIDER MITES (ACARINA: TETRANYCHIDAE).

T Ahmed M Anwarullah

Pakistan J Sci Indus Res 11(4):455-456

Oct 1968 475 P174

Aramite, Chemical control (insects), Chlorinated hydrocarbons, Chlorobenzilate, Larvicides, Ovicides, Petkolin, Tetranychus telarius.

9619-69

TRANSMISSION INTENSITY OF STOLBUR VIRUS BY MEANS OF HYALESTHES OBSOLETUS SIGN. ON SOME HOST PLANTS. (SE)

Z Aleksic D Sutic D Aleksic

Zastita Bilja 18(93/95):67-73

1967 464.8 Z1

Cicadellidae, Convolvulus arvensis, Eggplant, Hyalesthes obsoletus, Insect vectors, Piper nigrum, Plant disease transmission, Stolbur, Symptomatology, Tomatoes, Virus diseases (plants). English summary.

9620-69

NEW ELECTRONIC CONCEPTIONS ON ACTOGRAPHY APPLIED TO THE STUDY OF INVERTEBRATES. (FR)

A J Andrien

Ann Epiphyt 19(3):483-499 REF

1968 464.9 F84AN

Electrical engineering, Insect physiology, Laboratory equipment, Sound waves, Vibration. English abstract.

9621-69

THE ESTABLISHMENT OF METAPHYCUS HELVOLUS (COMPERE) (HYM. ENCYRTIDAE) ON SAISSETIA OLEAE (BERN.) (HOM. COCCIDAE) IN OLIVE GROVES IN GREECE.

L C Argyriou P Detbach

Entomophaga 13(3):223-228

1968 421 EN835

Biological control (insects), Encyrtidae, Metaphycus, Olives, Saissetia oleae.

9622-69

THE CHEMICAL CONTROL OF THE DIPLOPODA OF BEETS. (FR)

J Biernaux

Bull Recherch Agron Gembloux (N s)3(1):26-35

REF

1968 S5.B8

Aldrin, Beets, Chemical control (insects), Diplopoda, Heptachlor, Insect biology, Insecticide application, Insecticides, Parathion, Plant pest control.

9623-69

RECENT INTRODUCTIONS FOR BIOLOGICAL CONTROL IN HAWAII-XIII.

C J Davis M Chong

Hawaii Entomol Soc Proc 20(1):25-34 REF

Jun 1968 420 H312

Biological control (pests), Insects, Reviews, Snails, Weeds.

9624-69

RECENT INTRODUCTIONS FOR BIOLOGICAL CONTROL IN HAWAII-XII.

C J Davis N L H Krauss

Hawaii Entomol Soc Proc 19(3):375-380 REF

Jun 1967 420 H312

Biological control (pests), Insects, Reviews, Snails, Weeds.

9625-69

A CURRENT REVIEW OF THE USE OF INSECTICIDES IN AGRICULTURE.

E Dunn

Scot Agr 46(4,AUTUMN):181-183

1967 10 SCO82SO

Chemical control (insects), Chlorinated hydrocarbons, Crop yields, Insecticides, Organophosphorus insecticides, Reviews.

The use of chlorinated hydrocarbons and organophosphorus compounds as insecticides and the resulting increase in crop yields are reviewed.

9626-69

PESTS AND DISEASES OF THE DATE PALM. PART I. MITES, INSECTS AND NEMATODES.

H S Elmer J B Carpenter L J Klotz

China Plant Protect Bull 16(5):77-91

Oct 1968 464.9 C47

Acarina, Biology, Chemical control (pests), Dates, Insects, Nematodes, Plant diseases, Reviews, Surveys.

9627-69

VECTORS OF HOJA BLANCA VIRUS.

T R Everett

Baltimore, John Hopkins Press. 111-121 REF

1969 NB633.C2

- Chemical control (insects), Hoja blanca, Insect vectors, Organophosphorus compounds, Rice, Virus diseases (plants).
- 9628-69**
EFFICACY OF DISULFOTON FOR CONTROL OF THE GREEN PEACH APHID, MYZUS PERSICAE, ON PEPPERS.
 W H Foott F G von Stryk P R Timmins
Can Entomol 101(4):375-382 REF
 Apr 1969 421 C16
 Chemical control (insects), Disulfoton, Insecticides, Myzus persicae, Pepper.
- 9629-69**
FIRST OBSERVATIONS OF DAMAGE TO OLIVE TREES, CAUSED BY A CECIDOMYDE. CLINODIPLOSI OLEISUGA TARG.(DIPT. CECIDOMYDAE). (FR)
 A Hafraoui
Awamia (20):139-141
 Jul 1968 24 AW1
 Cecidomyiidae, Clinodiplosis oleisuga, Insect biology, Insect control, Insect pests, Insect rearing, Olives, Tree injuries.
- 9630-69**
NEXT MOVE AGAINST THE GRASSGRUB.
 R A Harrison C P Hoyt G O Osborne
New Zeal J Agr 118(6):17
 Jun 1969 23 N48J
 Chemical analysis, Chemical control (insects), Costelytra zealandica, Insect biochemistry, Insecticides, Sex attractants.
- 9631-69**
TRANSMISSION OF DWARF, YELLOW DWARF, STRIPE, AND BLACK-STREAKED DWARF.
 T T Iida A Shinkai
Baltimore, John Hopkins Press. 125-129 REF
 1969 NB633.C2
 Black-streaked dwarf, Dwarf disease, Insect vectors, Nephrotettix, Plant disease transmission, Rice, Stripe, Virus diseases (plants), Yellow dwarf.
- 9632-69**
INFLUENCE OF HIGH TEMPERATURES ON THE PATHOGENICITY AND SURVIVAL OF WESTERN X-DISEASE VIRUS IN LEAFHOPPERS.
 D D Jensen
Virology 36(4):662-667 REF
 Dec 1968 448.8 V81
 Celery, Cicadellidae, Colladonus montanus, Insect vectors, Temperature, Thermotherapy, Virus diseases (plants), Western X.
- 9633-69**
COMMERCIAL VEGETABLE INSECT CONTROL.
 G F Knowlton D W Davis R S Roberts
Utah State Univ Ext Ext Circ 300:29P
 Apr 1969 275.29 UT1
 Bees, Chemical control (insects), Chemical control (nematodes), Cultural control (insects), Insect pests, Insecticide application, Insecticides, Maggots, Pesticides, Plant nematodes, Spraying, Vegetables.
- 9634-69**
OBSERVATIONS ON THE ECOLOGY OF THAIA ORYZIVORA, A LEAFHOPPER FOUND ON RICE IN THAILAND.
 J Leevwangh P Levamsang
China Plant Protect Bull 15(2):30-31
 Apr 1967 464.9 C47
 Cicadellidae, Insect ecology, Population, Rice.
- 9635-69**
THE ROLE OF HAMPEA SP. IN THE MIGRATION OF THE COTTON LEAFWORM TO THE UNITED STATES.
 M J Lukefahr P A Fryxell
J Econ Entomol 62(1):263-264
 17 Feb 1969 421 J822
- Alabama argillacea, Anthonomus grandis, Hampea, Insect migration, Insect pests, Longevity, Plants.
- 9636-69**
NEW LARGE-SCALE EXPERIMENTATION IN BIOLOGICAL CONTROL OF THE OLIVE FLY (DACUS OLEA GMEL.) BY MEANS OF OPIUS CONCOLOR SICULUS MON. IN SICILY IN 1967. (FR)
 S Monastero
Entomophaga 13(3):251-261 MAP
 1968 421 EN835
 Biological control (insects), Dacus oleae, Field studies, Opius concolor. English abstract.
- 9637-69**
A NEW METHOD OF CABBAGE ROOT FLY CONTROL.
 P Osborne
Scot Agr 46(2, SPRING):92-95
 1967 10 SCO82SO
 Cabbage, Chlorfenvinphos, Diazinon, Disulfoton, Hylemya brassicae, Insect control, Insecticide application, Methodology, Organophosphorus compounds, Phorate.
- 9638-69**
NOTE ON THE EFFECTS OF CERTAIN WILD PLANTS, TEMPERATURE AND INSECTICIDES ON THE GROWTH AND DEVELOPMENT OF AGROTIS SEGETUM SCHIFFER-MUELLER (LEPIDOPTERA: NOCTUIDAE).
 S N Pandey J K Bogawat
Indian J Agr Sci 38(5):826-827
 Oct 1968 22 AG831
 Agrotis segetum, Aldrin, Benzene hexachloride, Carbaryl, Chemical control (insects), Chlordane, Food plants, Insect morphology, Noctuidae, Temperature.
 The growth and development of the cutworm, Agrotis segetum, was retarded by dietary intake, low temperature and was inhibited by chlordane, aldrin, BHC and carbaryl.
- 9639-69**
EFFECTIVENESS OF A LIGHT TRAP IN THE PROTECTION OF THE HEALTH AND PRODUCTIVITY OF CORN. (IT)
 R Protta G Delrio
Stud Sassaressi Sez III 15(2):293-307 REF
 1967 507 SA75A
 Corn, Costs, Crop yields, Insect control, Insect pests, Insect traps, Lepidoptera, Light traps, Plant protection, Plant protection equipment, Sesamia. English summary.
- 9640-69**
THE DEFENSE OF A CORN CROP AGAINST NOXIOUS INSECTS BY MEANS OF A LIGHT TRAP. (IT)
 R Protta
Stud Sassaressi Sez III 15(2):267-292 REF
 1967 507 SA75A
 Corn, Crop varieties, Insect control, Insect pests, Insect traps, Lepidoptera, Light traps, Ostrinia nubilalis, Plant protection, Sesamia nonagrioides. English summary.
- 9641-69**
THE MITE ACERIA TULIPAE (ERIOPHYIDAE)--VECTOR OF THE ONION MOSAIC VIRUS. (RUS)
 G M Razvyazkina E A Kapkova N P Cheremushkina
Zool Zhur 48(2):288-289
 Feb 1969 410 R92
 Aceria tulipae, Aphididae, Insect vectors, Mosaic, Onions. English abstract
- 9642-69**
NEW HOSTS, DISTRIBUTION, AND BIOLOGICAL NOTES ON AN IMPORTED AMBROSIA BEETLE, XYLOSANDRUS GERMANUS (COLEOPTERA: SCOLYTIDAE).
 I Schneider M H Farrier
Can Entomol 101(4):412-415 REF
 Apr 1969 421 C16
- Insect biology, Nyssa, Prunus serotina, Scolytidae, Taxodium distichum, Zoogeography.
- 9643-69**
HOME ORCHARD PEST CONTROL.
 M C Shurtleff R Randell D B Meador
Ill Univ Ext Circ 1001:7P
 Apr 1969 275.29 IL62C
 Birds, Chemical control (pests), Chlorinated hydrocarbons, Cultural control (insects), Formulations, Fruit, Insect pests, Mice, Orchards, Organophosphorus compounds, Pesticide application, Pesticides, Rabbits, Spraying, Thiocarbamates.
- 9644-69**
FLY PESTS AFFECT SOME CROPS IN NORTHLAND.
 W Stacey
New Zeal J Agr 118(1):74-75
 Jan 1969 23 N48J
 Chemical control (insects), Cucumbers, Diazinon, Dichlorvos, Larvae, Malathion, Methyl parathion, Nicotine, Sciara annulata, Trichlorfon.
 The larvae of Sciara annulata have become a major pest of cucumbers in New Zealand. Dichlorvos, malathion, nicotine sulfate, and methyl parathion have been shown to control these insects effectively.
- 9645-69**
COMPARATIVE ELECTRON MICROGRAPHS OF SOWTHISTLE YELLOW VEIN AND VESICULAR STOMATITIS VIRUSES.
 E S Sylvester J Richardson P Wood
Virology 36(4):693-696
 Dec 1968 448.8 V81
 Aphididae, Electron microscopes, Insect vectors, Sonchus, Vesicular stomatitis virus, Virology, Virus diseases (animals), Virus diseases (plants), Yellow vein.
- 9646-69**
SOME NEW HOST PLANTS OF THE SUNFLOWER MOTH IN TEXAS.
 G L Teets N M Randolph
J Econ Entomol 62(1):264-265
 17 Feb 1969 421 J822
 Feeding, Homosoma electellum, Insect pests, Plants, Seeds. 11 new host plants were listed.
- 9647-69**
PRELIMINARY STUDIES ON THE INCIDENCE OF SHOOTFLY (ATHERIGONA INDICA) ON HYBRID JOWAR UNDER DIFFERENTIAL SOWINGS.
 S Usman
Mysore J Agr Sci 2(1):44-48
 1968 S19.M9
 Atherigona indica, Climate, Crop varieties, Durra, Insect pests, Plant dissemination.
- 9648-69**
OBSERVATIONS ON CROP PESTS IN THE SUDAN IN 1966-67.
 T V Venkatraman E El Khidir
China Plant Protect Bull 15(6):115-116
 Dec 1967 464.9 C47
 Plant pests, Surveys.
- 9649-69**
NOTE ON TRICHOGRAMMA JAPONICUM ASHM., AN EGG PARASITE OF INTERNODE-BORER (PROCERAS INDICUS KAPUR) OF SUGARCANE IN MADRAS STATE.
 S Venugopal H Subramanian R Natarajan
Indian J Agr Sci 38(5):874-875
 Oct 1968 22 AG831
 Biological control (insects), Egg parasite, Natural control (insects), Parasitic insects, Proceras indicus, Sugarcane, Trichogramma japonicum, Weather.
 Optimum climatic conditions for Trichogramma japonicum parasitization of Proceras indicus were found and the possibilities for developing this as a biological control for this internode borer of sugarcane are discussed.

9650-69

9650-69
ON THE EXTINCTION OF THE ASIATIC RICE BORER CHILO SUPPRESSALIS IN HAWAII.
K Yasumatsu T Nishida H A Bess
Hawaii Entomol Soc Proc 20(1):239-245 REF
Jun 1968 420 H312.
Biological control (insects), Chilo suppressalis, Insect outbreaks.

NEMATODES

9651-69
THE EELWORM PROBLEM IN GLASSHOUSE TOMATOES.
E Dunn
Scot Agr 46(2,SPRING):87-89
1967 10 SCO8250
Greenhouses, Heterodera rostochiensis, Nematocides, Nematode control, Plant nematodes, Soil sterilization, Tomatoes.

9652-69
TRANSMISSION OF TOBACCO RINGSPOT VIRUS TO THE ROOTS OF A CONIFER BY A NEMATODE.
J P Fulton
Phytopathology 59(2):236
Feb 1969 464.8 P56
Coniferae, Cupressus arizonica, Nematode vectors, Plant disease transmission, Plant nematodes, Ring spot, Roots, Tobacco, Virus diseases (plants), Xiphinema americanum.

9653-69
ASSESSMENT OF CROP LOSSES CAUSED BY NEMATODES IN THE UNITED STATES.
J M Good
China Plant Protect Bull 16(3):37-40
Jun 1968 464.9 C47
Crop losses, Economics, Plant nematodes, Surveys.

9654-69
ROOT NEMATODE (MELOIDOGYNE NAASI FRANKLIN) IN SERBIA (PRELIMINARY COMMUNICATION). (SE)
G Grujicic
Zastita Bilja 18(93/95):193-197
1967 464.8 Z1
Barley, Mangel-wurzel, Meloidogyne naasi, Parasitism, Plant nematodes, Roots, Sugar beets, Wheat. English summary.

9655-69
NEMATODES ASSOCIATED WITH DECLINING COCONUT PALMS.
K Maramorosch A m Goldlen
China Plant Protect Bull 15(2):38-39
Apr 1967 464.9 C47
Coconuts, Nematodes, Plant nematodes, Surveys.

9656-69
DYNAMICS OF THE PERMEATION OF NEMATODES BY WATER, NEMATOCIDES AND OTHER SUBSTANCES.
C F Marks I J Thomason C E Castro
Exp Parasitol 22(3):321-337 REF
Jun 1968 436.8 EX7
Anguina tritici, Aphelenchus avenae, Chlorinated hydrocarbons, Dibromo-3-chloropropane, 1,2-Ethylene dibromide, Glucose, Glycine, Nematocides, Nematodes, Permeability, Rhizoctonia solani, Sodium acetate, Tylenchulus semipenetrans, Water.

9657-69
STUDY OF NEMATODES CAUSERS OF ROOT SPOT- PRATYLENCHUS SPP. (SE)
K Olga
Zastita Bilja 18(93/95):133-142
1967 464.8 Z1
Barley, Crop rotation, Fungus diseases (plants), Plant nematodes, Pratylenchus, Pratylenchus crenatus, Pratylenchus neglectus, Pratylenchus thornici, Root rot, Root spot, Wheat. English summary.

WEEDS

9658-69
VENDETTA AGAINST WEEDS.
Anonymous
Farm Quart 24(1,SPRING):90-91, 126, 128
1969 6 F22995
Chemical control (weeds), Cultural control (weeds), Herbicides, Soybeans, Trifluralin, Vernolate.

9659-69
YOUNG HAYWOOD COUNTY FARMER TEAM: HOW THEY SOLVE SOME TRICKY PROBLEMS.
Anonymous
Tennessee Farmer 16(2):4H
Feb 1969 S115.T42
Agricultural economics, Agricultural labor, Chemical control (weeds), Cotton, Herbicides, Treflan, herban, MSMA, DSMA, cotoran, bidrin and 4-2-1 toxiphene-ddt-methyl were tested.

9660-69
MISSISSIPPI RATINGS GIVEN TO COTTON HERBICIDES.
Anonymous
Miss Farmer 17(4):24
Apr 1969 6 M6992
Chemical control (weeds), Cotton, Herbicides, Weeds. Herbicides were rated according to their effectiveness.

9661-69
CASORON--A NEW WEED KILLER TO PROTECT WOODY PLANTS.
Anonymous
Arnoldia 29(4):21-24
18 Apr 1969 451 AR6BA
Agropyron repens, Chemical control (weeds), Dichlobenil, Shrubs, Weed control.

9662-69
NEW HERBICIDE INTRODUCED FOR BUCKWHEAT CONTROL IN CEREAL LANDS.
Anonymous
Farmers Weekly 116:59,62
30 Oct 1968 24 F225
Bromoxynil, Buckwheat, Chemical control (weeds), Field crops, Grain, Herbicides.

9663-69
CROP SEEDLING UPTAKE OF DDT, DIELDRIN, ENDRIN, AND HEPTACHLOR FROM SOILS.
M L Beall R G Nash
Agron J 61(4,JUL-AUG):571-575 REF
Aug 1969 4 AM34P
Absorption, Crops, Dieldrin, DDT, Endrin, Heptachlor, Insecticides, Pesticide residues, Seedlings.

9664-69
PRELIMINARY RESEARCH ON THE ACTION OF C. C. C. ON GRAPES. (FR)
R Bonnet J Lhoste L Penchi B Pascalon
Paris Acad Agr France Compt Rend Hebd Seances 54(9):708-712
19 Jun 1968 14 P215BC
Chloroethyltrimethylammonium chloride, (2-, Crop yields, Grapes, Plant regulators.

9665-69
CONTROL OF DODDER IN HOME GARDENS.
L L Danielson
Amer Hort Mag 48(1,WINTER):41-43
1969 80 N216
Chemical control (weeds), Chlorinated hydrocarbons, Chlorophthalam, Cuscuta, Dimethyl tetrachloroterephthalate, Gardens, Herbicides, Methyl bromide, Soil fumigation.

9666-69
THE INFLUENCE OF THE STEPPES INUNDATION AND ENLARGEMENT OF THE AREA OF CULTIVATION UPON DISTRIBUTION AND NUMBERS OF HARMFUL RODENTS OF AZERBAIJAN. (RUS)
T S Gladkina

Zool Zhur 47(12):1840-1850
Dec 1968 410 R92
Chemical control (pests), Pastures, Rodents, Zoogeography. English abstract

9667-69
THE STATUS OF BIOLOGICAL CONTROL OF THE WEED HYPERICUM PERFORATUM IN BRITISH COLUMBIA.
P Harris D Peschken J Milroy
Can Entomol 101(1):1-15 REF
Jan 1969 421 C16
Agrilus hyperici, Arid regions, Biological control (weeds), Chrysolina hyperici, Chrysolina quadrigemina, Chrysolina varians, Humidity, Hypericum perforatum, Insect dissemination, Insect ecology, Zeuxidiplosis giardi.

9668-69
MANAGEMENT AND WEED CONTROL.
W W Huffine
(PT 1):1-13

Dec 1965 60.19 OK4
Chemical control (weeds), Cynodon dactylon, Herbicide application, Herbicides.
Many herbicides are listed. The weeds discussed are: Smooth crabgrass, hentgrass, Sunturf bermuda, Silver Crab, annual bluegrass, Seaside bentgrass, hairy crabgrass, hembit, and chickweed.

9669-69
HERBICIDAL ETHER. PATENT 3,450,522.
D V Lopickes
Us Patent Office Gaz 863(3):854
17 Jun 1969 156.65 OF2
Ethers, Herbicides, Patents.

9670-69
TOLERANCE OF SEVERAL HERBICIDES.
MOENCH TO SEVERAL HERBICIDES.
F R Miller R W Bovey
Agron J 61(2,MAR-APR):282-285 REF
Apr 1969 4 AM34P
Herbicide resistant plants, Herbicides, Inheritance, Plant geography, Sorghum, Tolerances.

9671-69
HERBICIDAL N-HALO-ALPHA-HALOACETANILIDES. PATENT 3,450,521.
J F Olin P C Hamm
Us Patent Office Gaz 863(3):854
17 Jun 1969 156.65 OF2
Haloacetamides, alpha-, Herbicides, Patents.

9672-69
SOME HERBICIDAL AND PHYSIOLOGICAL EFFECTS OF 3,4-DICHLOROPROPIONANILDE (STAM F-34) ON AMMANNIA BACCIFERA L.
J Prakash
Prog Farning 5(1):58-61
Mar 1968 S19.P8
Ammannia baccifera, Chemical control (weeds), Dosage, Herbicides, Plant physiology, Propanil, Rice.

9673-69
RESEARCH CONCERNING THE EFFECTIVENESS OF SOME HERBICIDES IN CONTROLLING THE WEEDS FROM PEA CROPS IN THE WESTERN AREAS OF THE COUNTRY. (RUM)
O Segareanu N Sarpe S Mate I Vladutu N Bratu N Gribincea
Probl Agr 20(11):37-48 REF
1968 21 R862
Chemical control (weeds), Crop yields, Herbicides, Peas, Zonal soils. English, Russian and French summaries.

On, prometryn, camparol, atrazine, phenoxilene plus, 2,4-D

OTHER PESTS

9674-69

THE BIOLOGY AND CONTROL OF THE RICE FIELD MOLE RAT OF CEYLON, *GUNOMYS GRACILIS*. (0)

H E Fernando N Kawamoto N Perea

China Plant Protect Bull 15(2):32-37

Apr 1967 464.9 C47

Biology, Chemical control (pests), Habitats, Phosphine, Rats.

9675-69

MODIFICATION OF PFEIFER'S BIRD-CONTROL APPARATUS.

R C Rosenau R V Worstell

Agron J 61(2,MAR-APR):327-328

Apr 1969 4 AM34P

Bird control, Dairy equipment, Electric shock, Electrical engineering, Grain.

LIVESTOCK PROTECTION

9676-69

SHEARING BY DRUG.

Anonymous

Sci News Lett 94(21):520

23 Nov 1968 470 SCI24

Agricultural economics, Alkylation, Cyclophosphamide, Deoxyribonucleic acid, Drug therapy, Drugs, Livestock, Protein synthesis, Sheep shearing, Wool.

9677-69

NOTICE OF FILING OF PETITION FOR FOOD ADDITIVE METOSERPATE HYDROCHLORIDE.

R E Duggan

Fed Regist 34(44):4898

06 Mar 1969 L1.451

Chickens, Food additives, Metoserpate hydrochloride, Slaughtering, Water.

9678-69

RESPONSE ON LACTATING COW TO CORN SILAGE AND CONCENTRATES OF THREE NITROGEN LEVELS WITH AND WITHOUT UREA.

F N Knott

Diss Abstr Sect B 29(3):823B

Sep 1968 Z5055.U49D53

Animal physiology, Cattle, Corn, Lactation, Nitrogen, Proteins, Silage, Urea.

9679-69

KLOT STAINLESS. DRUGS FOR VETERINARY USE, DRUG EFFICACY STUDY IMPLEMENTATION.

H L Ley

Fed Regist 34(52):5342-5343

18 Mar 1969 L1.451

Butyl alcohol, n-, Drug therapy, Drugs, Serum, Veterinary medicine.

9680-69

ATARAXOID TABLETS. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.

H L Ley

Fed Regist 34(54):5448

20 Mar 1969 L1.451

Drug therapy, Drugs, Hydroxyzine, Prednisolone, Veterinary medicine.

9681-69

DIODOHYDROXYQUIN. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.

H L Ley

Fed Regist 34(54):5449

20 Mar 1969 L1.451

Diodohydroxyquin, Drug therapy, Drugs, Scalp, Schorrhea.

9682-69

A NOTE ON THE DAILY URINARY EXCRETION OF ESTRADIOL-17BETA AND ESTRONE BY THE HEN.

R S Mathur R H Common

Poultry Sci 48(1):100-104 REF

Jan 1969 47.8 AM33P

Animal physiology, Chickens, Estradiol, Estrone, Excretion, Urine

9683-69

TURKEY LIPID CHARACTERISTICS: INFLUENCE OF SEX, AGE AND ESTRADIOL-17 BETA-MONOPALMITATE.

W E Osborn R E Moreng T E Hartung

Poultry Sci 48(1):274-283 REF

Jan 1969 47.8 AM33P

Aging, Animal histology, Animal physiology, Estradiol, Fatty acids, Lipids, Sex, Turkeys.

9684-69

WHITE SPINE IN DOMESTIC ZEBU, THE CATTLE OF AZERBAIJAN. (RUS)

Z K Verdiyev

Genetika 4(9):165-168

1968 QH431.A1G4

Animal adaptation, Animal breeding, Animal genetics, Animal physiology, Cattle breeds, Livestock, Resistance, Zebu cattle.

DISEASES

9685-69

FURTHER STUDIES ON LEUCOCYTOZOON CAULLERYI IN DOMESTIC FOWLS IN THE PHILIPPINES.

Avian Dis 13(2):280-287

May 1969 41.8 AV5

Chickens, Leucocytozoon caulleryi, Morphology, Poultry diseases.

9686-69

EFFECT OF SUCCINYLCHOLINE CHLORIDE ON THE CARDIAC FUNCTION OF THE HORSE. (JA)

A Amada S Yoshida T Senta T Uchino

Exp Rep Equine Health Lab (4):88-106 REF

1967 SF321.N5

Animal physiology, Dosage, Electrocardiograms, Heart, Horses, Succinylcholine chloride, English summary.

9687-69

PROSTAGLANDINS: ENZYMIC ANALYSIS.

E Anggard F M Matshinsky B Samulesson

Science 163(3866):479-480

31 Jan 1969 470 SCI2

Animal physiology, Biological assay, Dehydrogenases, Enzymes, Lungs, Prostaglandins, Swine.

9688-69

CORONAVIRUSES.

Anonymous

Nature 220(5168):650

16 Nov 1968 472 N21

Coronaviruses, Electron microscopy, Infectious bronchitis, Myxoviruses, Virology, Virus diseases (animals).

9689-69

THE EGG-BIT TECHNIQUE FOR MEASURING NEWCASTLE DISEASE VIRUS AND ITS NEUTRALIZING ANTIBODIES.

C W Beard

Avian Dis 13(2):309-320 REF

May 1969 41.8 AV5

Antibodies, Eggs, Newcastle disease virus, Particle size determination, Virus-neutralization tests.

9690-69

A BIOLOGICAL CONTROL FOR ECHINOCOCCUS. (IT)

E Biocca O Massi

Parassitologia 10(1):61-73 REF

Jul 1968 436.8 P212

Animal diseases, Biological control (pests), Echinococcosis, Echinococcus granulosus, Swine. English summary.

9691-69

STUDIES ON THE ROLE OF MAMMALS IN THE NATURAL HISTORY OF WESTERN ENCEPHALITIS IN HALE COUNTY TEXAS.

J H Bowers R O Hayes T B Hughes

J Med Entomol 6(2):175-178 REF

May 1969 421 J828

Animal vectors, Epizootic diseases, Mammals, Rabbits, Western equine encephalomyelitis.

9692-69

DUCK PLAGUE VIRUS DISTRIBUTION IN EMBRYONATING CHICKEN AND DUCK EGGS.

W K Butterfield F A Ata A H Dardiri

Avian Dis 13(1):198-202

Feb 1969 41.8 AV5

Chick embryos, Duck plague, Ducks, Eggs, Mortality, Poultry diseases, Virus diseases (animals).

9693-69

TREATMENT OF INFECTIOUS CANINE HEPATITIS WITH A MONOAMINE OXIDASE INHIBITING DRUG.

H Cifuentes-Bernal A Albornoz-Plata E Nunez-

Olarte S Triana-Aguilar B Buitrago

Toxicol Appl Pharmacol 12(3):508-517 REF

May 1968 391.8 T662

Canine distemper virus, Dogs, Dosage, Drug therapy, Immunization, Infectious canine hepatitis, Inhibitors, Monoamine oxidase, Nialamide, Virus diseases (animals).

9694-69

HAZARD OF THE HIGH COUNTRY.

Colo Farm Home Res 19(3,APR-JUN):10-11

1969 100 C712CO

Brisket disease, Cattle, Electron microscopy, Heart failure, Livestock diseases, Oxygen.

9695-69

INFLUENCE OF HOST GENOTYPE ON MORTALITY FROM LYMPHOID LEUKOSIS AND MAREK'S DISEASE AFTER ARTIFICIAL AND NATURAL EXPOSURE.

L B Crittenden B R Burmester

Poultry Sci 48(1):196-204 REF

Jan 1969 47.8 AM33P

Animal genetics, Avian lymphomatosis, Chickens, Immunity, Leukosis, Poultry diseases, Virology, Virus diseases (animals).

9696-69

AVIAN REOVIRUSES II. PHYSICOCHEMICAL CHARACTERIZATION AND CLASSIFICATION.

D R Deshmukh B S Pomeroy

Avian Dis 13(2):243-251 REF

May 1969 41.8 AV5

Avian diseases, Biophysics, Chemical analysis, Classification, Reoviruses.

9697-69

AVIAN REOVIRUSES. I. ISOLATION AND SEROLOGICAL CHARACTERIZATION.

D R Deshmukh B S Pomeroy

Avian Dis 13(2):239-243

May 1969 41.8 AV5

Avian diseases, Immunodiagnosis, Reoviruses, Serological tests.

9698-69

A MEDIUM FOR ISOLATION AND TENTATIVE IDENTIFICATION OF FECAL STREPTOCOCCI, AND THEIR ROLE AS AVIAN PATHOGENS.

C H Domermuth W B Gross

Avian Dis 13(2):394-399

May 1969 41.8 AV5

Avian diseases, Culture media, Feces, Streptococcus.

9699-69

9699-69
AN ISOLATION CABINET SYSTEM FOR AVIAN DISEASE RESEARCH.
L N Drury C W Beard S R Hopkins
Avian Dis 13(2):400-412
May 1969 41.8 AV5
Avian diseases, Chickens, Germ-free life, Laboratory equipment.

9700-69

9700-69
STRUCTURAL RELATIONSHIPS BETWEEN THE RNA OF MAMMARY TUMOR VIRUS AND THOSE OF OTHER RNA TUMOR VIRUSES.
P H Duesberg R D Cardiff
Virology 36(4):696-700 REF
Dec 1968 448.8 V81
Electrophoresis, Leukosarcomatosis, Mammary glands, Neoplasms, Proteins, Ribonucleic acid, RNA viruses, Virology, Virus diseases (animals).

9701-69

9701-69
PROTEIN IN THE BLOOD SERUM OF CHICKS EXPERIMENTALLY INFECTED WITH SPIROCHAETOSIS. (BU)
I Dumanov T Lozeva
Vet Med Nauk 5(3):41-49 REF
1968 41.8 V6468
Blood serum, Chicks, Hematologic diseases, Proteins, Spirochetosis. English and Russian summaries.

9702-69

9702-69
RELATIONSHIP OF PARTICLE SIZE TO COCCIDIOSTATIC EFFICACY OF BUQUINOLATE.
M K Eckman R E Kohls
Avian Dis 13(2):297-308
May 1969 41.8 AV5
Buquinolate, Chickens, Coccidiosis, Coccidiostats, Drug therapy, Eimeria acervulina, Eimeria tenella, Particle size determination.

9703-69

9703-69
CONGO RED AND TRYPAN BLUE AS STAINS FOR PLAQUE ASSAY OF NEW CASTLE DISEASE VIRUS.
J Estupinan R P Hanson
Avian Dis 13(2):330-339 REF
May 1969 41.8 AV5
Azo dyes, Biological assay, Newcastle disease virus, Plaque, Staining, Trypan blue.

9704-69

9704-69
PRODUCTION OF STREPTOCOCCAL M-TYPING ANTISERA. I. ANTIGENIC RESPONSE IN DIFFERENT BREEDS OF RABBITS.
R R Facklam M D Moody
Appl Microbiol 16(12):1822-1825
Dec 1968 448.3 AP5
Animal diseases, Antigens, Antiserum, Immunization, Rabbits, Streptococcus.

9705-69

9705-69
HISTOPATHOLOGIC CHANGES INDUCED WITH DUCK HEPATITIS VIRUS IN THE DEVELOPING CHICKEN EMBRYO.
J E Fitzgerald L E Hanson J Simon
Avian Dis 13(1):147-157 REF
Feb 1969 41.8 AV5
Animal histology, Animal physiology, Chick embryos, Microscopy, Poultry diseases, Virus diseases (animals), Virus hepatitis.

9706-69

9706-69
SYNTHESIS OF URIDILIC NUCLEOTIDES AND TMP IN BONE MARROW OF CHICKS INFECTED WITH THE AVIAN MYELOBLASTOSIS VIRUS.
G A Galegov N F Pravdina V A Parnes D K Karapctyan
Biochemistry 33(2,PT 2,MAR-APR):282-285 REF
1968 385 B523AE
Avian myeloblastosis virus, Bone marrow, Chicks, Enzymes, Ethyl-2-(hydroxymethyl)-1,3-propanediol, 2-, Kinases, Nucleotides, Synthesis, Tables (data), Thymidine, Uridine, Virus diseases (animals). Translated from russian

9707-69

9707-69
AN ATTEMPT TO ISOLATE HIGH POLYMERIZED DEOXYRIBONUCLEIC ACID FROM BRUCELLA ABORTUS.
S P E Geysler M J Pitout
S Afr Chem Inst J 21(2):164-173 REF
Oct 1968 385 SO84
Brucella abortus, Cattle, Culture media, Deoxyribonucleic acid, Spectrochemistry, Tables (data), Afrikaans summary.

9708-69

9708-69
VIRUS-LIKE PARTICLES OBSERVED IN PLASMA AND WHITE BLOOD CELLS FROM BIRDS WITH MAREK'S DISEASE.
R Glaser C N Burke T N Fredrickson R E Luginbuhl
Avian Dis 13(2):261-267
May 1969 41.8 AV5
Avian lymphomatosis, Biological assay, Blood plasma, Chickens, Cytology, Electron microscopy, Virus diseases (animals).

9709-69

9709-69
AGGLUTINATING ANTIGEN FROM AN ORNITHOSIS AGENT. II. MODIFICATION OF ANTIGEN PREPARATION AND TEST PROCEDURE.
J E Grimes R W Moore L C Grumbles
Avian Dis 13(2):345-355 REF
May 1969 41.8 AV5
Agglutination, Antigens, Methodology, Ornithosis, Serological tests, Turkeys.

9710-69

9710-69
BOVINE MYCOTIC PLACENTITIS IN NEW YORK STATE.
R B Hillman
Cornell Vet 59(2):269-288 REF
Apr 1969 41.8 C81
Abortion, Aspergillus fumigatus, Cattle, Epidemiology, Livestock diseases, Mycosis.

9711-69

9711-69
COLIC OF THE HORSE AND AUTONOMIC NERVOUS DISTURBANCES. PATHO-MORPHOLOGICAL INVESTIGATIONS.
T Hirose H Satoh
Exp Rep Equine Health Lab (4):151-213 REF
1967 SF321.N5
Colic, Diagnosis, Horses, Livestock diseases, Morphology, Nerves, Research. Japanese translation.

9712-69

9712-69
STUDIES ON A FILTRABLE AGENT ASSOCIATED WITH INFECTIOUS ENTERITIS (BLUECOMB) OF TURKEYS.
M S Hofstad N Adams M L Frey
Avian Dis 13(2):386-393
May 1969 41.8 AV5
Biochemistry, Bluecomb, Immunodiagnosis, Turkeys.

9713-69

9713-69
SEROLOGIC AND IMMUNOLOGIC PROPERTIES OF A RECENT ISOLATE OF INFECTIOUS BRONCHITIS VIRUS.
S R Hopkins
Avian Dis 13(2):356-362 REF
May 1969 41.8 AV5
Chickens, Immunochimistry, Infectious bronchitis virus, Serological tests.

9714-69

9714-69
ANTI-MALARIAL EFFECT OF INTERFERON INDUCERS AT DIFFERENT STAGES OF DEVELOPMENT OF PLASMODIUM BERGHEI IN THE MOUSE.
R I Jahiel B S Nussenzweig J Vanderberg J Vileck
Nature 220(5168):710-711
16 Nov 1968 472 N21
Injections, Interferon, Laboratory animals, Malaria control, Mice, Newcastle disease virus, Parasitism, Plasmodium berghei, Statolon, Virus diseases (animals).

9715-69

9715-69
VIRUS INDUCED CATARACTS.
R Jarman C Hanna C E Duffy
Ark Acad Sci Proc 21:21-25 REF
1967 500 AR42

Cataracts, Eyes, Human diseases, Laboratory animals, Rats, Ribonucleic acid, Saint louis encephalitis, Virus diseases (animals).

9716-69

9716-69
KALAFUNGIN, A NEW ANTIBIOTIC PRODUCED BY STREPTOMYCES TANASHIENSIS STRAIN KALA.
L E Johnson A Dietz
Appl Microbiol 16(12):1815-1821 REF
Dec 1968 448.3 AP5
Animal diseases, Antibiotics, Bacteria, Culture media, Fungus diseases (animals), Kalafungin, Protozoa, Soil microorganisms, Streptomyces tanashiensis kala.

9717-69

9717-69
AN ELECTRON MICROSCOPIC COMPARISON OF THREE STRAINS OF BOVINE PARAINFLUENZA-3 VIRUS.
D E Kahn J Kita J H Gillespie
Cornell Vet 59(3):431-438
Jul 1969 41.8 C81
Cattle, Electron microscopy, Parainfluenza-3, Virus mutation.

9718-69

9718-69
TETRACYCLINE HYDROCHLORIDE POWDER WITH BENZOCAINE FOR TOPICAL USE. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.
J K Kirk
Fed Regist 34(38):2623
26 Feb 1969 L1.451
Cattle, Drug therapy, Ethyl aminobenzoate, Infectious keratitis, Livestock diseases, Tetracycline hydrochloride, Veterinary medicine.

9719-69

9719-69
ACETAZOLAMIDE. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.
J K Kirk
Fed Regist 34(26):1839-1840
07 Feb 1969 L1.451
Acetazolamide, Dogs, Dosage, Drugs, Heart, Regulation (drugs), Veterinary medicine.

9720-69

9720-69
THE PROPAGATION AND CYTOMORPHOLOGICAL EFFECTS OF BOVINE PARAINFLUENZA TYPE 3 VIRUS IN ORGAN CULTURES OF BOVINE FETAL TISSUES.
J Kita R M Kenney J H Gillespie
Cornell Vet 59(3):355-369 REF
Jul 1969 41.8 C81
Animal morphology, Cattle, Parainfluenza-3, Pathology, Tissue culture.

9721-69

9721-69
OCULAR SENSITIVITY OF DOGS TO TOPICAL TETRACAINE HCL.
S A Koeh L F Rubin
Amer Vet Med Ass J 154(1):15-16
01 Jan 1969 41.8 AM3
Allergies, Antihistaminics, Chemosis, Diagnosis, Dogs, Drug therapy, Eyes, Tetracaine hydrochloride.

9722-69

9722-69
EFFECT ON MORTALITY OF SEMIPURIFIED DIETS VERSUS NATURAL FEEDSTUFFS FED TO CHICKENS INFECTED WITH EIMERIA TENELLA.
A J Koltveit
Avian Dis 13(2):288-296 REF
May 1969 41.8 AV5
Chickens, Coccidiosis, Diet, Eimeria tenella, Mortality.

- 9723-69
CYTOPLASMIC INCLUSIONS OBSERVED BY ELECTRON MICROSCOPY LATE IN INFLUENZA VIRUS INFECTION OF CHICKEN EMBRYO FIBROBLASTS.
J V Kopp J E Kempf A V Kroeger
Virology 36(4):681-683 REF
Dec 1968 448.8 V81
Cells, Chickens, Cytoplasm, Electron microscopes, Embryology, Inclusion bodies, Influenza viruses, Tissues, Virus diseases (animals).
- 9724-69
A STUDY OF THE IMMUNOLOGICAL RELATIONSHIP OF ANAPLASMA MARGINALE AND ANAPLASMA CENTRALE.
K L Kuttler
Res Vet Sci 8(4):467-471, REF
Oct 1967 41.8 R312
Anaplasma centrale, Anaplasma marginale, Anaplasmosis, Calves, Cattle, Livestock diseases.
- 9725-69
A REPORT ON THE USE OF A SERUM PLATE ANTIGEN FOR THE DETECTION OF ANTIBODIES TO MYCOPLASMA GALLISEPTICUM.
K F Lawson R T Hertler
Poultry Sci 48(1):295-300
Jan 1969 47.8 AM33P
Antibodies, Antigens, Chickens, Hemagglutination-inhibition test, Immunology, Mycoplasma gallisepticum, Poultry diseases.
- 9726-69
HYDROCHLOROTHIAZIDE. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.
H L Ley
Fed Regist 34(36):2516
21 Feb 1969 L1.451
Cattle, Dosage, Drug therapy, Edema, Hydrochlorothiazide, Legislation, Livestock diseases, Regulation (drugs), Research, Udders, Veterinary medicine.
- 9727-69
ATTEMPTED EXPERIMENTAL INDUCTION OF AMYLOIDOSIS IN CHICKENS.
D W MacDonald H C Carlson
Poultry Sci 48(1):71-76 REF
Jan 1969 47.8 AM33P
Amyloidosis, Casein, Chickens, Culture media, Immunology, Poultry diseases, Staphylococcus aureus.
- 9728-69
EFFECT OF TRITON WR-1339 ON ROUS VIRUS-INDUCED TUMORS IN CHICKENS.
V W Mayer F M Hetrick
Cornell Vet 59(3):405-417 REF
Jul 1969 41.8 C81
Chickens, Dosage, Drugs, Neoplasms, Rous sarcoma virus.
- 9729-69
A FILTERABLE, PROLIFERATING FACTOR SIMULATING AUTOIMMUNITY IN MALARIOUS AND NONMALARIOUS DUCKLINGS.
R B McGhee W E Loftis
Exp Parasitol 22(3):299-308 REF
Jun 1968 436.8 EX7
Anemia, Blood plasma, Ducklings, Immunity, Malaria, Parasitology, Plasmodium lophurae, Virus diseases (animals).
- 9730-69
ARBOVIRUS FOCUS IN THE EAST KOOTENAYS. (ABSTRACT).
D M McLean
Can J Public Health 60(1):37
Jan 1969 449.8 P964
Antigens, Arboviruses, Dermacentor andersoni, Epidemiology, Forest insects, Hemagglutination-inhibition test, Ixodides, Mammals, Powassan virus, Rodents, Saint louis encephalitis, Serum, Virus diseases (animals).
- 9731-69
METABOLISM OF LINEAR ALKYLATE SULFONATE AND ALKYL BENZENE SULFONATE IN ALBINO RATS.
W R Michael
Toxicol Appl Pharmacol 12(3):473-485 REF
May 1968 391.8 T662
Animal physiology, Biochemistry, Dosage, Feces, Gastrointestinal system, Metabolism, Metabolites, Rats, Sulfonic acids, Surface-active agents, Urine.
- 9732-69
PRELIMINARY OBSERVATIONS ON POSSIBLE SYNERGISM BETWEEN INFECTIOUS LARYNGOTRACHEITIS VIRUS AND HEMOPHILUS GALLINARUM.
Y S Mohamed P D Moorhead E H Bohil
Avian Dis 13(1):158-162
Feb 1969 41.8 AV5
Coryza, Haemophilus gallinarum, Infectious diseases, Laryngotracheitis, Poultry, Poultry diseases, Respiratory diseases, Tissue culture.
- 9733-69
THE EFFECTS OF HYDROXYUREA ON CULTURED SOMATIC CELLS OF THE CHINESE HAMSTER, CRICETULUS GRISEUS.
C Neill W C Guest
Ark Acad Sci Proc 21:59-61
1967 500 AR42
Animal physiology, Biochemistry, Cells, Deoxyribonucleic acid, Hamsters, Hydroxyurea, Mitosis, Ribonucleic acid, Synthesis, Tables (data).
- 9734-69
MAMMARY DEVELOPMENT IN ALLOXAN DIABETIC RABBITS INJECTED WITH OESTRONE AND PROGESTERONE.
A Norgren
Lund Univ Acta Univ Lundsensis Sect I I Med Math Sci Ker Nat (37):15P
1967 502 L97A
Alloxan, Animal physiology, Diabetes, Hormones, Injections, Mammary glands, Oestrone, Progesterone, Rabbits.
- 9735-69
THE FOOT AND MOUTH EPIDEMIC.
J Oekleshaw J M Hilton
Chartered Surv 101(1):42-43
Jul 1968 325.8 C38
Epidemiology, Foot-and-mouth disease, Livestock diseases. This article is the personal consideration of the author.
- 9736-69
BLOOD CONCENTRATION OF CHLORAMPHENICOL IN HORSES AFTER INTRAMUSCULAR OR ORAL ADMINISTRATION. (JA)
S Oh-ishi
Exp Rep Equine Health Lab (4):83-87
1967 SF321.N5
Animal physiology, Blood, Chloramphenicol, Horses, Hyaluronidase, Muscles. English and French summaries.
- 9737-69
TISSUE DISTRIBUTION OF SULFADIMETHOXINE AND SULFAMONOMETHOXINE IN HORSES AFTER INTRAVENOUS INJECTION. (JA)
S Oh-ishi
Exp Rep Equine Health Lab (4):79-82
1967 SF321.N5
Blood vessels, Horses, Injections, Physiology, Sulfadimethoxine, Sulfameter, Tissues. English and French summaries.
- 9738-69
SEVERAL CONTROL MEASURES USED IN AN EPIZOOTIC OF TRANSMISSIBLE GASTROENTERITIS.
L D Olson
Cornell Vet 59(3):426-430
Jul 1969 41.8 C81
Animal quarantine, Epizootic diseases, Gastroenteritis, Immunization, Swine.
- 9739-69
COMPARISON OF COMMERCIAL AND AUTOGENOUS BACTERINS FOR CONTROL OF THE CRANIAL FORM OF FOWL CHOLERA IN TURKEYS.
L D Olson E L McCune R E Bond
Avian Dis 13(2):252-260
May 1969 41.8 AV5
Bacterins, Fowl cholera, Poultry diseases, Serological tests, Turkeys.
- 9740-69
OXIDATION OF METHYL- AND DIMETHYL-CARBAMATE INSECTICIDE CHEMICALS BY MICROSOMAL ENZYMES AND ANTICHOLINESTERASE ACTIVITY OF METABOLITES.
E S Oonithan J E Casida
J Agr Food Chem 16(1, JAN-FEB):28-44 REF
1968 381 J8223
Animal physiology, Carbamates, Cholinesterases, Enzymes, Insecticides, Liver, Metabolites, Microsomes, Oxidation, Rats.
- 9741-69
POLYMETHACRYLIC ACID: EFFECTS ON LYMPHOCYTE OUTPUT OF THE THORACIC DUCT IN RATS.
S Ormai E De Clereq
Science 163(3866):471-472
31 Jan 1969 470 SCI2
Animal physiology, Blood, Lymphocytes, Methacrylic acid, Polymers, Rats, Thorax.
- 9742-69
TULAREMIA IN THE WILDLIFE OF ARKANSAS.
L J Paulissen R R Corey D Swartz
Ark Acad Sci Proc 21:39-44 REF
1967 500 AR42
Agglutination test, Animal vectors, Bacterial diseases (animals), Human diseases, Pasteurella tularensis, Tularemia, Wildlife diseases.
- 9743-69
ATYPICAL FOCI OF HISTOMONIASIS LESIONS IN A STUDY OF DIRECT ORAL TRANSMISSION.
D L Peardon J E Ware
Avian Dis 13(2):340-344 REF
May 1969 41.8 AV5
Animal disease transmission, Animal physiology, Blackhead, Turkeys.
- 9744-69
B PARATHIPPHOSIS OF YOUNG PHEASANTS. (RUM)
L Petricia M Caroiu P Onica I Contiu P Nistor
Bucharest Inst Agron Timesoara Lucari Stiint 6:329-338 REF
1963 106.4 T48
Epizootic diseases, Infectious diseases, Mortality, Pheasants, Poultry diseases, Salmonella typhimurium, Salmonellosis. Russian and English summary.
- 9745-69
CHARACTERIZATION OF FIVE ISOLATES OF MAREK'S DISEASE.
H G Purchase P M Biggs
Res Vet Sci 8(4):440-449 REF
Oct 1967 41.8 R312
Avian lymphomatosis, Chickens, Poultry diseases, Virus diseases (animals).
- 9746-69
ABSORPTION AND METABOLISM OF ANTIMYCIN ADMINISTERED WITH A RAT DIET.
P O Ritter F M Strong
J Agr Food Chem 16(1, JAN-FEB):6-12 REF
1968 381 J8223
Absorption, Animal physiology, Antibiotics, Citrinin, Diet, Hydrogen, Isotopes, Metabolism, Radioactivity, Rats.
- 9747-69
THE ISOLATION OF BACTERIUM ANITRATUM (ACINETOBACTER ANITRATUS) AND MIMA POLYMORPHA

(ACINETOBACTER IWOFFI) FROM ANIMALS IN UGANDA.

H M Ross
Vet Rec 83(19):483-485
09 Nov 1968 41.8 V641

Achromobacter, Animals, Chickens, Microorganisms.

9748-69

STUDIES ON COLIBACILLOSIS OF CALVES. VII. ADVISABILITY OF RE-VACCINATION. (FR)

F Schoenaers A Kaeckenbeek
Ann Med Vet 112(8):649-657 REF
Dec 1968 41.8 AN78

Antibodies, Calves, Colibacillosis, Colostrum, Immunization, Livestock diseases, Pregnancy. English summary.

9749-69

ROLE OF INTERFERON IN EXPERIMENTAL MOUSE MALARIA.

W W Schultz K Y Huang F B Gordon
Nature 220(5168):709-710 REF
16 Nov 1968 47.2 N21

Biochemistry, Injections, Interferon, Laboratory animals, Malaria, Mice, Newcastle disease virus, Parasitism, Plasmodium berghei, Virus diseases (animals).

9750-69

A PLAQUE SYSTEM FOR STUDY OF INFECTIOUS LARYNGOTRACHEITIS VIRUS IN ADULT CHICKEN KIDNEY CULTURES.

J M Sharma L G Raggi
Avian Dis 13(2):268-279 REF
May 1969 41.8 AV5

Chickens, Infectious laryngotracheitis virus, Plaque, Serodiagnosis, Tissue culture.

9751-69

ELECTRON MICROSCOPY OF RICE TRANSITORY YELLOWING VIRUS.

E Shikata M J Chen
J Virology 3(2):261-264 REF
Feb 1969 QR360.J6

Electron microscopy, Plant physiology, Rice, Virus diseases (plants), Yellows.

9752-69

CARDIOVASCULAR STUDIES ON COPPER DEFICIENT SWINE. XII. PARTIAL PURIFICATION OF A SOLUBLE PROTEIN RESEMBLING ELASTIN.

D W Smith N Weissman W H Carnes
Biochem Biophys Res Commun 31(3):309-315 REF
10 May 1968 44.2.8 B5236

Amino acids, Animal nutrition, Circulatory system, Copper, Deficiency diseases, Elastin, Electrophoresis, Proteins, Purification, Swine, Temperature.

9753-69

ELECTRO-CARDIOGRAM IN A CARDIAC DISORDER IN CATTLE.

T P Suresh T R S Rangachar V R Hegde
Mysore J Agr Sci 2(1):17-22
1968 S19.M9

Cattle, Electrocardiograms, Heart diseases, Laboratory animals, Livestock diseases.

9754-69

THE RATE OF BREAKDOWN OF METHYL METHANESULPHONATE, DIMETHYL SULPHATE AND N-METHYL-N-NITROSOUREA IN THE RAT.

P F Swann
Biochem J 110(1):49-52 REF
Nov 1968 38.2 B52

Biochemistry, Blood, Chemical reactions, Decomposition, Dimethyl sulfate, Injections, Methyl methanesulfonate, Methyl-I-nitrosourea, I-, Rats.

9755-69

FLUORIDE TOXICITY IN THE CHICK.

C W Weber A R Doberenz B L Reid
Poultry Sci 48(1):230-235 REF

Jan 1969 47.8 AM33P

Animal nutrition, Chicks, Deficiency diseases, Fluorides, Toxins.

9756-69

IN VIVO SUSCEPTIBILITY OF SALMONELLA PANAMA TO POLYMYXIN B SULFATE AND COMBISTREP.

B J Williams O E Bentley
Avian Dis 13(2):412-414
May 1969 41.8 AV5

Antibiotics, Biological assay, Polymyxin b sulfate, Salmonella panama, Turkey.

9757-69

MUTATIONS OF THE WESTERN EQUINE ENCEPHALOMYELITIS VIRUS (WEE) INDUCED BY CHEMICAL MUTAGENS. (RUS)

G D Zasukhina W P Marinina
Genetika (5):166-168
1967 QH431.A1G4

Adenine nucleotides, Formaldehyde, Mutagens, Mutations, Nitrosomethylurea, N-, Virus diseases (animals), Western equine encephalomyelitis virus. English summary

ARTHROPODS

9758-69

A 10-YEAR SURVEY OF TRINIDADIAN ARTHROPODS FOR NATURAL VIRUS INFECTIONS (1953--1963).

T H G Aitken L Spence A H Jonkers W G Downs
J Med Entomol 6(2):207-215
May 1969 42.1 J828

Acarina, Arboviruses, Culicidae, Diptera, Insect vectors, Siphonaptera, Surveys, Virus diseases (animals).

9759-69

THE EFFECT OF DDT ON REPRODUCTION IN MICE.

M S Cannon L C Holcomb
Ohio J Sci 68(1):19-24
Jan 1968 41.0 OH3

Animal physiology, Biological assay, Chlorinated hydrocarbons, DDT, Insecticides, Mice, Reproduction, Toxicology.

9760-69

TICKS (IXODOIDEA) OF DOMESTIC ANIMALS IN IRAQ. PART 7. SEASONAL INCIDENCE ON CATTLE, SHEEP AND GOATS IN THE TIGRIS-EUPHRATES VALLEY PLAIN.

J Robson J M Robb N J Hawa T Al-Wahayyib
J Med Entomol 6(2):127-130 MAP
May 1969 42.1 J828

Insect identification, Ixodoidea, Livestock.

Based on collections totalling 78,247 ticks from 4,349 animals, cattle, sheep and goats carried more Hyalomma and Boophilus in summer and autumn than in either spring or winter. Rhipicephalus were more prevalent in spring and summer as compared to autumn and winter. The only purely seasonal tick species on these animals was H. detritum, which occurred in summer only.

9761-69

STUDIES ON THE SAFETY OF PLASTIC DOG COLLARS CONTAINING DICHLORVOS.

A I T Walker D E Stevenson
Vet Rec 83(21):538-541
23 Nov 1968 41.8 V641

Blood tests, Cholinesterases, Dichlorvos, Dogs, Insecticides, Organophosphorus compounds.

PARASITES

9762-69

EVALUATION OF PARBENDAZOLE, A NEW BROAD SPECTRUM ANTHELMINTIC FOR SWINE AND SHEEP.

E G Batte D J Moncol

Vet Med/Small Anim Clin 63(10):984-985

Oct 1968 41.8 M69

Anthelmintics, Dosage, Drenches, Drug therapy, Feed additives, Helminthiasis, Parbendazole, Sheep, Swine.

9763-69

FINE STRUCTURAL LOCALIZATION OF ACID PHOSPHATASE AND ARYL SULFATASE ACTIVITIES IN THE INTERMEDIATE LAYER OF HYMENOLEPIS DIMINUTA CYSTICERCOSIS.

B J Bogtish
Amer Microscop Soc Trans 88(3):411-419
Jul 1969 44.0 AM33

Acid phosphatase, Arylsulfatase, Biochemistry, Cytology, Hymenolepis diminuta.

9764-69

A NEW GENUS AND SPECIES, PSILOTRONUS AUDACIRRUS (TREMATODA: DIGENEA: PSILOSTOMATIDAE), FROM THE WILD TURKEY IN ALABAMA.

E E Byrd A K Prestwood
Amer Microscop Soc Trans 88(3):366-369
Jul 1969 44.0 AM33

Taxonomy, Trematoda, Turkey.

9765-69

CHANGES IN SEX RATIO IN HAEMONCHUS CONTORTUS CAYUGENSIS.

H D Crofton J H Whitlock
Cornell Vet 59(3):388-392
Jul 1969 41.8 C81

Haemonchus contortus, Population, Sex ratios, Surveys.

9766-69

THE EFFECT OF TIME AND SEASON ON THE CONSTANCY OF MORPHOLOGY IN HAEMONCHUS CONTORTUS CAYUGENSIS INFECTIONS.

H D Crofton J H Whitlock
Cornell Vet 59(3):393-397
Jul 1969 41.8 C81

Haemonchus contortus, Morphology, Nematodes.

9767-69

PELECITUS CEYLONENSIS N.SP., FROM THE CHICK AND ASH-DOVE EXPERIMENTALLY INFECTED WITH LARVAE FROM MANSONIA CRASSIPES, AND FROM NATURALLY-INFECTED CROWS IN CEYLON.

A S Dissanaike
Ceylon J Sci Biol Sci 7(1/2):96-104 REF
Oct 1967 47.5 C33

Birds, Chicks, Crows, Insect physiology, Insect vectors, Larvae, Mansonia crassipes, Pelecitus ceylonensis, Pigeons.

9768-69

A COMPARATIVE STUDY OF THE EFFECTIVENESS OF CHEMICAL OVICIDES ON THE SURVIVAL OF THE SOIL-TRANSMITTED INTestinal NEMATODES.

A M Mango
Diss Abstr Sect B 29(3):1078B
Sep 1968 Z5055.U49D53

Ancylostoma caninum, Ascaris lumbricoides, Biochemistry, Chemical control (nematodes), Hydrogen-ion concentration, Larvae, Livestock, Nematodes, Ovicides, Soils, Strongyloides fülleborni, Temperature, Trichuris vulpis.

9769-69

THE EFFECT OF THE TAPEWORM HYMENOLEPIS NANA ON IMMUNITY TO TUBERCULOSIS IN MICE.

R J Olds
J Hyg 67(2):233-239 REF
Jun 1969 44.8 J82

Hymenolepis nana, Immunity, Mice, Tuberculosis.

9770-69

STUDIES ON TWO FLUKE INFECTIONS OF THE INTESTINAL TRACT IN BUFFALO-CALVES (BELOW TWO YEARS OF AGE) WITH FURTHER OBSERVATIONS ON HISTOPATHOLOGY.

B P Pande B B Bhatia G S Arora

Indian J Vet Sci Anim Husb 38(3):463-470 REF
Sep 1968 41.8 IN22
Buffaloes, Calves, Livestock diseases, Paramphistomum explanatum, Parasitism, Schistosoma spindale, Trematoda.

9771-69

STUDIES ON STEPHANOFILARIASIS IN ORISSA. II. DERMATITIS DUE TO STEPHANOFILARIA ASSAMENSIS PANDE, 1936, IN THE MURRAH BUFFALO (BOS BUBALIS) AND THE BEETAL BUCK (CAPRA HIRCUS) WITH REMARKS ON THE MORPHOLOGY OF THE PARASITE.

B Patnaik S P Roy

Indian J Vet Sci Anim Husb 38(3):455-462 REF
Sep 1968 41.8 IN22

Buffaloes, Dermatitis, Filariasis, Helminths, Livestock diseases, Morphology, Parasitism, Sheep, Stephanofilaria assamensis.

9772-69

STUDIES ON GEOGRAPHICAL DISTRIBUTION AND ECOLOGY OF LYMAEA AURICULARIA VAR. RUFESCENS, THE INTERMEDIATE HOST OF FASCIOLA GIGANTICA IN ORISSA.

M M Patnaik S K Ray

Indian J Vet Sci Anim Husb 38(3):484-506 MAP REF

Sep 1968 41.8 IN22

Animal vectors, Cattle, Distribution, Ecology, Fasciola, Fascioliasis, Host specificity, Livestock diseases, Snails.

9773-69

STUDIES ON EIGHT MORPHOLOGICAL VARIANT FEMALES OF HAEMONCHUS SIMILIS TRAVASSOS, 1914 (NEMATODA, TRICHOSTRONGYLIDAE) FROM INDIAN CATTLE (BOS INDICUS).

S R Rao M A Ghafoor

Indian J Vet Sci Anim Husb 38(3):471-477 REF
Sep 1968 41.8 IN22

Cattle, Haemonchus similis, Morphology, Nematodes, Trichostrongylidae.

9774-69

GNATHOSTOMULIDA FROM AMERICA.

R J Riedl

Science 163(3866):445-452 REF
31 Jan 1969 470 SCI2

Anatomy, Ecology, Gnathostomulida, Physiology, Taxonomy, Zoogeography.

9775-69

PARBENDAZOLE IN TREATMENT OF INTESTINAL NEMATODES OF DOGS AND MONKEYS.

V J Theodorides M Luderman

Vet Med/Small Anim Clin 63(10):985

Oct 1968 41.8 M69

Ancylostoma, Dipylidium, Dogs, Dosage, Drug therapy, Intestines, Monkeys, Nematodes, Oesophagostomum, Parasitism, Parhendazole, Physaloptera, Strongyloides, Taenia, Toxocara, Trichostrongylus, Trichuris, Uncinaria.

9776-69

RESEARCH NOTE--INCIDENCE OF INFECTION BY GASTROTAENIA CYGNI (CESTODA: APORIDEA) OF WATERFOWL IN EASTERN COLORADO.

W B Willers O W Olsen

Avian Dis 13(2):415-416

May 1969 41.8 AV5

Aquatic birds, Cestodiasis.

CITRUS FRUITS STORED AT DIFFERENT TEMPERATURES.

M Schiffman-Nadel E Cohen

Phytopathology 59(2):237-238

Feb 1969 464.8 P56

Brown rot, Citrus, Fruit, Fungus diseases (plants), Incubation, Phytophthora citrophthora, Storage diseases, Temperature.

ARTHROPODS

9778-69

BIONOMICS OF ANDROLAELAPS CASALIS (BERLESE) (ACARINA: LAELAPIDAE) A PREDATOR OF MITE PESTS OF STORED CEREALS.

P S Barker

Can J Zool 46(6):1099-1102

Nov 1968 470 C16D

Acarus siro, Androlaelaps casalis, Biological control (insects), Glyciphagus domesticus, Grain, Insect pests, Mites, Predaceous insects, Stored products, Temperature, Tribolium confusum, Tyrophagus putrescentiae.

9779-69

COCKROACHES (BLATTARIA) AS VECTORS OF FOOD POISONING AND FOOD INFECTION ORGANISMS.

M E Rueger T A Olson

J Med Entomol 6(2):185-189

May 1969 421 J828

Food poisoning, Insect vectors, Periplaneta americana, Salmonella, Shigella, Staphylococcus aureus.

9780-69

RECORDS OF COLEOPTERA ASSOCIATED WITH STORED PRODUCTS IN AUSTRALIA.

R G Winks

Entomol Soc Australia (nsw) J 8(1):110-112

30 Jun 1969 423.92 EN84

Coleoptera, Grain, Stored product insects, Surveys.

MICROBIAL CONTAMINATION

9781-69

SOME THOUGHTS CONCERNING THE SALMONELLA PROBLEM. (GE)

J Bischoff

Arch Lebensmittellhyg 19(4):83

Apr 1968 41.8 L49

Conferences, Eggs, Feed, Fish meal, Flour, Food contamination, Food sanitation, Foreign trade, Import control, Infectious diseases, Poultry products, Salmonella.

9782-69

AFLATOXIN-PRODUCING POTENTIAL OF FUNGI ISOLATED FROM CURED AND AGED MEATS.

L B Bullerman J C Ayres

Appl Microbiol 16(12):1945-1946

Dec 1968 448.3 AP5

Aflatoxin, Aging, Aspergillus flavus, Aspergillus parasiticus, Curing, Food contamination, Fungi, Meat.

9783-69

THE SOURCES AND EXTENT OF SALMONELLA CONTAMINATION IN RENDERING PLANTS.

J Timoney

Vet Rec 83(21):541-543

23 Nov 1968 41.8 V641

Animal diseases, Animal nutrition, Food contamination, Salmonella.

9784-69

ON THE PROBLEM OF CONTAMINATION WITH SALMONELLAE FOODSTUFFS AND FEEDS. (BU)

V Vesselinov

Vet Med Nauk 5(3):111-115

1968 41.8 V6468

Bacteria, Feed, Food contamination, Microbial contamination, Salmonella.

RESIDUES

9785-69

GAS CHROMATOGRAPHIC ANALYSIS OF CIBA C-9491 (O-(2,5-DICHLORO-4-IODOPHENYL)O,O-DIMETHYL PHOSPHOROTHIOATE), ITS OXYGEN ANALOG, AND ITS PHENOLIC HYDROLYSIS PRODUCT IN SWEET CORN AND MILK.

M C Bowman M Beroza

J Agr Food Chem 16(2,MAR-APR):280-283

1968 381 J8223

Chromatography, Corn, Dichloro-4-iodophenyl) O,O-dimethyl phosphorothioate, O-(f, Gases, Hydrolysis, Milk, Oxygen, Pesticide residues, Phenols.

9786-69

NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS.

R E Duggan

Fed Regist 34(59,PT 1):5752

27 Mar 1969 L1.451

Agricultural products, Benzene, Chromatography, Fruit, Fungicides, Pesticide analysis, Pesticide residues, Tetrachloroethylthio)-4-cyclohexene-1,2-dicarboximide, cist.

9787-69

NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS.

R E Duggan

Fed Regist 34(44):4899

06 Mar 1969 L1.451

Chemicals, Chromatography, Mung beans, Pesticide residues, Pesticides, Plant regulators, Regulation (pesticides), Trifluralin.

9788-69

NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS.

R E Duggan

Fed Regist 34(48):5128

12 Mar 1969 L1.451

Agricultural products, Butylphenoxy)cyclohexyl 2-propynyl sulfite, 2-(p-tert-, Chemicals, Pesticide residues, Pesticides, Raw materials, Sulfites, Tolerances, Walnuts.

9789-69

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. NOREA.

R E Duggan

Fed Regist 34(51):5291-5292

15 Mar 1969 L1.451

Agricultural products, Chemicals, Cottonseed, Herbicide residues, Norea, Pesticide residues, Pesticides, Raw materials, Sorghum, Soybeans, Spinach, Sugarcane, Tolerances.

9790-69

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. O,O-DIMETHYL S-(4-OXO-1,2,3-BENZOTRIAZIN-3(4H)-YL METHYL) PHOSPHORODITHIOATE.

R E Duggan

Fed Regist 34(50):5255

14 Mar 1969 L1.451

Agricultural products, Azinphosmethyl, Chemicals, Organophosphorus compounds, Pesticide

COMMODITY PROTECTION

STORAGE DISEASES

9777-69

THE INCUBATION PERIOD OF PHYTOPHTHORA CITROPHTHORA IN

residues, Pesticides, Raw materials, Tolerances, Tomatoes.

9791-69

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. 2-(P-TERTBUTYLPHENOXY)CYCLOHEXYL 2-PROPYNYL SULFITE.

R E Duggan

Fed Regist 34(51):5291

15 Mar 1969 L1.451

Agricultural products, Apples, Butylphenoxycyclohexyl 2-propynyl sulfite, 2-(p-tert-, Chemicals, Insecticides, Peaches, Pears, Pesticide residues, Pesticides, Plums, Prunes, Public health, Raw materials, Sulfites, Tolerances.

9792-69

NOTICE OF FILING OF PETITION FOR FOOD ADDITIVE BUQUINOLATE.

R E Duggan

Fed Regist 34(25):1784

06 Feb 1969 L1.451

Buquinolate, Chickens, Drugs, Food additives, Meat, Pesticide residues.

9793-69

IDENTIFICATION AND QUANTITATIVE EVALUATION OF ANTIBIOTIC RESIDUES IN CHICKENS FED ON A SPIRAMYCIN DIET.

G R Jolles B I. Terlain

J Agr Food Chem 16(1,JAN-FEB):60-64

1968 381 J8223

Antibiotics, Chickens, Chromatography, Diet, Residues, Spiramycin, Streptomyces ambofaciens, Volumetric analysis.

9794-69

NOTICE OF WITHDRAWAL OF PETITION REGARDING PESTICIDES.

J K Kirk

Fed Regist 33(38):2623-2624

26 Feb 1969 L1.451

Agricultural products, Carbamates, Carbofuran, Insecticide residues, Pesticides, Raw materials, Regulation (pesticides).

9795-69

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. 2-ETHYLAMINO-4-ISOPROPYLAMINO-6-METHYLTHIO-S-TRIAZINE.

J K Kirk

Fed Regist 34(38):2608

26 Feb 1969 L1.451

Agricultural products, Bananas, Chemicals, Ethylamino)-4-(isopropylamino)-6-(methylthio)-s-triazine, 2-, Pesticide residues, Pesticides, Pineapples, Potatoes, Raw materials, Sugarcane, Tolerances, Triazines, Tropical fruit.

9796-69

CONCENTRATION OF TWO 1,4-BENZOXAZINONES IN DENT CORN AT VARIOUS STAGES OF DEVELOPMENT OF THE PLANT AND ITS RELATION TO RESISTANCE OF THE HOST PLANT TO THE EUROPEAN CORN BORER.

J A Klun J F Robinson

J Econ Entomol 62(1):214-220 REF

17 Feb 1969 421 J822

Benzoxazinone compounds, Biochemistry, Corn, Insect pests, Insecticide residues, Methoxy-2-benzoxazolinone, 6-, Ostrinia nubilalis, Plant genetics, Plant morphology, Plant pest resistance.

9797-69

FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION. ADJUVANTS FOR PESTICIDE USE DILUTIONS.

H L Ley

Fed Regist 34(61):5930

29 Mar 1969 L1.451

Coconuts, Ethylene dichloride, Food additives, Food consumption, Pesticides, Regulation (pesticides), Residues.

9798-69

FATE OF C14-MALEIC HYDRAZIDE IN RATS.

D L Mays G S Born J E Christian B J Liska

J Agr Food Chem 16(2,MAR-APR):356-357

1968 381 J8223

Animal physiology, Biochemistry, Blood, Carbon compounds, Carbon isotopes, Feces, Maleic hydrazide, Rats, Tissues, Urine.

9799-69

EFFECT OF 2,4-D ON INCORPORATION OF 14C INTO URINARY METABOLITES FROM RATS RECEIVING 14C-LABELED ACETATE.

W W Philleo S C Fang

J Agr Food Chem 16(2,MAR-APR):358-360

1968 381 J8223

Acetates, Animal physiology, Biochemistry, Carbon isotopes, D, 2,4-, Metabolites, Rats, Urine.

9800-69

COLORIMETRIC METHODS FOR DETERMINATION OF SIMAZINE AND RELATED CHLORO-S-TRIAZINES.

M T H Ragab J P McCollum

J Agr Food Chem 16(2,MAR-APR):284-289 REF

1968 381 J8223

Chlorinated hydrocarbons, Colorimetry, Pesticide residues, Simazine, Triazines.

9801-69

INHIBITION OF BEEF LIVER HYDROLYTIC ENZYMES BY ORGANOPHOSPHORUS PESTICIDES. QUANTAL INHIBITION CHARACTERISTICS OF SEVERAL ORGANOPHOSPHORUS COMPOUNDS, USING O-NITROPHENYL BUTYRATE AS SUBSTRATE.

D C Villeneuve W P McKinley

J Agr Food Chem 16(2,MAR-APR):290-294 REF

1968 381 J8223

Cattle, Enzymes, Hydrolysis, Inhibitors, Liver, Nitrogen compounds, Nitrophenyl butyrate, o-, Organophosphorus compounds, Pesticide residues, Substrates.

9802-69

CHROMATOGRAPHIC DETERMINATION OF 4-TRIFLUOROMETHYL-2,4-DINITRODIPHENYL ETHER RESIDUES IN SOYBEANS.

J P Walter M L Kerchersid M G Merkle

J Agr Food Chem 16(1,JAN-FEB):143-144

1968 381 J8223

Chromatography, Ethers, Herbicides, Pesticide residues, Soybeans, Trifluoromethyl-2,4-dinitrodiphenyl ether, 4-.

TOXICOLOGY

9803-69

STUDIES WITH CALCIUM ETHYLENEDIAMINETETRAACETATE IN CALVES; TOXICITY AND USE IN BOVINE LEAD POISONING.

A L Aronson P B Hammond A C Straffuss

Toxicol Appl Pharmacol 12(3):337-349 REF

May 1968 391.8 T662

Blood plasma, Calcium ethylenediaminetetraacetate, Cattle, Dosage, Drug therapy, Lead poisoning, Metabolism, Toxicology, Urine.

9804-69

MCD-PEPTIDE FROM BEE VENOM: ISOLATION, BIOCHEMICAL AND PHARMACOLOGICAL PROPERTIES. (GE)

H Breithaupt E Habermann

*Naunyn-Schmiedebergs Arch Pharmacol Exp**Pathol* 261(3):252-270 REF

30 Sep 1968 448.8 AR2

Bee venom, Biochemistry, Blood pressure, Capillaries, Cells, Chromatography, Histamine, Peptides, Permeability, Pharmacology, Rats, Surface-active agents, Tissues. English summary.

9805-69

ORGANOPHOSPHORUS POISONING. SOME PROPERTIES OF AVIAN ESTERASES.

P J Bunyan D M Jennings A Taylor

J Agr Food Chem 16(2,MAR-APR):326-331 REF

1968 381 J8223

Esterases, Organophosphorus compounds, Pheasants, Phorate, Pigeons, Properties, Toxicology.

9806-69

ORGANOPHOSPHORUS POISONING. DIAGNOSIS OF POISONING IN PHEASANTS OWING TO A NUMBER OF COMMON PESTICIDES.

P J Bunyan D M Jennings A Taylor

J Agr Food Chem 16(2,MAR-APR):332-339 REF

1968 381 J8223

Azinphosmethyl, Chlorfenvinphos, Diagnosis, Diazinon, Dimethoate, Ethion, Methyl demeton, Organophosphorus compounds, Pesticides, Pheasants, Toxicology.

9807-69

EFFECT OF O,P'-DDD AND METYRAPONE (SU-4885) ON DEVELOPMENT OF RENAL HYPERTENSION IN RATS.

M J Fregly

Toxicol Appl Pharmacol 12(3):548-559 REF

May 1968 391.8 T662

Biochemistry, Dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane, 1,1-, Diet, Dosage, Hypertension, Hypertrophy, Kidneys, Laboratory animals, Metyrapone, Rats, Toxicology.

9808-69

STUDIES ON THE ACTION OF HIGH CONCENTRATIONS OF ALKYL POLYGLYCOL ETHERS ON FISH. (GE)

C Gloxhuber W K Fischer

Food Cosmet Toxicol 6(4):469-477 REF

Dec 1968 391.8 F73

Absorption, Detergents, Fish, Lethal factor, Toxicology. English and French summaries.

9809-69

ENVENOMATION BY THE SPIDERS CHIRACANTHIUM INCLUSUM AND ARGIOPE AURANTIA.

J R Gorham T B Rhency

Jama (J Amer Med Ass) 206(9):1958-1962 MAP

REF

25 Nov 1968 448.9 AM37

Arachnida, Argiope aurantia, Chiracanthium inclusum, Drug therapy, Epidemiology, Public health, Spider venom, Spiders, Zoogeography.

9810-69

ACUTE AND SUBCHRONIC TOXICITY OF A NEW FLUORINE PESTICIDE, N-METHYL-N-(1-NAPHTHYL) FLUOROACETAMIDE.

Y Hashimoto T Makita H Miyata T Noguchi G Ohta

Toxicol Appl Pharmacol 12(3):536-547

May 1968 391.8 T662

Acaricides, Animal physiology, Dosage, Fluorine, Fluoro-N-methyl-N-(1-naphthyl)acetamide, 2-, Insecticides, Laboratory animals, Toxicology.

9811-69

STIMULATION OF HEPATIC MICROSOMAL DRUG-METABOLIZING ENZYMES BY ALPHA,ALPHA-BIS-(P-CHLOROPHENYL)-3-PYRIDINEMETHANOL AND A METHOD FOR DETERMINING NO-EFFECT LEVELS IN RATS.

D G Hoffman H M Worth R C Anderson

Toxicol Appl Pharmacol 12(3):464-472 REF

May 1968 391.8 T662

Animal physiology, Bis(p-chlorophenyl)-3-pyridinemethanol, alpha, alpha-, Diet, Dosage, Drugs, EPN, Enzymes, Metabolism, Nitroanisole, p-, Organophosphorus compounds, Rats, Statistical analysis, Toxicology.

9812-69

STUDIES ON LABELED ANIMAL POISONS. II. DISTRIBUTION OF THE VENOMS OF VARIOUS SPIDERS LABELED WITH SE75 AND P32 IN THE GUINEA PIG.

D Lebez Z Maretic F Gubensek J Kristan

Toxicol 5(4):261-262

May 1968 391.8 T66

Electrophoresis, Guinea pigs, Isotopes, *Latrodectus mactans*, Phosphorus, Physiology, Radioactivity, Selenium, Spiders, *Steatoda paykulliana*, Venoms.

9813-69

EQUI-THESIN, GENERAL ANESTHETIC. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.

H L Ley

Fed Regist 34(43):3861
05 Mar 1969 L1.451

Accident prevention, Anesthetics, Cattle, Chloral hydrate, Dosage, Drug therapy, Horses, Magnesium sulfate, Pentobarbital.

9814-69

PRELIMINARY STUDIES ON TOXICITY OF RONNEL-DOW ET 57 IN SHEEP.

A Malaki A Jilek

Mysore J Agr Sci 2(1):56-58

1968 S19.M9

Drug therapy, Hypoderma, Ronnel, Sheep, Systemic insecticides, Toxicity.

9815-69

A SIMPLE BIOASSAY FOR DETECTION OF AFLATOXIN IN MILK.

A M Mayer A Polijakoff-Mayber P Robinson I Slowatizky

Toxicon 7(1):13-14

Jun 1969 391.8 T66

Aflatoxin, Biological assay, Methodology, Milk.

9816-69

PRELIMINARY STUDIES ON VENOM FROM THE BROWN RECLUSE SPIDER *LOXOSCELES RECLUSA*.

P N Morgan

Toxicon 6(3):161-165 REF

Feb 1969 391.8 T66

Guinea pigs, *Loxosceles reclusa*, Mice, Rabbits, Rats, Toxicology, Venoms.

9817-69

THE ACUTE TOXICITY OF OCHRATOXIN A TO RATS.

I F H Purchase J J Theron

Food Cosmet Toxicol 6(4):479-483 REF

Dec 1968 391.8 F73

Aspergillus ochraceus, Fungus cultures, Lethal factor, Ochratoxin, Rats, Toxicology. French and German summaries.

9818-69

TOXICOLOGICO-HYGIENIC CHARACTERISTICS OF THE AMINE SALT OF 2,4-D (LITERATURE SURVEY). (RUS)

E G Sharina L I Smirnova

Vop Pitan 27(3,MAY-JUN):57-62 REF

1968 389.8 V89

Amines, D, 2,4-, Hygiene, Phenoxy acid compounds, Salts, Toxicology.

9819-69

EXPERIMENTAL PRODUCTION OF HEINZ BODIES IN THE PIG.

D Sinha S D Sleight

Toxicol Appl Pharmacol 12(3):435-439

May 1968 391.8 T662

Animal physiology, Diagnosis, Erythrocytes, Heinz bodies, Hematologic diseases, Hydrazine compounds, Hydroxylamine, Nitrites, Swine, Toxicology.

9820-69

DETERMINATION OF HYDROLYTIC METABOLITES OF ORGANOPHOSPHORUS INSECTICIDES IN COW URINE USING AN IMPROVED THERMIONIC DETECTOR.

L E St. John D J Lisk

J Agr Food Chem 16(1 JAN-FEB):48-49

1968 381 J8223

Animal physiology, Dairy cattle, Diethyl phosphate, Dimethyl phosphate, Hydrolysis, Insecticides, Metabolites, Organophosphorus compounds, Thiophosphates, Urine.

9821-69

ANTHELMINTIC EFFICACY AND TOXICITY STUDIES OF I-TETRAMISOLE IN FEEDLOT CATTLE.

T A Stolfus

Vet Med/Small Anim Clin 63(10):986

Oct 1968 41.8 M69

Anthelmintics, Cattle, Dosage, Drug therapy, Helminthiasis, *Oesophagostomum*, *Onchocerca gibsoni*, Parasitism, Stomach, Tetramisole, Thiazolyl-henzimidazole, 2-(4-, Toxicology.

9822-69

ACUTE RADIOTOXICITY OF 144CE-144PR AFTER INTRAVENOUS ADMINISTRATION TO SHEEP.

D J Sullivan T P McDonald M C Bell

Cornell Vet 59(2):236-249 REF

Apr 1969 41.8 C81

Animal physiology, Bone marrow, Cerium isotopes, Injections, Radiation, Radioisotopes, Sheep, Soil contamination, Toxicology.

9823-69

THE ORAL TOXICITY OF DIELDRIN TO THE CROWNED GUINEA-FOWL, NUMIDA MELEAGRIS (L.).

I H Wiese N C J Basson

S Afr J Agr Sci 10(3):697-705 REF

Sep 1967 24 SU3

Chlorinated hydrocarbons, Dieldrin, Dosage, Guinea fowl, Poultry, Toxicity.

The toxicity of dieldrin to the crowned guinea fowl at different dietary levels was investigated and compared to its toxicity to other wild and domestic fowl in South Africa.

PLANT PHYSIOLOGY & BIOCHEMISTRY

9824-69

PLANT HORMONES AND FLOWERING IN COFFEE.

R van der Veen

Acta Bot Neer 17(5):373-376

Oct 1968 450 AC822

Coffee, Gibberellie acid, Plant budding, Plant dormancy, Plant hormones, Plant physiology, Plant regulators, Weather.

9825-69

UPTAKE OF VITAVAX (DCMO) BY GERMINATING COTTONSEED.

A I Allam P E Schilling J B Sinclair

Phytopathology 59(2):265-266 REF

Feb 1969 464.8 P56

Chemical control (plant diseases), Cottonseed, Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Dosage, Fungicides, Fungus diseases (plants), Plant translocation, *Rhizoctonia solani*, Seed germination, Seed treatment, Systemic fungicides.

9826-69

COLCHICINE-INDUCED MUTATIONS IN A TRISPECIFIC NICOTIANA HYBRID.

K Appario D M Gopinath

Can J Genet Cytol 10(4):782-787

Dec 1968 443.8 C16

Biosynthesis, Chromosomes, Colchicine, *Nicotiana forgetiana*, *Nicotiana glauca*, *Nicotiana longiflora*, Plant breeding, Plant morphology, Plant mutation.

9827-69

EFFECTS OF RATE, TIME, AND METHOD OF APPLICATION OF TIBA ON SOYBEAN PRODUCTION.

M E Bauer T G Sherbeck A J Ohlrogge

Agron J 61(4 JUL-AUG):604-606

Aug 1969 4 AM34P

Plant growth regulator, Plant morphology, Soybeans, Triiodobenzoic acid, 2,3,5-,

9828-69

EFFECT OF CHLOROCHOLINE CHLORIDE ON THE GROWTH CHARACTERISTICS, LODGING AND YIELD OF RICE.

B Das A C Vig D R Bhumbala

Prog Farming 5(1):33-39

Mar 1968 S19.P8

Chloroethyltrimethylammonium chloride, (2-, Crop yields, Fertilizers, Nitrogen, Nodules (plants), Plant biochemistry, Plant physiology, Rice.

9829-69

INFECTION STRUCTURES FROM RUST UREDIOSPORES; EFFECT OF RNA AND PROTEIN SYNTHESIS INHIBITORS.

L D Dunkle R Maheshwari P J Allen

Science 163(3866):481-482 REF

31 Jan 1969 470 SCI2

Fungus diseases (plants), Heat, Plant physiology, Proteins, *Puccinia graminis tritici*, Ribonucleic acid, Rust, Synthesis, Uredinales.

9830-69

METABOLISM OF IODOACETIC ACID BY ORANGE LEAVES.

T J Fecteau

Diss Abstr Sect B 29(3):820B

Sep 1968 Z5055.U49D53

Biochemistry, Iodoacetic acid, Leaves, Oranges, Plant metabolism, Plant physiology, Radioactive tracers.

9831-69

OXIDATIVE DEGRADATION OF AROMATIC HYDROCARBONS BY MICROORGANISMS. II. METABOLISM OF HALOGENATED AROMATIC HYDROCARBONS.

D T Gibson J R Koch C L Schuld R E Kallio

Biochemistry 7(11):3795-3802 REF

Nov 1968 381 B523

Biochemistry, Enzymes, Glycols, Hydrocarbons, Mammals, Metabolism, Microorganisms, Oxidation, Plant physiology, *Pseudomonas putida*, Toluene.

9832-69

PATHOLOGICAL CHANGES IN ULTRASTRUCTURE: FALSE PLASMOLYSIS.

P Hanchey H Wheeler

Can J Bot 47(5):675-678 REF

May 1969 470 C16C

Electron microscopy, Plant physiology, Plasmolysis, Tissues.

9833-69

OZONE. EFFECT ON APPARENT PHOTOSYNTHESIS, RATE OF TRANSPIRATION, AND STOMATAL CLOSURE IN PLANTS.

A C Hill N Littlefield

Environ Sci Technol 3(1):52-56 REF

Jan 1969 TD420.A1E5

Air pollution, Ozone, Photosynthesis, Plant growth inhibitors, Plant physiology, Plant transpiration, Stomata.

9834-69

PROPERTIES OF SINGLE- AND DOUBLE-STRANDED RIBONUCLEIC ACID FROM BARLEY PLANTS INFECTED WITH BROMEGRASS MOSAIC VIRUS.

C Hiruki

J Virology 3(5):498-505 REF

May 1969 OR360.J6

Barley, Chromatography, Mosaic, Plant biochemistry, Ribonucleic acid, Virus diseases (plants).

9835-69

ISOLATION OF GIBBERELLIN A20 FROM PEA PODS.

Y Komoda Y Isogai T Okamoto

Tokyo Univ Coll Gen Educ Sci Pap 18(2):221-230

Dec 1968 330.9 T572

Biological assay, Gibberellins, Peas, Plant extracts, Plant regulators.

9836-69

9836-69
SNA SPRAYS TO IMPROVE WEIGHT AND SIZE OF SPRING FRUIT OF PINEAPPLES IN TAITUNG. (CH)

K H Kwong Y M Chiu
J Hort Soc China 14(1-2):35-48
Apr 1968 80 C47

Calcium carbide, Fruit culture, Growth factors, Naphthaleneacetic acid, Pineapples, Plant growth inhibitors, Plant physiology, Plant regulators, Plant water relations, Spraying, Variance analysis. English summary.

9837-69

ALTERATIONS OF THE HOST WALL SURROUNDING THE INFECTION PEG OF POWDERY MILDEW FUNGI.

W E McKeen R Smith P K Bhattacharya
Can J Bot 47(5):701-706 REF
May 1969 470 C16C

Carbohydrates, Erysiphe cichoracearum, Erysiphe graminis, Erysiphe polygoni, Fungus cultures, Plant extracts, Plant physiology, Plant tissues, Powdery mildew, Sphaerotheca macularis.

9838-69

EFFECT OF INHIBITORS OF NUCLEIC ACID AND PROTEIN SYNTHESIS ON THE REAPPEARANCE OF LIGHT INTERRUPTION RHYTHM IN A LONG-DAY DUCKWEEP, LEMNA GIBBA G3.

H Nakashima
Plant Cell Physiol 10(2):259-270 REF
Jun 1969 450 P699

Deoxyribonucleic acid, Inhibitors, Lemna gibba, Photoperiodism, Plant biochemistry, Proteins, Synthesis, Weed control.

9839-69

EFFECT OF TIME OF APPLICATION OF GIBBERELLIC ACID AND PARACHLOROPHENOXACETIC ACID ON BERRY AND BUNCH WEIGHT, YIELD AND SEEDLESSNESS IN GRAPE (VAR. ANABE-SHAHI).

G S Nijjar G G Bhatia
Prog Farming 5(1):51-55 REF
Mar 1968 S19.P8

Chlorophenoxyacetic acid, p-, Crop yields, Dosage, Fruit culture, Gibberellin acid, Grapes, Plant biochemistry, Plant physiology, Plant regulators, Seeds, Time.

9840-69

METABOLISM OF BETA-DIHYDROHEPTACHLOR-14C IN SOIL AND BY MICROORGANISMS.

N H Poonawalla F Korte
J Agr Food Chem 16(1,JAN-FEB):15-16 REF
1968 381 J8223

Aspergillus niger, Biochemistry, Carbon isotopes, Dihydroheptachlor, beta-, Heptachlor, Metabolism, Microorganisms, Penicillium urticae, Plant physiology, Soils.

9841-69

EFFECTS OF SUCCINIC ACID 2,2-DIMETHYL HYDRAZIDE AND (2-CHLOROETHYL) TRIMETHYLAMMONIUM CHLORIDE ON TOMATOES (LYCOPERSICON ESCULENTUM MILL.) AND ON TUBEROUS ROOT FORMATION IN DAHLIA PINNATA CAV.

P E Read
Diss Abstr Sect B 29(3):838B-839B
Sep 1968 Z5055.U49D53
Biochemistry, Chloroethyl)trimethylammonium chloride, (2-, Crop yields, Dahlia pinnata, Plant growth inhibitors, Plant morphology, Succinic acid, 2,2-dimethylhydrazide, Tomatoes.

9842-69

STRUCTURE DETERMINATION OF SOME METABOLITES OF FUSARIUM CULMORUM.

K J Schilling
Diss Abstr Sect B 29(3):948B
Sep 1968 Z5055.U49D53

Acids, Chemical structure, Fungi, Fusarium culmorum, Metabolites, Plant metabolism, Stereochemistry.

9843-69

GIBBERELLIN-LIKE SUBSTANCES IN ROOT EXUDATE OF VITIS VINIFERA.

K G M Skene
Planta 75(3):250-262
07 Apr 1967 450 P693
Biological assay, Chromatography, Gibberellins, Grapes, Root excretions.

Abstract: Calculations on the rate of gibberellin movement from the roots seemed to be compatible with levels of activity in the leaves. The levels of gibberellin-like activity in the root exudate were examined by harley endosperm assay and compared with levels determined for other parts of the plant.

9844-69

THE INFLUENCE OF INSECTICIDES, ACARICIDES AND FUNGICIDES ON THE BIOCENOSIS OF FRUIT CULTURES. (GE)

H Steiner
Entomophaga 7(3):237-242
1962 421 EN835

Acaricides, Biocenosis, Fruit culture, Fungicides, Insecticides, Plant protection, Spraying. English summary. discussion of the suitability of 10 insecticides, 3 acaricides and 9 fungicides.

9845-69

THE GROWTH AND ACTIVITY OF CELLULOSE DECOMPOSING FUNGI AS INFLUENCED BY CULTURE CONDITIONS.

E E M Taha A A Abuzid
Zeitsch Allg Mikrobiol 3(4):275-281
1963 QRI.Z4

Cellulose, Culture media, Decomposition, Fungi, Helminthosporium cyclops, Humidity, Hydrogen ion concentration, Penicillium oxalicum, Plant physiology, Temperature.

CHEMISTRY

9846-69

RECOMMENDED ANALYTICAL METHODS FOR PESTICIDES. 38. TEST FOR EMULSION CHARACTERISTICS OF EMULSIFIABLE CONCENTRATES.

Anonymous
China Plant Protect Bull 16(4):67-68
Aug 1968 464.9 C47
Emulsions, Methodology, Pesticide analysis.

9847-69

SYNTHESIS OF BENZOTHAZOLYL-GUANIDINES AS ANTITUBERCULARS AND ANTIBACTERIALS.

N P Bhargava R Laxhan
Agr Biol Chem 32(11):1392-1394 REF
Nov 1968 385 AG8B
Bactericides, Chemicals, Culture media, Guanidine compounds, Mycobacterium tuberculosis, Synthesis, Tuberculosis vaccines.

9848-69

EFFECT OF ANTISERUM TO E. COLI DNA POLYMERASE ON SYNTHESIS OF PHI CHI 174 DNA EXTRACTS OF PHI CHI INFECTED CELLS.

D T Denhardt
Nature 220(5163):131-134
12 Oct 1968 472 N21
Antiserum, Bacteria, Breeding, Cells, Chemical reactions, Deoxyribonucleic acid, Enzymes, Escherichia coli, Extracts, Lysates, Polymers, Reproduction, Sedimentation, Synthesis.

9849-69

BROMDICHLOROACETANILIDES AS FUNGICIDES AND NEMATOCIDES. PATENT 3,450,822.

E E Gilbert

Us Patent Office Offic Gaz 863(3):903

17 Jun 1969 156.65 OF2
Acetanilide, Fungicides, Nematocides, Patents.

9850-69

DEGRADATION OF ORGANOCHLORINE PESTICIDES WITH SPECIAL REFERENCE TO 1,1-BIS(4-CHLOROPHENYL)-2,2-DICHLOROETHYLENE. (ABSTRACT).

H Hughes I Bazant J R Brown
Can J Public Health 60(1):41-42
Jan 1969 449.8 P964

Biosynthesis, Bis(p-chlorophenyl) acetic acid, Chlorinated hydrocarbons, Degradation, Dichloro-2,2-bis(p-chlorophenyl) ethylene, 1,1-, Dicolof, Pesticides, Porphyrins, TDE.

9851-69

SYNTHESES OF PYRIDAZINE DERIVATIVES AS HERBICIDES PART III. PREPARATION OF 3- AND 4-PHENOXYPYRIDAZINES.

T Jojima K Oyamada S Tamura
Agr Biol Chem 32(11):1376-1381
Nov 1968 385 AG8B

Chemical control (weeds), Chemical reactions, Chemistry, Herbicides, Pyridazine compounds, Synthesis.

9852-69

PHARMACOLOGICALLY ACTIVE NEW SUBSTITUTED BENZAMIDES. PATENT 3,432,549.

E Kasztreiner J Borsi L Vargha B Dumbovich E Meszaros
Us Patent Office Offic Gaz 860(2):571
11 Mar 1969 156.65 OF2

Analeptics, Benzamide, Chemical structure, Elements, Patents, Pharmacology.

9853-69

HETEROGENEITY VALUES OF INSECTICIDE, FUNGICIDE OR HERBICIDE DEPOSITS AND OF THEIR RESIDUES. (FR)

P H Martens R Caussin
Bull Recherch Agron Gembloux (N s)3(1):173-181
1968 S5.B8

Fungicides, Herbicides, Insecticides, Pesticide application, Pesticide residues, Plant protection, Spraying, Statistical analysis, Tables (data).

9854-69

THE APPLICATION OF POTENTIOSTATIC POLAROGRAPHY WITH THREE ELECTRODES TO THE DOSAGE OF INSECTICIDE AND FUNGICIDE PREPARATIONS. (FR)

P Nangniot
Bull Recherch Agron Gembloux (N s)3(1):182-189
1968 S5.B8

Carbaryl, Dosage, Fungicides, Insecticides, Polarography.

9855-69

DETERMINATION OF TERBACIL RESIDUES USING MICROCOULOMETRIC GAS CHROMATOGRAPHY.

H L Pease
J Agr Food Chem 16(1,JAN-FEB):54-56
1968 381 J8223

Animals, Bromacil, Chromatography, Coulometers, Gases, Pesticide residues, Plants, Soils, Temperature, Terbacil.

9856-69

CYCLIC DICARBOXIMIDO-SUBSTITUTED PHOSPHONOTHIOATES. PATENT 3,450,713.

H Tolkmith H O Senkbeil
Us Patent Office Offic Gaz 863(3):886
17 Jun 1969 156.65 OF2

Cyclic compounds, Parasitism, Patents, Pesticides.

9857-69

PROCESS FOR THE PREPARATION OF NITROIMIDAZOLE CARBAMATES. PATENT 3,450,710.

V F Verdi
Us Patent Office Offic Gaz 863(3):886
17 Jun 1969 156.65 OF2

Carbamates, Drugs, Imidazoles, Patents, Protozoa.

9858-69

N-DIALKYLAMINOALKYL-NAPHTHALENE-DICARBOXIMIDES. PATENT 3,450,714.

E Wagner

Us Patent Office Offic Gaz 863(3):886

17 Jun 1969 156.65 OF2

Analeptics, Bactericides, Dicarboximide compounds, Drugs, Patents.

9859-69

SYNTHESES OF 14C-LABELED PYRETHRIN I, ALLETHRIN, PHTHALTHRIN, AND DIMETHRIN ON A SUBMILLIMOLE SCALE.

I Yamamoto J E Casida

Agr Biol Chem 32(11):1382-1391

Nov 1968 385 AG8B

Allethrin, Carbon isotopes, Chemical control (insects), Chemical reactions, Dimethrin, Insecticides, Phthalthrin, Pyrethrum, Synthesis.

ENGINEERING

9860-69

A SHORT SURVEY OF THE PLANT PROTECTION EQUIPMENT, APPROVED DURING 1966. (GE)

W Zislavsky

Pflanzenarzt 20(8):93-94

01 Aug 1967 464.9 P482

Fumigation, Plant protective devices, Surveys.

INDUSTRY

EDUCATION

9861-69

MID-STATE OF NEBRASKA: THERE'S NO MAGIC IN PEST CONTROL .

Anonymous

Pest Contr 37(1):28-29 MAP

Jan 1969 449.8 EX8

Advertising, Insect control, Pest control, Public relations, Termites.

A pest control company's public relations activities are described.

REGULATIONS

9862-69

THE BACTERIOLOGICAL SUPERVISION OF

EGG PRODUCTION IN THE FEDERAL REPUBLIC OF GERMANY. (GE)

E Bulling

Arch Lebensmittelhyg 19(4):78-80 REF

Apr 1968 41.8 L49

Eggs, Enterobacteriaceae, Legislation, Pasteurization, Poultry products, Salmonella.

9863-69

THE CLASSIFICATION OF SLAUGHTER ANIMALS IN WHICH SALMONELLA HAVE BEEN FOUND, FROM THE LEGAL MEAT INSPECTION POINT OF VIEW. (GE)

E Martens

Arch Lebensmittelhyg 19(4):80-82 REF

Apr 1968 41.8 L49

Cattle, Food contamination, Infectious diseases, Legislation, Meat inspection, Salmonella, Slaughtering.

9864-69

BRUCELLOSIS. SUBPART D. DESIGNATION OF MODIFIED CERTIFIED BRUCELLOSIS AREAS, PUBLIC STOCKYARDS, SPECIFICALLY APPROVED STOCKYARDS AND SLAUGHTERING ESTABLISHMENTS.

G H Wise

Fed Regist 34(40):3616

28 Feb 1969 L1.451

Brucellosis, Livestock diseases, Rgulations, Slaughterhouses, Stockyar

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