Pesticides Documentation BULLETIN

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PESTICIDES DOCUMENTATION BULLETIN

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

OBJECTIVES AND SCOPE

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

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

FORMAT

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

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

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

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

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

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

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

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

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

Compound Tested Company furnishing the compound Author or Investigator Test Sponsor Date Location Mode of Application Rates of Application Soil Types Carriers Crops or Weeds tested with phytotoxicity ratings Associated documentation

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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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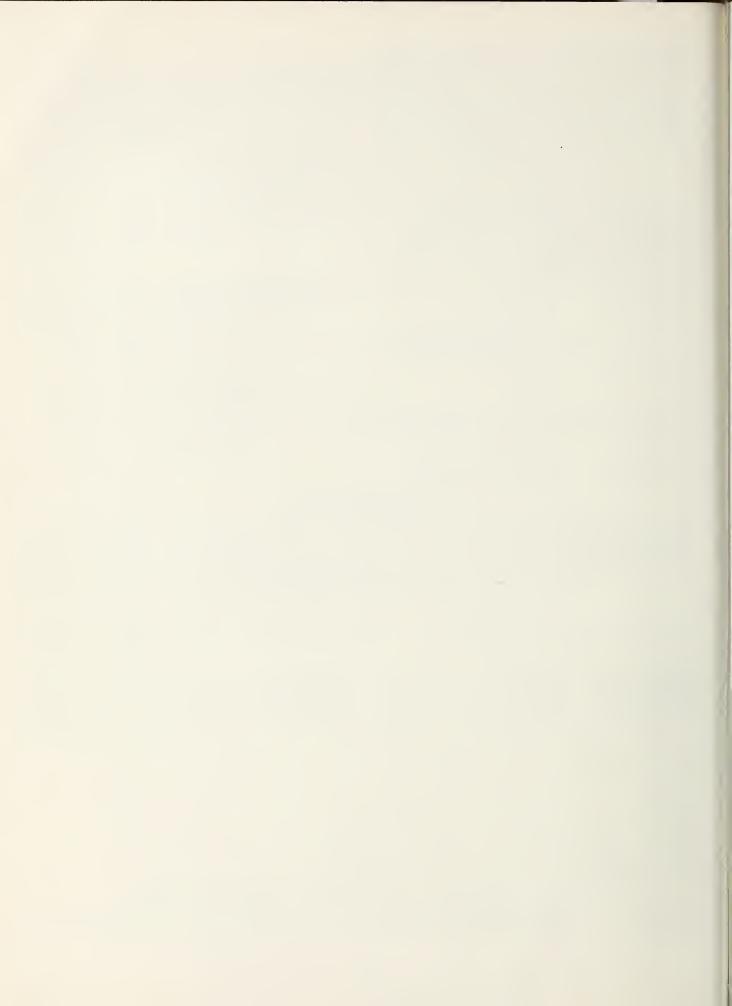
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ENTOMOLOGY

2471-69

COMPARATIVE STUDIES OF THE MOL-LUSCICIDAL EFFECT OF CUPROUS CILLORIDE AND COPPER SULFATE IN IRAN. K Y Chu

World Health Organ Bull 39(2):320-326 1968 449.9 W892B

Animal vectors, Chemical control (pests), Copper chloride, Copper sulfate, Dosage, Fish, Mollusca-cides, Ponds, Schistosoma, Snails.

2172-69

INFLUENCE OF THE FORM OF TRAPS UPON THE ATTRACTIVENESS OF SEXUAL ODOUR OF GYPSY MOTH FEMALES. (SE) M Maksimovic R Marovic

Zastita Bilja 18(93/95):115-123 1967 464.8 Z1 Insect collecting equipment, Insect traps, Porthetria dispar, Sex attractants, Smell, Zoogcog-

SYSTEMATICS

2473-69

UNDESCRIBED SPECIES OF CRANE FLIES FROM THE HIMALAYA MOUNTAINS (DIP-TERA: TIPULIDAE), XVII. C P Alexander

N Y Entomol Soc J 77(1):61-65 Mar 1969 420 N48J

raphy. English summary.

Insect geography, Insect taxonomy, Tipulidae.

2474-69

PLANTHOPPERS OF THE FAMILY DERBIDAE (HOMOPTERA, AUCHENORRHYNCHA) IN THE FAUNA OF THE USSR. **G** A Anufrivev

Entomol Rev 47(1, JAN-MAR):75-82 REF

Mar 1968 421 R322AE Catalogs, Derbidac, Insect geography, Insect tax-

onomy

2475-69

IMPORTANT ADDITIONS TO MYRMECOFAU-NA (HYMENOPTERA, FORMICIDAE) OF THE USSR WITH SOME NEW DESCRIPTIONS. (RUS

K V Arnoldi Zool Zhur 47(12):1800-1822 Dcc 1968 410 R92

Formicidae, Insect taxonomy. German abstract

2476-69

A REVIEW OF THE GENUS GOSODESMUS CHAMBERLIN, WITH THE SYNONYMY OF EUCYBE CHAMBERLIN (DIPLOPODA: PLATYDESMIDA: ANDROGNATHIDAE). J S Buckett M R Gardner

N Y Entomol Soc J 77(1):40-50 MAP

Mar 1969 420 N48J Diplopoda, Insect geography, Insect names, Insect taxonomy, Polymorphism.

2477-69

ZOOGEOGRAPHIC ANALYSIS OF MITES OF THE FAMILY RHINONYSSIDAE (GAMASOIDEA, PARASITIFORMES) OF THE USSR FAUNA. (RUS) O.M. Butenko

Zool Zhur 48(2):207-211

Feb 1969 410 R92

Birds, Gamasid mites, Host relationships, Insect gcography, Zoogeography. English abstract

2478-69

NEOTROPICAL MIRIDAE, CIII: REVISION OF THE GENUS RESTHENIA SPINOLA (HEMIP-TERA). (POR) J C M Carvalho A V Fontes

Rev Brasil Biol 28(3):235-242

Sep 1968 442.8 R326

Insect geography, Insect taxonomy, Miridae, Neotropical Region. English summary

2479-69 NEOTROPICAL MIRIDAE, CI: REVISION OF THE CYLAPUS SAY COMPLEX WITH DESCRIPTIONS OF GENERA AND NEW SPE-CIES. (POR) J C M Carvalho A V Fontes Rev Brasil Biol 28(3):273-282 Scp 1968 442.8 R326 Catalogs, Insect geography, Insect taxonomy, Miridae, Neotropical Region. English summary. 2480-69 NEW MEXICAN AND CENTRAL AMERICAN SPECIES OF STRANGALIA AUDINET-SER-VILLE (COLEOPTERA; CERAMBYCIDAE). 1 A Chemsak N Y Entomol Soc J 77(1):2-9 Mar 1969 420 N48J Insect geography, Insect taxonomy, Strangalia. 2481-69 THE DISTRIBUTION AND ABUNDANCE OF COLLEMBOLA IN THE TUNDRA ZONE. Yu I Chernov Entomol Rev 47(1, JAN-MAR):47-49 REF Mar 1968 421 R322AE Collembola, Insect ecology, Insect geography, Insect populations, Tundras. 2482-69 WATER MITES FROM INDIA. D R Cook Amer Entomol Inst Mem 9, 411P, REF 1967 420 AM34 Aquatic insects, Hydrachnellae, Insect taxonomy. 2483-69 ANTS OF THE GENUS PROFORMICA RUZS. OF THE USSR AND CONTIGUOUS COUN-TRIES (HYMENOPTERA, FORMICIDAE). (RUS G M Dlussky Zool Zhur 48(2):218-232 REF Feb 1969 410 R92 Formicidae, Insect taxonomy. English abstract 2484-69 DESCRIPTION OF A NEW SPECIES OF BRYOBJA FROM JAPAN. (ACARINA: (ACARINA: BRYOBIA FROM TETRANYCHIDAE). S Ehara M Yamada Annot Zool Jap 41(2):66-69 Jun 1968 410 AN79 Bryobia, Insect taxonomy. 2485-69 SPECIES THE GENUS NEW OF TYPHLODROMUS FROM SUDAN (ACARI: PHYTOSEIIDAE). E A Elbadry J Zool 153(4):463-474 Dec 1967 410.9 L84P Africa, Economics, Insect ecology, Insect taxonomy, Typhlodromus. 2486-69 KEY FOR IDENTIFICATION SIGHT MOSQUITOES OF THE GREAT SALT LAKE BASIN. R E Elbel

Mosquito News 28(2):167-171

Jun 1968 421 M85

Aedes, Anopheles, Culex, Insect identification, Insect taxonomy.

Two identification plates which allow easy sight recognition of 18 species of mosquitos in the Salt Lake area arc presented.

2487-69

COSSIDAE, METARBELIDAE, PSYCHIDAE, LIMACODIDAE, DREPANIDAE, URANIIDAE, LASIOCAMPIDAE, EUPTEROTIDAE, BOM-BYCIDAE, SATURNIIDAE AND SPHINGIDAE. **D** S Eletcher

Brit Mus (Nat Hist) Ruwenzoie Exped 1(8):45P RFF

Apr 1968 422.7 R94

Insect taxonomy, Lepidoptera. Includes 68 species, 17 of which are described as new.

TWO NEW SYMPATRIC SPECIES OF A NEW LEAF-HOPPER GENUS (IIOMOPTERA, LEAF-HOPPER GENUS (IIOMOPTERA, CICADELLOIDEA) ATTACKING COCOA IN GHANA. M S K Ghauri

Ann Mag Natur Hist 3(1 JAN-MAR):35-39 Mar 1969 410 AN77

Cicadellidae, Cocoa, Insect taxonomy.

Two externally similar but reproductively distinct lcalhoppers in a new genus of Cicadelloidea were found to be sympatric cocoa pests in Ghana.

A CONTRIBUTION TO THE FAUNA OF FLEAS IN EASTERN SIBERIA. (RUS

A 1 Goncharov G 1 Vasiliev G B Zonov V V

Kirillov Zool Zhur 48(1):149-150

Jan 1969 410 R92

Catalogs, Insect geography, Insect taxonomy, Siphonaptera. English abstract

2490-69

FIG--WASPS (CHALCIDOIDEA) OF HONG KONG I. AGAONIDAE.

D S Hill

Leiden Rijksmus Natuur Hist Zool Verhandel (89):3-55 REF

31 May 1967 410.9 L59Z

Catalogs, Chalcidoidea, Host records, Insect geography, Insect taxonomy.

2491-69

STRUCTURE OF THE PLASTRON OF HEXA-CYLLOEPUS, WITH A DESCRIPTION OF A NEW SPECIES (COLEOPTERA, EL-MINTHIDAE).

H F Hinton

Ann Mag Natur Hist 3(1, JAN-MAR):125-130 Mar 1969 410 AN77

Colcoptera, Electron microscopy, Insect morphology, Insect taxonomy.

2492-69

TWO GENERA OF THE FAMILY ENCYR-TIDAE (HYM., CHALCIDOIDEA), NEW FOR EUROPE. (GE) A Holfer

Acta Ent Bohemoslov 65(5):379-385

20 Sep 1968 420 C33

Chalcidoidea, Encyrtidae, Insect identification, Insect taxonomy, Zoogeography. English and Czech summaries.

2493-69

CONTRIBUTION TO THE KNOWLEDGE OF BRAZILIAN SPECIES OF THE GENUS EU-RYNEURA SCHINER, 1867 (DIPTERA, STRATIOMYIDAE). (POR)

P lide

Rev Brasil Biol 28(3):251-272 REF

Sep 1968 442.8 R326

Insect taxonomy, Stratiomyidae. English summary.

2494-69

NEW SPECIES OF THE GENUS A MALACOPHAGOMYIA FROM PARAIBA, BRAZIL (DIPTERA, SARCOPHAGIDAE). R Kano H de S Lopes

Rev Brasil Biol 28(3):303-306 MAP

Sep 1968 442.8 R326 Insect taxonomy, Sarcophagidae.

2495-69

DESCRIPTIONS OF TWO NEW SARCOPHAGA SPECIES FROM THE TRANSVAAL (DIPTERA: SARCOPHAG1DAE). R Kano F Zumpt Novos Taxa Entomol (63):3-8

Nov 1968 421 N853

Insect taxonomy, Sarcophaga.

ENTOMOLOGY

2496-9

2496-69 A LIST OF THE TYPE-SPECIMENS OF LIBEL-LULIDAE AND CORDULIIDAE (ODONATA) IN THE BRITISH MUSEUM (NATURAL HISTO-RY).

D E Kimmins Brit Mus (natur Hist) Entamal Bull Suppl 22(6):277-305 REF 1968 420 B773

Catalogs, Insect geography, Odonata.

2197-69

LINOGNATIIUS DIGITALIS N. SP. (ANOPLU-RA: LINOGNATHIDAE) FROM THE SPRING-BUCK (ANTIDORCAS MARSUPIALIS (ZIM-MERMANN)).

K P N Kleynhans

Navos Taxa Entomal (60):1-6

Jun 1968 421 N853

Anoplura, Insect taxonomy, Linognathus digitalis, Wildlife.

2198.69

SOME NEW AND LITTLE KNOWN GROUND BEETLES (COLEOPTERA, CARABIDAE) OF THE USSR AND NEIGHBORING COUNTRIES. O L Kryzhanovskiy

Entamal Rev 47(1, JAN-MAR):91-100 REF Mar 1968 421 R322AE

Carabidac, Insect geography, Insect taxonomy.

2499-69

ASSASSIN FLIES OF THE TRIBE LAPHYSTINI (DIPTERA, ASILIDAE) OF THE USSR FAUNA. (RUS)

P A Lchr

Zoal Zhur 48(2):233-240

Fcb 1969 410 R92

Asilidae, Insect taxonomy. English abstract

2500-69

THE ACTUAL PLACING OF THE ZELURUS SPECIES HAHN OF THE GROUP FORMOSUS (HEMIPTERA, REDUVIIDAE). (POR) H Lent P Wygodzinsky

Rev Brasil Biol 28(3):317-326 REF

Sep 1968 442.8 R326

Insect geography, Insect taxonomy, Reduviidae.

2501-69

ON THE GENUS NASOCORIS RT. (HET., MIRIDAE).

R Linnavuori

Suomen Hvonteistieteellinen Aikakauskir Ann Entomol Fenn 34(4):201-204 1968 421 SU7

Insect taxonomy, Miridac, Nasocoris, Zoogcography.

2502-69

DESCRIPTION OF SCAPHIDIUM COMES SP. N. AND NOTES ON SOME OTHER PALAEAR-TIC SPECIES OF THE GENUS SCAPHIDIUM (COLEOPTERA, SCAPHIDIDAE). I Lobl

Acta Ent Bahemoslov 65(5):386-390 REF 20 Sep 1968 420 C33

Insect identification, Insect names, Insect taxonomy. Scaphidiidae, Zoogeography. Czech summary.

2503-69

STUDIES ON COPULATION OF SOME SAR-COPHAGID FLIES (DIPTERA), TAXONOMIC IMPORTANCE OF SOME FEATURES OF MALE AND FEMALE GENITALIA.

H de S Lopes R Kano

Rev Brasil Biol 28(3):295-301

Sep 1968 442.8 R326

Insect mating, Insect taxonomy, Reproductive organs, Sarcophagidae.

2504-69

NOTES ON THE TYPES OF SOME NEOTROPI-CAL SARCOPHAGID FLIES DESCRIBED BY ENDERLEIN (DIPTERA, SARCOPHAGIDAE). H De S Lopes

Rev Brasil Bial 28(3):337-349 REF

BIBLIOGRAPHY

Sep 1968 442.8 R326 Insect geography, Insect taxonomy, Neotropical Region, Sarcophagidac. 2505-69 AUSTRALIAN BLATTIDAE (BLATTODEA). VI. REVISION OF THE GENUS COSMOZOSTERIA STAL. M J Mackerras Australian J Zool 15(3):593-618 MAP May 1967 410 AU73 Blattidac, Catalogs, Insect geography, Insect taxonomy. 2506-69

CONSIDERATIONS ON THE DISTRIBUTION OF SOME GENERA OF COLEOPTERA, CARABIDAE AND CHRYSOMELIDAE IN THE APPENINE MOUNTAINS OF ITALY. (IT) M Magistretti S Ruffo

Accad Naz Ital Entomol Atti 8:137-179 MAP 1960 420 AC2

Carabidac, Chrysomelidae, Colcoptera, Insect ecology, Zoogeography. Many species are ccology, discussed.

2507-69

A NEW SPECIES OF THE GENUS EREMIPPUS UV. (ORTHOPTERA, ACRIDIDAE) FROM SOU-TEAST KAZAKHSTAN. M P Mal'kovskiy

Entomal Rev 47(1, JAN-MAR):73-74 Mar 1968 421 R322AE

Acrididae, Insect geography, Insect taxonomy.

2508-69

MICROARTHROPODS FROM TWO OUEBEC WOODLAND HUMUS FORMS. III. THE SAR-COPTIFORMES (ACARINA). V G Marshall

Entonuol Soc Quebec Ann 13(2):65-88 REF May 1968 420 EN822

Acarina, Humus, Insect identification, Insect tax-Microarthropods, Oribatci, onomy, Sarcoptiformes. French summary, annotated list of 97 specics

2509-69

NEW SPECIES OF MEALYBUGS (HOMOP-TERA, COCCOIDEA, PSEUDOCOCCIDAE) FROM EAST KAZAKHSTAN. G Ya Matesova

Entomol Rev 47(1, JAN-MAR):85-90 Mar 1968 421 R322AE

Insect geography, Insect taxonomy, Pseudococcidae.

2510-69

THE CEREAL LEAF BEETLE-A NEW INSECT IN ONTARIO.

R J McClanahan H R Boyce W R Code Entomal Soc Ontario Prac 98:21-26 MAP REF

1967 420 ON8

Grain, Insect migration, Insect taxonomy, Oulema melanopus, Zoogcography.

2511-69

A NEW SPECIES OF THE GENUS APHODIUS ILL. (COLEOPTERA, SCARABAEIDAE) FROM ABKHASIA.

S 1 Mcdevedev

Entomol Rev 47(1, JAN-MAR):101-102 Mar 1968 421 R322AE

Insect geography, Insect taxonomy, Scarabaeidae.

2512-69

A NEW SPECIES OF THE GENUS PSEU-DOBLAPS GUERIN (COLEOPTERA, TENEBRIONIDAE) FROM IRAN.

G S Medvedev

Entanual Rev 47(1, JAN-MAR):103-104 Mar 1968 421 R322AE

Insect geography, Insect taxonomy, Tenebrionidae. 2513-69

THE TYPE-SPECIMENS OF THE PALEARCTIC SPECIES OF SCOLYTUS GEOFFR. (COLEOP-TERA, SCOLYTIDAE) IN THE INSTITUTE OF

2

ZOOLOGY COLLECTION, USSR ACADEMY OF SCIENCES (LENINGRAD). J Michalski

Entamol Rev 47(1 JAN-MAR):107-116 REF

Mar 1968 421 R322AE Catalogs. Insect geography, Insect taxonomy, Palearctic Region, Scolytus.

2514-69

NEW SPECIES OF DICLIDOPHLEBIA (HOMOPTERA: PSYLLIDAE) FROM NIGERIA. E O Osisanya

Aun Mag Natur Hist 3(1 JAN-MAR):71-77 Mar 1969 410 AN77

Insect geography, Insect taxonomy, Psyllidae.

2515-69

A REVIEW OF THE AUSTRALIAN SPECIES OF GENUS THE LIGYRA NEWMAN (HYPERALONIA OLIM) (BOMBYLIIDAE: DIP-TERA).

S I Paramonov

Australian J Zaal 15(1):123-144

Fcb 1967 410 AU73

Bombyliidae, Catalogs, Insect geography. Insect taxonomy.

2516-69

STUDIES ON AUSTRALIAN MUSCIDAE (DIP-TERA). J. SOME SPECIES OF DICHAETO-MYIA MALLOCH. A C Pont

Australian J Zool 15(3):619-640

May 1967 410 AU73

Kans Entomol Soc J 40(1):9

Pol Pismo Entomol 38(2):285-287

(ACARINA, PYEMOTIDAE). (GE

Jan 1967 420 K13

Research, Taxonomy

SPHECIDAE). (FR)

Catalogs, Insect geography, Insect taxonomy, Muscidae

A NEW SPECIES OF COLPOCEPHALUM (HAL-

LOPHAGA: MENOPONIDAE) FROM THE KEA.

Colpocephalum pilgrimi, Insect identification,

MISCOPHUS HELIOPHILUS SP. N. (HYM.,

Insect identification. Insect taxonomy, Sphecidae.

NEW PYEMOTIDAE FINDS IN HAMBURG

Hamburg Zool Staatsinst Zoal Mus Entomol Mitt

Insect taxonomy, Mites, Pediculaster areanus, Pseudopygmephorus latipilosus, Pyemotidae,

RECORDS OF MASARID WASPS WITH DESCRIPTIONS OF TWO NEW SPECIES OF QUARTINIA ED. ANDRE (HYMENOPTERA).

Hymenoptera, Insect geography, Insect taxonomy,

THE SUBGENERIC DIVISION OF THE GENUS

Bombus, Catalogs, Insect geography, Insect tax-

LATRIELLE (IIYMENOPTERA:

Ann Mag Natur Hist 3(1 JAN-MAR):79-83

Brit Mus (natur Hist) Entomol Bull Suppl

2517-69

R D Price

2518-69

2519-69

G Rack

W Pulawski

1968 421 P76

Polish summary.

3(58):1-17 REF

Zoogeography.

O W Richards

Mar 1969 410 AN77

2520-69

2521-69

BOMBUS

APIDAE).

onomy.

O W Richards

22(5):209-276

1968 420 B773

01 Jun 1967 421 H17

2539-69

2546-69

2522-69 AUSTRALIAN HYMENOPTERA CHALCI-DOIDEA FAMILY EULOPHIDAE, SUBFAMILY ELASMINAE. E F Rick Australian J Zool 15(1):145-199 Fcb 1967 410 AU73 Catalogs, Eulophidae, Insect geography, Insect taxonomy 2523-69 **OCCURRENCE OF AEDES INFIRMATUS D. K.** IN ARIZONA. P T Rigby Mosquito News 28(2):239 Jun 1968 421 M85 Aedes, Arizona, Insect identification. 2524-69 A NOTE ON THE NIGERIAN SPECIES OF THE GENUS SOSYLUS ERICHSON (COL. COLYDIDAE), PARASITES AND PREDATORS OF AMBROSIA BEETLES. **H** Roberts Ann Mag Natur Hist 3(1, JAN- MAR):85-91 Mar 1969 410 AN77 Colydiidae, Host relationships, Insect taxonomy, Platypodidac. Records of ten species of Sosylus collected in Nigeria arc given, with details of its distribution and a listing of the host trees of its platypodid associates. 2525-69 THE BIOLOGY AND DESCRIPTION OF A NEW SPECIES OF AFRICAN THYREUS, WITH LIFE HISTORY NOTES ON TWO SPECIES OF ANTHOPHORA (HYMENOPTERA: ANTHOPHORIDAE). J G Rozen N Y Entomol Soc J 77(1):51-60 Mar 1969 420 N481 Anthophora, Insect coology, Insect nests, Insect taxonomy, Life cycle. 2526-69 THREE NEW SPECIES OF BRAZILIAN MEM-BRACIDAE BELONGING TO THE TRIBE HETERONOTINI. (POR) A M Sakakibara Rev Brosil Biol 28(3):307-315 Sep 1968 442.8 R326 Insect taxonomy, Mcmbracidae. English summary. 2527-69 NEW SPECIES OF HOVER FLIES (DIPTERA, SYRHIDAE) FROM THE CAUCASUS. A A Shtakel'berg Entomol Rev 47(1, JAN-MAR):133-135 Mar 1968 421 R322AE Insect gcography, Insect taxonomy, Syrphidac. 2528-69 NOTES ON ALASKAN MOSQUITO RECORDS. K M Sommerman Mosquito News 28(2):233-234 Jun 1968 421 M85 Aedes canadensis, Aedes cinercus, Aedes vexans, Insect geography, Insect identification. 2529-69 A NEW GENUS AND TWO NEW SPECIES OF ARBOREAL OPPIIDAE (ACARI: CRYPTOSTIG-MATA) FROM NEW ZEALAND. A V Spain Pacific Insects 11(1):155-163 1969 421 P11 Insect ecology, Insect geography, Insect taxonomy, Oppiidae. 2530-69 NUMERICAL CLASSIFICATION OF THE CANADIAN SPECIES OF THE GENUS AEDES HARIA. N G Agekyan (DIPTERA: CULICIDAE). Entomol Rev 47(1 JAN-MAR):24-25 C C Steward Mar 1968 421 R322AE Syst Zool 17(4):426-437 REF Coccoidea, Encyrtidae, Host range, Insect ecology, Dec 1968 410 SY8 Life cycle, Parasitic insects.

Adults, Aedes, Insect taxonomy, Larvae, Methodology. 2531-69 NEW ORTHOPTERA FROM AFGHANISTAN. (RUS) M V Stolyarov Zool Zhur 47(12):1794-1799 Dec 1968 410 R92 Insect taxonomy, Orthoptera, English abstract 2532-69 ACLERDAEPHAGUS PLANUS SUGONJAEV GEN. ET SP. N. (HYMENOPTERA, APHELINIDAE)--PARASITE OF NIP-PONACLERDA TURANICA ARCH. IN SOUTH TAJIKISTAN. (RUS) E S Sugonjaev Zool Zhur 48(2):290-292 Fcb 1969 410 R92 Aphclinidae, Coccidae, Host relationships, Insect taxonomy, Parasitic insects. English abstract 2533-69 A NEW SPECIES OF THE GENUS BRUCHUS L. (COLEOPTERA, BRUCHIDAE) FROM THE USSR. M Ye Tcr-Minasyan Entomol Rev 47(1, JAN-MAR):105-106 Mar 1968 421 R322AE Bruchidae, Catalogs, Insect taxonomy. 2534-69 THE GENUS COCCIDOXENUS CRAWFORD, 1913--A SYNONYM OF TRICHOMASTHUS THOMSON, 1875 (HYMENOPTERA, ENCYR-TIDAE). V A Tryapitsyn Entomol Rev 47(1, JAN-MAR):125 Mar 1968 421 R322AE Encyrtidae, Insect names, Insect taxonomy. 2535-69 SOME NEW HELICONIUS PUPAE: THEIR TAXONOMIC AND EVOLUTIONARY SIG-NIFICANCE IN RELATION TO MIMICRY (LEPIDOPTERA, NYMPHALIDAE). **J R G Turner** J Zool 155(3):311-325 REF Jul 1968 410.9 L84P Insect evolution, Insect taxonomy, Mimiery, Nymphalidac, Pupae. 2536-69 SPECIES OF THE GENUS PHYSCUS HOW. (HYMENOPTERA, CHALCIDOIDEA), PARASITES OF SCALE INSECTS IN THE USSR. V A Vasnosh Entomol Rev 47(1, JAN-MAR):117-124 REF Mar 1968 421 R322AE Catalogs, Chalcidoidea, Insect geography, Insect taxonomy, Parasitic insects. 2537-69 PRELIMINARY REPORTS ON THE LEPIDOP-TERA OF MOUNT TERMINILLO. S Zangheri Accad Noz Itol Entomol Atti 8:191-217 MAP REF 1960 420 AC2 Insect identification, Lepidoptera, Tables (data), Zoogcography. German summary. listing of many species. PHYSIOLOGY AND BIOCHEMISTRY 2538-69 COMPERIELLA BIFASCIATA HOW. ENCYRTIDAE), (HYMENOPTERA. PARASITE OF THE SPRUCE SCALE IN ADZ-

ON FOOD FORMS OF THE FLAT-HEADED PEAR-BORER AGRILUS VIRIDIS (COLEOP-TERA, BUPRESTIDAE). (RUS) A V Alexeev Zool Zhur 48(1):85-92 Jan 1969 410 R92 Agrilus, Food habits, Host relationships, Insect ccology, Insect morphology, Polymorphism. En-glish abstract 2540-69 **OVERWINTERING HABITS OF ORTHOPODO-**MYIA CALIFORNICA BOHART (DIPTERA: CULICIDAE). D C Baerg Mosquito News 28(2):234-235 Jun 1968 421 M85 Hatching, Hibernation, Life cycle, Orthopodomyia, Temperature. 2541-69 **BIOCHEMISTRY OF THE DEVELOPMENT OF** THE INSECTS DACUS OLEAE AND CERATITIS CAPITATA--EVOLUTION OF TOTAL FATTY ACIDS. C Barroso A M Municio A Ribera Compar Biochem Physiol 28(1):239-244 REF Jan 1969 444.8 C73 Ceratitis capitata, Dacus oleae, Devclopment, Fatty acids, Insect biochemistry, Insect physiology. 2542-69 FIRST APPLICATIONS OF BIOLOGICAL CONTROL OF AONIDIELLA AURANTII IN MOROCCO. (FR) C Benassy G Euverte Awamio (21):19-25 Oct 1968 24 AW1 Aonidiella aurantii, Aphytis lingnancnsis, Aspidiotus hederac, Biological control (insects), Citrus, Insect rearing, Orchards, Parasitism. English, Spanish and Arabic summaries. 2543-69 NOSEMA DISEASE OF HONEY BEES. F S Bcnecke Agr Gaz New S Wales 79(5):274-279 May 1968 23 N472 Acetic acid, Apiculture, Fumagillin, Host relation-ships, Insect mortality, Life cycle, Nosema apis, Palynology, Weather. The environmental conditions which influence the development of nosema disease in honey bees and the effect that the disease has on workers, queens and the entire colony are discussed. Fumagillin and glacial acetic acid fumigation are the recommended control measures. 2544-69 MEIGENIA MUTABILIS FALL. (DIPT. TACHINIDAE) AS A PARASITE OF OULEMA MELANOPA L. AND ITS RELATION TO LEP-TINOTARSA DECEMLINEATA SAY. (SE) P Bjcgovic Zastitu Biljo 18(93/95):93-100 1967 464.8 Z1 Chrysomelidac, Insect biology, Insect pests, Lep-tinotarsa decemlineata, Oulema melanopa, tinotarsa decemlineata, Oulema melane Parasitic insects, Tachinidae. English summary. melanopa, 2545-69 A TACHINID PARASITE OF AUSTRALIAN GRASSHOPPERS. R E Blackith

Austrolian J Zool 15(4):745-758 MAP REF

Aug 1967 410 AU73

Acrididae, Host range, Insect geography, Insect morphology, Parasitic insects, Tachinidae.

A Tachnid parasite of Morabinae grasshoppers is described along with its distribution and host range in Australia.

2546-69

FLIGHT MUSCLE VOLUME CHANGE IN IPS CONFUSUS (COLEOPTERA: SCOLYTIDAE). J H Borden C E Slater Can J Zool 47(1):29-32 REF

ENTOMOLOGY

2547-69

Jan 1969 470 C16D

Insect anatomy, Insect flight, Insect physiology, Ips confusus, Measurement, Muscles, Scolytidae, Volumetric analysis.

2547-69

2347-09 THE USE OF DROSOPHILA MELANOGASTER MEIG., CALANDRA ORYZAE L. AND TRIBOLIUM CONFUSUM DUV. FOR THE DE-TECTION OF PESTICIDES AND FOR THE EVALUATION OF SOME EXTRACTIVE TECHNIQUES. (IT)

A R Borgatti A Cesari R Stanzani

Giornate Fitopatol 105-113 REF

26 Mar 1967 SB599.G5

Calandra oryzae, Chlorinated hydrocarbons, Drosophila melanogaster, Endrin, Insect physiology, Malathion, Organophosphorus compounds, Parathion, Pesticide residues, Tribolium confusum. Several other pesticides were tested.

2518-69

REARING THREE SPECIES OF FRUIT-SUCKING MOTHS ON ARTIFICIAL DIETS. I Bot

S Afr J Agr Sci 10(4):1009-1014 Dec 1967 24 SU3

Culture media, Insect rearing, Lepidoptera, Synthetic diets.

2519-69

STEROLS OF THE COMMON HOUSE CRICKET, ACHETA DOMESTICUS L. G A Carls

Diss Abstr Sect B 29(3):931B-932B

Sep 1968 Z5055.U49D53

Acheta domesticus, Biochemistry, Chemurgy, Chromatography, Insect metabolism, Sterols.

2550-69

ULTRASTRUCTURE OF PHOTORECEPTOR CELLS IN A VITAMIN ADEFICIENT MOTH (MANDUCA SEXTA).

S D Carlson G Gemne W E Robbins

Experientia 25(2):175-177 REF

15 Feb 1969 475 EX7

Electron microscopy, Insect cytology, Insect morphology, Manduca sexta, Retina, Vitamin a.

2551-69

NEW OBSERVATION ON THE ORIGIN AND LOCALITY OF THE MICROTUBULES IN THE ERGASTOPLASM IN THE MIGRATOR LOCUST. LOCUSTA MIGRATORIA MIGRA-TORIA (R. AND F.). (FR)

P Cassier M-a Fain-Maurel

Acad Sci Compt Rend Ser D Sci Nat 268(3, 1ST SEMESTER):537-539 REF

20 Jan 1969 505 P21

Electron microscopy, Insect cytology, Insect morphology, Locusta migratoria, Metamorphosis.

2552-69

MASS ISOLATION OF MALARIA SPOROZOITES FROM MOSQUITOES BY DEN-SITY GRADIENT CENTRIFUGATION.

D H Chen I Schneider

Soc Exp Biol Med Proc 130(4):1318-1321

Apr 1969 442.9 SO1 Aedes aegypti, Centrifugation, Methodology, Plasmodium gallinaceum.

2553-69

A POPULATION STUDY OF PHAULACRIDIUM VITTATUM SJOST. (ACRIDIDAE). D P Clark

Australian J Zool 15(4):799-872 MAP REF Aug 1967 410 AU73

Acrididae, Demography, Diapause, Food habits, Life cycle, Weather.

The life cycle of Phaulacridium vittatum and enviornmental conditions affecting the survival of each stage in its development are discussed.

2551-69

GENOTYPES AND ENVIRONMENT IN THE DETERMINATION OF THE GROUND- AND WINGED FORMS OF APHIDS. (IT) G Cognetti

BIBLIOGRAPHY

Accad Naz Ital Entomol Atti 8:99-101 1960 420 AC2 Aphididae, Environment, Genotypes, Insect genetics, Insect rearing, Parthenogenesis, Wings (insects) 2555-69 THE IMPORTANCE OF BUCCO-PHARYN-GEAL ARMATURE IN ANOPHELES AND CULEX IN RELATION TO DIROFILARIA IN-FECTION. (IT) M Coluzzi R Trabucchi Parassitologia 10(1):47-60 REF Jul 1968 436.8 P212 Anopheles, Biological control, Culex, Dirofilaria, Insect morphology, Insect vectors. English summarv. 2556-69 NOTES ON THE SPOROGONIC STAGES OF PLASMODIUM (GIOVANNOLAIA) POLARE IN CULISETA LONGIAREOLATA. (IT) A Corradetti M Scanga Parassitologia 10(1):1-10 Jul 1968 436.8 P212 Culiscta, Disease transmission, Histology, Insect vectors, Plasmodium. English summary.

2557-69

THE FOOD AND FEEDING RELATIONSHIPS OF THE COMMON MESO AND MACROFAUNA IN THE MAHA OYA, A SMALL MOUN-TAINOUS STREAM AT PERADENIYA, CEYLON.

H H Costa E C M Fernando

Cevlon J Sci Biol Sci 7(1-2):74-90 MAP REF Oct 1967 475 C33

Aquatic animals, Aquatic insects, Aquatic plants, Feeding, Fish, Food, Invertebrates, Streams.

2558-69

THE SENSORY PHYSIOLOGY OF THE LARVA OF THE RHINOCEROS BEETLE ORYCTES RHINOCEROS L.

H H Costa V K Ganesalingam Ceylon J Sci Biol Sci 7(1/2):52-73 REF

Oct 1967 475 C33

Coconuts, Humidity, Insect behavior, Insect pests, Larvae, Oryctes rhinoceros, Smcll, Temperature.

2559-69

STUDY OF SOME INJURIES INDUCED BY X-RAYS IN THE FIRST STAGE LARVAE OF BOMBYX MORI. (FR.) M Coulon

Acad Sci Compt Rend Ser D Sci Nat 268(6, IST SEMESTER):959-962

10 Feb 1969 505 P21

Bombyx mori, Insect mortality, Insect mutation, Irradiation, Larvae.

2560.69

MITOTIC ACTIVITY IN IN VITRO CULTURE, IN THE OCCULOANTENNAL DISCS OF CAL-LIPHORA ERYTHROCEPHALIA MEIG. LAR-VAE (INSECTA, DIPTERA). (FR)

A M Courgeon Acad Sci Compt Rend Ser D Sci Nat 268(6, 1ST SEMESTER):950-952

10 Feb 1969 505 P21

Antennae, Calliphoridae, Insect cytology, Larvae, Mitosis.

2561-69

ON THE DETERMINATION OF AGE STRUC-TURE OF THE LARVAE OF TENDIPEDIDAE (DIPTERA).

B Czeczuga E Bobiatynska-Ksok E Niedzwiecki Zool Pol 18(3):317-328 REF

1968 410 Z712

Aging, Head capsule, Insect morphology, Larvae, Tendipedidae.

2562-69

THE EFFECT OF PESTICIDE APPLICATION AT THE END OF WINTER, ON THE WINTER EGGS OF PANONYCHUS ULMI KOCH. (IT) I Da Tripoli A Gelosi A Ugolini Giornate Fitopatol 389-391

4

26 Mar 1967 SB599.G5

Apples, Chemical control (insects), Insect eggs, Insecticide application, Organophosphorus com-pounds, Panonychus ulmi, Parathion, Peaches, Petroleum.

2563-69

A METHOD FOR COMPARING FEEDING RATES IN MOSQUITO LARVAE. R H Dadd

Mosquito News 28(2):226-230

Jun 1968 421 M85

Carbon, Culicidac, Food habits, Insect feeding, Larvae, Methodology.

2564-69

A COMPARATIVE STUDY OF EMBRYOGENE-A COMPARATIVE STUDY OF EMDRYOGENE-SIS IN THE MOSQUITO CULEX FATIGANS WIEDEMANN (DIPTERA: CULICIDAE) AND THE SHEEP-FLY LUCILIA SERICATA MELGEN (DIPTERA: CALLIPHORIDAE). I. DESCRIPTION OF EMBRYONIC DEVELOP-MENT.

C W C Davis

Australian J Zool 15(3):547-579 REF

May 1967 410 AU73

Culex quinquefasciatus, Embryogenesis, Larvae, Phaenicia sericata.

2565-69

EFFECT OF DIETARY SERINE ON SURVIVAL AND RATE OF DEVELOPMENT OF ORYZAEPHILUS SURINAMENSIS (COLEOP-TERA: SILVANIDAE). G R F Davis

Can Entomol 101(1):27-31 REF

Jan 1969 421 C16

Biosynthesis, Diet, Glycine, Humidity, Insect nutrition, Oryzaephilus surinamensis, Serine, Silvanidae

2566-69

A COMPARISON TRIAL OF PACKAGE BEES OBTAINED FROM DIFFERENT TRADE SOURCES.

BEHAVIOR

OF

A S C Deans

Scot Agr 47(3,SUMMER):153-156

1968 10 SCO82SO

PSEUDO-ALLOSTERIC

FIREFLY LUCIFERASE. J Denburg M DeLuca

10 May 1968 442.8 B5236

Apiculture, Bees, Crop yields, Honey.

Biochem Biophys Res Commun 31(3):453-460

Assay, Biochemistry, Enzymes, Fluorescence, Hydrolysis, Insect physiology, Kinetics, Lam-pyridae, Luciferase, Pyrophosphatases.

DISTRIBUTION OF THE FACE FLY, MUSCA DISTRIBUTION OF THE FACE FLY, MUSCA AUTUMNALIS (DIPTERA: MUSCIDAE), IN WESTERN CANADA AND THE RELATION BETWEEN ITS ENVIRONMENT AND POPULA-TION DENSITY.

Climate, Insect migration, Musca autumnalis,

THE STRUCTURE OF THE HINDGUT AND AS-SOCIATED STRUCTURES OF THE LARVA OF SESAMIA CALAMISTIS HAMPSON (LEPIDOP-

Gastrointestinal system, Insect histology, Insect

THE ISOLATION AND BIOPHYSICAL CHARACTERIZATION OF AN INSECT VIRUS

FROM PACHYPASA CAPENSIS (LEPIDOP-

Can Entomol 101(1):97-100 MAP REF

S Afr J Agr Sci 10(3):723-734 REF

morphology, Sesamia calamistis.

TERA: LASIOCAMPIDAE).

L P van Dyk V de Villiers

2567-69

2568-69

K R Depner

2569-69

H J R Durr

2570-69

Sep 1967 24 SU3

Jan 1969 421 C16

Muscidae, Zoogeography.

TERA: NOCTUIDAE).

S Afr J Agr Sci 10(4):969-979 REF

Dec 1967 24 SU3

Biological control, Biophysics, Insect diseases, Lasiocampidae, Polyhedroses, Virus diseases (insects).

2571-69

STRUCTURE, FUNCTION AND DEVELOP-MENT OF THE RECTAL APPARATUS FOR FORMING EXCREMENTS (KOTPRESSE) OF CENTRAL EUROPEAN CLYTRINAE CRYPTOCEPHALINAE (COLEOP AND (COLEOPTERA, CHRYSOMELIDAE).

D Erber

Z Morphol Okolog Tiere 62(3):245-306 REF 1968 442.8 Z33

Chrysomelidae, Excreta, Insect anatomy, Insect eggs, Insect histology, Insect morphology, Larvae, Rectum. English summary.

2572-69

WHOLE-BODY TURNOVER OF SODIUM IN ADULT DROSOPHILA (DROSOPHILADAE) AND MEGASELIA (PHORIDAE). L D Fairbanks G E Burch

Physiol Zool 41(4):401-411

Oct 1968 410 P56

Drosophila melanogaster, Drosophila repleta, Insect metabolism, Megaselia scalaris, Radioactive isotopes, Sodium.

2573-69

LABORATORY REARING OF THE PEPPER MAGGOT, ZONOSEMATA ELECTA (SAY) (DIPTERA: TEPHRITIDAE). W H Foott

Entomol Soc Ontario Proc 98:18-21 1967 420 ON8

Insect eggs, Insect morphology, Insect rearing, Laboratories, Larvae, Ovipositors, Tephritidae, Zonosemata electa.

2574-69

THE IMPORTANCE OF SOLANUM CAROLINENSE L. AS A HOST OF THE PEPPER MAGGOT, ZONOSEMATA ELECTA (SAY) (DIPTERA: TEPHRITIDAE) IN SOUTHWESTERN ONTARIO.

W H Foott

Entomol Soc Ontario Proc 98:16-18

1967 420 ON8

Diptera, Insect behavior, Insect rearing, Solanum carolinense, Tephritidae, Zonosemata electa.

2575-69

THE STYLETS OF THE GREEN PEACH APH1D, MYZUS PERSICAE (HOMOPTERA: APHIDIDAE).

A R Forbes

Can Entomol 101(1):31-41 REF

Jan 1969 421 C16

Aphididae, Electron microscopy, Insect anatomy, Insect morphology, Myzus persicae, Stylets.

2576-69

ON THE GENERIC POSITION OF PLESIOCERA FLAVIFRONS BECKER AND OF A FEW RELATED SPECIES (DIPTERA, BOM-BYLIIDAE).

F J J Francois

Inst Roy Sci Natur Belg Bull 43(39):8P REF

31 Dec 1967 504 B835B

Bombyliidae, Insect anatomy, Insect identification, Insect morphology, Insect names, Insect physiology. French summary.

2577-69

QUANTITATIVE SAMPLING OF THE PSEU-DOSCORPION CHTHONIUS ISCHNOCHELES FROM BEECH LITTER.

P D Gabbutt

J Zool 151(4):469-478

Apr 1967 410.9 L84P

Chelonethida, Demography, Insect population statistics, Soil microorganisms, Surveys.

2578-69

THE EXTERNAL MORPHOLOGY AND LIFE HISTORY OF THE PSEUDOSCORPION MICROCREAGRIS CAMBRIDGEI. P D Gabbutt M Vachon J Zool 154(4):421-441 Apr 1968 410.9 L84P Chelonethida, Insect hiology, Insect morphology, Insect taxonomy. 2579-69 SOME OBSERVATIONS ON THE EMBRYONIC DEVELOPMENT OF THE EXTERNAL GENETALIA IN THE COLLEMBOLAN ANU-RIDA MARITIMA GUERIN. (FR) M Garaudy-Tamarelle Acad Sci Compt Rend Ser D Sci Not 268(6, 1ST SEMESTER):945-947 10 Feb 1969 505 P21 Collembola, Development, Embryology, Insect

BIBLIOGRAPHY

morphology, Reproductive organs.

A HISTOLOGICAL STUDY OF NEUROSECRE-TION IN ANTS (FORMICOIDEA). **R** B Gawande

Acta Ent Bohemoslov 65(5):349-363 REF 20 Sep 1968 420 C33

Formicidae, Insect histology, Neurosecretion. Czech summary.

2581-69

THE POSSIBILITIES OF THE APPLICATION OF PATHOGENIC BACTERIA FOR THE CON-TROL OF DEFOLIATING CATERPILLARS (ABSTRACT). (FR P Grison

Entomophaga 7(3):269-270

1962 421 EN835

Bacillus thuringiensis, Biological control (insects), Caterpillars, Defoliation, Forests, Fruit culture, Integrated control (pests), Orchards, Pathogenic bacteria. Influence on many insect species is discussed. report from First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

2582-69

STUDIES STUDIES ON THE CONTROL OF MOSQUITOES IN EGYPT BY MEANS OF CHEMOSTERILANTS, I. CHEMOSTERILIZA-TION OF ANOPHELES PHAROENSIS. M Hafez A E Aboul-Nasr H S Salama

J Econ Entomol 62(1):233-234

17 Feb 1969 421 J822

Anopheles pharoensis, Biological control (insects), Breeding, Chemical control (insects), Chemosterilants, Diet, Hempa, Tepa.

2583-69

NEW TRAPPING AND RECORDING METHODS FOR INVESTIGATIONS INTO THE MIGRA-TION PHENOMENON OF VIRUS-TRANS-MITTING INSECTS. (GE E Haine

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):113-117 REF

Feb 1967 410.9 G31M

Aphididae, Atmosphere. Insect collection, Insect flight, Insect vectors, Suction traps, Virus diseases plants. English abstract

2584-69

STUDY OF SEVERAL PHYSIOLOGICAL AND BIOLOGICAL CHARACTERISTICS IN THE THIRD INSTAR OF MELOLONTHA MELOLONTHA L. LARVAE WHICH HAVE BEEN CONTAMINATED BY TWO PATHOLOG-IC AGENTS. (FR)

N Hawlitzky

Acad Sci Compt Rend Ser D Sci Not 268(6, 1ST SEMESTER):941-944

10 Feb 1969 505 P21

Bacillus popilliae, Insect diseases, Insect physiology, Insect respiration, Larvae, Melolontha melolontha, Metamorphosis, Rickettsia.

5

2585-69

INTRACELLULAR DISTRIBUTION OF BETA-GLUCURONIDASE ACTIVITY DURING METAMORPHOSIS OF THE HOUSEFLY, MUSCA DOMESTICA L.

B M Hegdekar B N Smallman Can J Zool 47(1):45-49 REF

Jan 1969 470 C16D

Cells, Enzymes, Insect biochemistry, Lysosomes, Metamorphosis, Microsomes, Musca domestica.

2586-69

GALL MIDGES (DIPTERA-CECIDOMYIIDAE) AND THEIR PARASITES (HYMENOPTERA) LIVING IN FEMALE BIRCH CATKINS. S Hodges

Soc Brit Entomol Trons 18(9):195-225 REF Mar 1969 420 SO15

Betula, Cecidomyiidae, Gall-making insects, Hymenoptera, Insect biology, Insect ecology, In-sect morphology, Parasitic insects, Population.

2587-69

INTER-RACIAL MATING OF A NON-DIAPAUS-ING AND A DIAPAUSING RACE OF TELEOGRYLLUS COMMODUS (WALK.) (WALK.) (ORTHOPTERA: GRYLLIDAE). T W Hogan

Australian J Zool 15(3):541-545

May 1967 410 AU73 Biological control (insects), Insect diapause, Insect genetics, Insect rearing, Teleogryllus commodus.

2588-69

THE TOXIC EFFECT OF HERBICIDES UPON ANTS AND EARTHWORMS. (RUS

A M Iljin

Zool Zhur 48(1):141-143

Jan 1969 410 R92 Biological assay, Earthworms, Formicidae, Herhi-

cides, Toxicology. English abstact

2589-69

2590-69

M Jacohson

Pheromones.

P C Joubert

2592-69

W W Judd

1967 420 ON8

Sep 1967 24 SU3

2591-69

THE USE OF COELOCONIC SENSILLAE ON THE FEMALE ANTENNA IN DIFFERENTIAT-ING THE MEMBERS OF THE ANOPHELES GAMBIAE GILES COMPLEX.

Anopheles, Anopheles gambiae, Antennae, Insect

SEX PHEROMONE OF THE PINK BOLLWORM

MOTH: BIOLOGICAL MASKING BY ITS GEOMETRICAL ISOMER.

Biochemistry, Chromatography, Insect physiology, Isomers, Moths, Pectinophora gossypiella,

REPRODUCTION IN THE PYRALIDIDAE (LEPIDOPTERA). I. POST-EMBRYONIC DEVELOPMENT AND STRUCTURE OF THE MALE REPRODUCTIVE SYSTEMS OF CADRA CAUTELLA AND PLODIA INTERPUNCTELLA.

Cadra cautella, Development, Insect morphology.

STUDIES ON THE BYRON BOG IN SOUTHWESTERN ONTARIO XXXIII. DIS-TRIBUTION OF DYTISCIDAE AND HYDRO-PHILIDAE (COLEOPTERA) IN THE BOG.

Bogs, Coleoptera, Dytiscidae, Environment. Hydrophilidae, Insect collection, Insect dissemina-tion, Research, Zoogeography.

Plodia interpunctella, Reproductive organs.

Eutomol Soc Ontario Proc 98:48-52 MAP

anatomy, Insect identification, Sense organs.

I A H Ismail E I Hammound World Health Organ Bull 38(5):814-821

Science 163(3863):190-191 REF

S Afr J Agr Sci 10(3):707-722

10 Jan 1969 470 SC12

1968 449.9 W892B

2593-69 INVESTIGATION OF THE EFFECT OF GOVERNING CHEMICAL COMPOUNDS IN TREES ON BARK BEETLE ORIENTATION. (GE)

E Kangas

Z Angew Entomol 61(4):353-364 REF

May 1968 421 Z36

Attractants, Hibernation, Humidity, Insect behavior, Light, Olfactometers, Phloem, Pinus syl-vestris, Temperature, Terpineol, Tomicus piniperda. English summary

2594-69

ECOLOGY OF LACCIFER LACCA KERR (HOMOPTERA, COCCOIDEA) UNDER THE CONDITIONS OF THE BLACK SEA COAST OF GEORGIA.

Z K Khadzhibeyli

Entomol Rev 47(1, JAN-MAR):5-9

Mar 1968 421 R322AE

Food plants, Insect ecology, Insect rearing, Laccifer lacca, Temperature.

2595-69

CONSUMPTION OF NUTRITIONAL RESERVES BY HUNGRY FEMALES IXODES PERSUL-CATUS P. SCH. DURING THE LIFE CYCLE. (RUS)

P G Khizhinskii

Med Parazitol Parazitarn Bolezni 37(3,MAY-JUN):291-297 REF

1968 448.8 M469

Forests, Hibernation, Insect adaptation, Insect nutrition, Insect physiology, Ixodes persulcatus, Molting (insects), Temperature. English summary.

2596-69

OOSORPTION IN NASONIA VITRIPENNIS (HYMENOPTERA: PTEROMALIDAE).

P E King J G Richards

J Zool 154(4):495-516 REF

Apr 1968 410.9 L84P

Absorption (biological), Aging, Insect biochemistry, Insect physiology, Insect reproduction, Nasonia vitripennis.

2597-69

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

J F Kinnear M-d Martin J A Thomson G J Neufeld

Australian J Biol Sci 21(5):1033-1045 REF Oct 1968 442.8 AU72

Calliphora stygia, Chemical analysis, Development, Electrophoresis, Hemolymph, Larvae.

2598-69

COMPARATIVE MORPHOLOGY OF THE LAR-VAE OF CERTAIN GENERA OF FLEAS (APHANIPTERA).

A N Kir'yakova

Entornol Rev 47(1, JAN-MAR):41-46 REF Mar 1968 421 R322AE

Catalogs, Insect morphology, Insect taxonomy, Larvae, Pulex, Siphonaptera, Xenopsylla.

2599-69

LUCIFERIN AND LUCIOPTERIN ISOLATED FROM THE JAPANESE FIREFLY, LUCIOLA CRUCIATA.

Y Kishi S Matsuura S Inoue O Shimomura T Goto

Tetrahedron Lett (24):2847-2850 Apr 1968 385 T29

Chromatography, Fluorescence, Insect biochemis-try, Luciferins, Luciola cruciata, Luciopterin. Leuciopteridine identified as 8-methyl-1,2,3,4,7,8-hex-ahydro-2,4,7-trioxopteridine.

2600-69

GENERAL CONSIDERATIONS ON THE SIG-NIFICANCE OF PREDATORS AND PARASITES IN ORCHARDS. D J Kuenen

Entomophaga 7(3):221-226 1962 421 EN835

BIBLIOGRAPHY

Balance of nature, Biocenosis, Fungicides, Insecti-cides, Orchards, Parasitism, Predaceous insects, Spraying. French summary, report from First Col-loquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

2601-69

OVIPOSITION CYCLES AND THE STIMULUS FOR OVIPOSITION IN DERMESTES MACU-LATUS DEGEER (COLEOPTERA: DERMESTIDAE).

A M Ladduwahetty

Ceylon J Sci Biol Sci 7(1/2):128-138 REF Oct 1967 475 C33

Dermestes maculatus, Insect behavior, Insect eggs, Ovulation.

2602-69

COMPARATIVE MORPHOLOGY OF THE MALE AUSTRALIAN NEPIDAE (HEMIPTERA: AETEROPTERA).

1 Lansbury

Australian J Zool 15(3):641-649 REF May 1967 410 AU73

Insect morphology, Nepidae, Reproductive organs, Venation (insects)

2603-69

SEASONAL FLUCTUATIONS IN THE PROTOZOAN PARASITES OF THE CEN-TIPEDES LITHOBIUS VARIEGATUS AND LITHOBIUS FORFICATUS IN A YORKSHIRE WOODLAND.

J G E Lewis

J Zool 151(1):163-169

Jan 1967 410.9 L84P

Chilopoda, Parasites, Protozoa, Seasonal variation, Surveys.

2604-69

DETERMINATION OF THE MOLECULAR WEIGHT OF PROTEINS, ESTERASES, AND BASIC PHOSPHO-MONOESTERASES IN THE HEMOLYMPH OF GALLERIA MELLONELLA L. PREPUPA AND PUPA USING A THINLAYER CHROMATOGRAPHY.

M Marek

Experientia 25(2):136-137 REF

15 Feb 1969 475 EX7

Chromatography, Esterases, Galleria mellonella, Hemolymph, Insect biochemistry, Phosphatases, Proteins.

2605-69

A TEST OF THE IMMEDIATE AND RESIDUAL EFFICACY OF SOME PHOSPHOROUS ESTERS AGAINST THE LARVAE OF THE OLIVE FRUIT FLY (DACUS OLEAE GMELIN). (IT)

G M Martelli O Casilli

Giornate Fitopatol 383-386

26 Mar 1967 SB599.G5

Chemical control (insects), Dacus oleae, Dimethoate, Ekatin, Insecticide residues, Larvae, Phosphamidon.

2606-69

THE STRUCTURE, FUNCTION AND IMAGINAL DEVELOPMENT OF THE FEMALE INNER REPRODUCTIVE ORGANS OF ADELPHOCORIS LINEOLATUS (GOEZE), ADELPHOCORIS LINEOLA (HETEROPTERA, MIRIDAE). P Masner

Acta Ent Bohemoslov 63(3):177-199 REF

1966 420 C33

Adelphocoris lineolatus, Insect anatomy, Insect morphology, Insect physiology, Miridae, morphology, Insect physiology, Reproductive organs. Czech summary.

2607-69

SOME DATA ON THE FAUNA AND ECOLOGY OF THE TABANID FLIES (DIPTERA, TABANIDAE) OF NORTH BELORUSSIA. A G Mayevskiy Entomol Rev 47(1, JAN-MAR):50-53 Mar 1968 421 R322AE

Climate, Habitats, Insect ecology, Surveys, Tabanidae.

6

2608-69

ROLE OF SALTS IN OVIPOSITION SITE SELECTION BY THE BLACK SALT-MARSH MOSQUITO, AEDES TAENIORHYNCHUS (WIEDEMANN). W H McGaughey

Mosquito News 28(2):207-217 REF

Jun 1968 421 M85

Aedes taeniorhynchus, Insect behavior, Oviposition, Sulfates

Aedes taeniorhynchus, a salt-marsh mosquito, responded to sulfates in pure solution and in combination with other salts on the oviposition substrate. The response appeared to be due to the chemical and was independent of osmotic pressure except at higher levels where such solutions may be repellent. Normal oviposition occurred on distilled water because of its non-repellent nature.

2609-69

DEFENSIVE MECHANISMS OF ARTHROPODS, XXIII. AN ALLENIC SESQUITERPENOID FROM THE GRASSHOPPER ROMALEA MICROPTERA.

J Meinwald K Erickson M Hartshorn Y C Meinwald T Eisner

Tetrahedron Lett (25):2959-2962

May 1968 385 T29

Arthropoda, Chromatography, Insect protective devices, Insect repellents, Romalea microptera, Secretion, Sesquiterpenoids.

2610-69

ORIENTATION AND PROGRESS IN THE STU-DIES ON THE PARASITISM OF EN-TOMOPHAGOUS INSECTS. (IT)

E Mellini

2611-69

F R Meyer

158

2612-69

2613-69

B Miczulski

2614-69

1968 421 P76

AEGYPTI (L.).

Jun 1968 421 M85

CERAMBYCINAE).

11 Jul 1967 410.9 SA63

D W Micks J Jennings K Barnes

Mosquito News 28(2):191-192

Accad Naz Ital Entomol Atti 8:62-85 REF 1960 420 AC2

Entomology, Environment, Insect biology, Insect morphology, Parasitism, Predaceous insects, Research.

LARVA, PUPA AND LIFE HISTORY OF THREE SPECIES OF IBIDIONINI (COLEOPTERA,

Sao Paulo Dep Zool Papeis Avulsos 20(14):147-

Cerambycidae, Compsa albopicta, Compsa mon-

rosi, Gnomidolon varians, Ibidionini, Insect biolo-

gy, Insect pests, Insect taxonomy, Larvae, Orna-mental plants, Pupae.

IDENTIFICATION OF PTERIDINES IN AEDES

Aedes aegypti, Chromatography, Insect biochemis-try, Insect identification, Pteridine.

COMMUNITY STUDIES ON HYMENOPTERA

FOUND ON BRASSICA NAPUS L. PART VI. CHALCIDOIDEA. (POL)

Chalcidoidea, Hymenoptera, Insect adaptation, In-

sect biology, Insect collecting equipment, Insect identification, Insect pests, Larvae, Nomenclature, Parasites, Rape, Tables (data). English summary.

THE PASSIVE DISPERSAL OF VIABLE ALGAE

AND PROTOZOA BY AN AQUATIC BEETLE.

Amer Microscop Soc Trans 87(4):443-448 REF

Algae, Aquatic insects, Gastrointestinal system, In-

L E Milliger H E Schlichting

Oct 1968 440.9 AM33

sect biology, Protozoa.

Pol Pismo Entomol 38(2):341-385 REF

2615-69

SCHIZECKENOSY: THE SUBSTITUTE FOR DEFECATION IN CHIGGER MITES. R Mitchell M Nadchatram

Ann Mag Natur Hist 3(1, JAN-MAR):121-124 Mar 1969 410 AN77

Excretion, Feces, Insect morphology, Insect physiology, Mites, Trombiculidae.

A new term schizeckenosy is proposed for a process of defecation in which a mite lacking both an anus and a hind gut extrudes a faeces-filled gut lode through a rupture in a specific region of the body wall.

2616-69

PARASITES OF SPHAEROLECANIUM PRU-FONSC. (HOMOPTERA, COC-NASTRI COIDEA). (SE)

N Mitic-Muzina Zastita Bilja 19(93/95):183-187

1967 464.8 Z1

Chalcidoidea, Coccoidea, Homoptera, Insect identification, Parasitism, Predaceous insects. French summary. 10 species of parasites are identified.

2617-69

THE DISTRIBUTION AND ACTIVITY LEVELS OF CARBOHYDRASES IN THE ALIMENTARY CANAL OF THE COCKROACH, BLABERUS CRANIIFER BURMEISTER.

W W D Modder

Ceylon J Sci Biol Sci 7(1/2):9-23 REF

Oct 1967 475 C33

Blaberus craniifer, Blattidae, Carbohydrases, Digestion, Gastrointestinal system, Salivary glands.

2618-69

SPECIFICITIES OF ALIMENTARY L CARBOHYDRASES OF THE THE CANAL . COCKROACH, BLABERUS CRANIIFER BUR-MEISTER.

W W D Modder

Ceylon J Sci Biol Sci 7(1/2):24-31 REF Oct 1967 475 C33

Blaberus craniifer, Blattidae, Carbohydrases, Enzymes, Gastrointestinal system, Hydrogen-ion concentration, Temperature.

2619-69

THE STRUCTURE OF THE ALIMENTARY CANAL AND SALIVARY GLANDS IN ACROTELSA COLLARIS (THYSANURA: LEPISMATIDAE).

W W D Modder

Ceylon J Sci Biol Sci 7(1/2):139-150 Oct 1967 475 C33

Acrotelsa collaris, Insect anatomy, Insect physiology, Intestines, Lepismatidae, Salivary glands.

2620-69

CALCIUM ALGINATE: A NEW APPROACH IN THE ARTIFICIAL CULTURING OF INSECTS, APPLIED TO SPODOPTERA LITTORALIS (BOISDUVAL).

I Moore A Navon

Experientia 25(2):221-222

15 Feb 1969 475 EX7

Alginic acid, Culture media, Insect rearing, Methodology, Spodoptera, Synthetic diets.

2621-69

INFLUENCE OF SOME ENVIRONMENTAL FACTORS ON THE VIABILITY AND HATCHING OF AEDES AEGYPTI (L.) EGGS.

M S Mulla M F B Chaudhury Mosquito News 28(2):217-221 REF

Jun 1968 421 M85

Aedes aegypti, Ascorbic acid, Hatching, Humidity, Insect eggs, Mortality, Temperature.

The hatching of eggs of Aedes aegypti was found to have a direct relationship to humidity and an inverse relationship to temperature and to be dependent on a stimulus such as ascorbic acid at o.1 percent solution.

2622-69

EFFECTS OF SURFACE TENSION ON PUPAE OF CULEX PIPIENS QUINQUEFASCIATUS SAY AND AEDES AEGYPTI (L.).

M S Mulla M F B Chaudhury Mosquito News 28(2):187-191

Jun 1968 421 M85

Aedes aegypti, Aquatic insects, Culex pipiens quinquefasciatus, Insect morphology, Interfacial tension, Pupae.

The mortality of the tested mosquito pupae increased proportionately as the water surface tension was lowered by polydetergents.

2623-69

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

S N H Naqvi S H Ashrafi M A H Qadri Australian J Biol Sci 21(5):1047-1052 REF Oct 1968 442.8 AU72

Acid phosphatase, Chemical activation, Gastrointestinal system, Insect biochemistry, Schistocerca gregaria.

2624-69

SELECTION OF PHASE TYPES BASED ON HOPPER COLORATION IN LOCUSTANA PAR-DALINA (WALKER). M D Nel

S Afr J Agr Sci 10(3):823-829

Sep 1967 24 SU3

Insect breeding, Insect color, Insect migration, Locustana pardalina, Polymorphism.

2625-69

THE BIOLOGY OF SOME SPECIES OF ALAP-TUS (MYMARIDAE) PARASITISING EGGS OF PSOCOPTERA. T R New

Soc Brit Entomol Trans 18(8):181-193 REF Mar 1969 420 SO15

Host records, Host relationships, Life cycle, Mymaridae, Parasitic insects, Parthenogenesis, Psocoptera.

2626-69

SUB-ZERO MORTALITY RESPONSES OF TRIBOLIUM CONFUSUM DUVAL (TWO STOCKS) AND T. CASTANEUM (HERBST) (FOUR STOCKS) ANALYZED BY WEIGHTED **REGRESSION LINES BASED ON INDIVIDUAL TEMPERATURE LD50 S.**

J A Nowosielski-Slepowron F L Waterhouse D E A Strevens

Physiol Zool 41(4):440-446 REF

Oct 1968 410 P56

Insect physiology, Lethal dose, Temperature. Tribolium castaneum, Tribolium confusum.

2627-69

ESTERASES IN THE ONTOGENESIS OF THE HOUSE FLY MUSCA DOMESTICA. (RUS)

V S Odintzov V S Petrenko

Zool Zhur 48(1):146-148

Jan 1969 410 R92

Esterases, Insect biochemistry, Musca domestica, Ontogeny. English abstract

2628-69

HONEY BEES ESSENTIAL FOR POLLINATION OF APPLE TREES.

T Palmer-Jones P G Clinch

New Zeal J Agr 116(5):32-33

May 1968 23 N48J

Apis mellifera, Apples, Crop yields, Food habits, Pollination.

Experiments showed that honey bees were by far the most effective pollinators of apple trees and it is suggested that fruit growers would profit from a small investment in procurement of hives by the increase in fruit yields.

7

2629-69

ON THE PHOTOPERIODIC REACTION OF CHILOCORUS RENIPUSTULATUS SCRIBA (COLEOPTERA, COCCINELLIDAE). G A Pantyukhov

Entomol Rev 47(1, JAN-MAR):26-29 REF Mar 1968 421 R322AE

Coccinellidae, Insect diapause, Insect physiology, Photoperiodism, Temperature.

2630-69

THE DEVELOPMENT OF RESEARCH ON IN-SECT SECRETIONS. (IT)

M Payan

Accad Naz Ital Entomol Atti 8:228-242 REF 1960 420 AC2

Glands (insects), Insect biology, Insect protective devices, Research, Secretion, Toxicity. French summary.

2631-69

AN EXPLANATION OF THE OSCILLATORY FREE-RUNS IN CIRCADIAN RHYTHMS. **T** Paylidis

Amer Natur 103(929 JAN-FEB):31-42 REF 28 Feb 1969 470 AM36

Diurnal rhythm, Drosophila pseudoobscura, Frequency distribution, Mathematical analysis, Rodents.

An effort is made to explain the fluctuations in the frequency of circadian oscillations in certain species under conditions of periodically variable illu-mination. It is hypothesized that if variations in light intensity are only a small fraction of its average value, then the system tends to ignore them and responds to the average according to Schiff's rule. Experimental data and computer simulation support this hypothesis.

2632-69

2633-69

2634-69

1968 421 SU7

extracts.

2635-69

TWO

melolontha.

A SEROLOGICAL COMPARISON OF PIS-SODES STROBI AND P. APPROXIMATUS (COLEOPTERA: CURCULIONIDAE). D J Peckham

Antigens, Curculionidae, Immunochemistry, Insect

morphology, Insect rearing, Pissodes approxi-matus, Pissodes strobi, Serological tests.

NEUROLEPTIC SUBSTANCES AND INSECT BEHAVIOR-- VI. THE INFLUENCE OF RESER-

PINE ON THE BODY WEIGHT OF TRIBOLIUM

Drug resistance, Insect physiology, Reserpine, Tribolium confusum.

THE MECHANISMS BY WIIICH BLASTOPHAGUS PINIPERDA L. (COL., SCOLYTIDAE) REACTS TO THE ODOUR OF AN ATTRACTANT FRACTION ISOLATED FROM PINE PHLOEM.

Attractants, Blastophagus piniperda, Insect behavior, Olfactory response, Phloem, Pinus, Plant

PRELIMINARY RESULTS OF THE USE OF

AGAINST SOIL INSECTS AND LEPTINOTAR-

Bromophos, Chemical control (insects), Chloro-1-

(2,4-dichlorophenyl) vinyl diethyl phosphate, 2-, Elateridae, Leptinotarsa decemlineata, Melolontha

INSECTICIDES

EXPERIMENTAL

SA DECEMLINEATA. (IT)

Giornate Fitopatol 321-331 26 Mar 1967 SB599.G5

G Perugia P Napoli A Gallizia

Snomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 34(4):205-222 REF

Compar Biochem Physiol 28(1):233-238 REF

Can Entomol 101(1):78-90 REF

J M Perron G W Corrivault L Huot

V Perttunen E Kangas H Oksanen

Jan 1968 421 C16

CONFUSUM. (FR)

Jan 1969 444.8 C73

ENTOMOLOGY

2636-69

2636-69 FAUNISTIC-ECOLOGICAL REVIEW OF SYNANTIIROPIC DIPTERA IN THE SOUTH OF THE MARITIME TERRITORY. **B** R Petrova

Entomol Rev 47(1 JAN-MAR):54-58 REF Mar 1969 421 R322AE

Catalogs, Diptera, Insect ecology, Insect geography, Insect vectors.

26.37-69

LABORATORY STUDIES ON THE LOCOMO-TOR ACTIVITY OF CORYPHOSIMA STENOP-TERA AND OTHER WEST AFRICAN ACRIDIDAE (INSECTA: ORTHOPTERA). J Phipps

J Zool 155(3):395-400 REF

Jul 1968 410.9 L84P

Acrididae, Insect behavior, Insect physiology, Locomotion.

2638-69

OF HORMONAL CONTROL OF OVARIAN DEVELOPMENT IN A HETEROGONAL GALL MITE. (GE)

K Pohlhammer

Naturwissenschaften 56(1):39

Jan 1969 474 N213

Development, Heteropeza pygmaea, Insect hormones, Ovarics, Reproductive organs.

2639-69

DEVELOPMENT OF THE BEAK MUSCULA-TURE AND SCLERITES IN HETEROPTERA. L V Puchrova

Entomol Rev 47(1, JAN-MAR): 30-34 REF Mar 1968 421 R322AE

Heteroptera, Insect evolution, Insect morphology, Metamorphosis, Mouth parts, Muscles.

2640-69

LABORATORY PROPAGATION OF THE PARASITE CHRYSOCHARIS LARICINELLAE (HYMENOPTERA: EULOPHIDAE) AND NOTES INTERACTION WITH ITS HOST, ON COLEOPHORA LARICELLA.

F W Quednau

Can Entomol 101(1):100-106

Jan 1969 421 C16

Chrysocharis laricinellae, Coleophora laricella, Eu-lophidae, Insect pests, Insect rearing, Laboratory animals, Larix laricina, Larvae, Parasites. French summary.

2641-69

EVOLUTION OF THE FUNCTION OF THE OVIPOSITOR IN RELATION TO THE ORIGIN OF PARASITISM IN HYMENOPTERA.

A P Rasnitsyn

Entomol Rev 47(1, JAN-MAR):35-40 REF Mar 1968 421 R322AE

Hymenoptera, Insect evolution, Insect morphology, Paleoentomology, Parasitism.

2642-69

EXPERIMENTAL ANALYSIS OF PHENOLOGY OF THE EUROPEAN RED MITE PANONYCHUS ULMI KOCH (ACARINA, TETRANYCHIDAE). (RUS)

A P Rasumova

Zool Zhur 48(2):212-217

Feb 1969 410 R92

Diurnal rhythm, Insect ecology, Panonychus ulmi, Temperature. English abstract

2643-69

THE USE OF A CAPILLARY-TUBE TECHNIQUE FOR ARTIFICALLY FEEDING ARGAS REFLEXUS REFLEXUS TICKS.

U Rau C Hannoun

World Health Organ Bull 39(2):332-333 1968 449.9 W892B

Arboviruses, Argas persicus, Argas reflexus, Blood, Chickens, Feeding, Pigeons.

2644-69

PRELIMINARY STUDY ON THE EFFECT OF DIFFERENT DOSES OF NITROGEN ON THE INCIDENCE OF MAJOR PESTS OF MUSTARD.

BIBLIOGRAPHY

R R Rawat U S Misra A V Thakar S V Dhamdhcre Madras Agr J 55(8):363-366 Aug 1968 22 M262 Brassica, Dosage, Insect population, Lipaphis erysimi, Nitrogen, Phytomyza atricornis, Plant pest resistance, Urea.

2645-69

CHANGES IN THE METABOLISM OF NUCLE-IC ACIDS IN THE OVARIES OF THE HOUSE FLY, MUSCA DOMESTICA, AFTER APPLICA-TION OF CHEMOSTERILANTS. B Rezabova Acta Ent Bohemoslov 65(5):331-340 REF

20 Sep 1968 420 C33

Biological control (insects), Biosynthesis, Chemical control (insects), Chemosterilants, Deox-yribonucleic acid, Insect anatomy, Insect metabol-ism, Musca domestica, Neoplasms, Nucleic acids, Ovaries, Ribonucleic acid. Czech summary

2646-69

OBSERVATIONS ON RHOPALOSIPHUM PADI AND R. FITCHII (HOMOPTERA: APHIDIDAE) IN MANITOBA.

A G Robinson Y Chen Can Entomol 101(1):110-112

Jan 1969 421 C16

Aphididae, Barley, Capsella bursa-pastoris, Chromosomes, Insect behavior, Insect ecology, In-sect identification, Insect morphology, Oats, Poa pratensis, Poa trivialis, Rhopalosiphum fitchii, Rhopalosiphum padi, Wheat.

2647-69

ACETYLCHOLINESTERASE INSENSITIVITY IN THE BIARRA STRAIN OF THE CATTLE TICK BOOPHILUS MICROPLUS, AS A CAUSE OF RESISTANCE TO ORGANOPHOSPHORUS AND CARBAMATE ACARICIDES.

W J Roulston H J Schnitzerling C A Schuntner Australian J Biol Sci 21(4):759-767 REF Aug 1968 442.8 AU72

Acetylcholinesterases, Boophilus microplus, Car-bamates, Enzymes, Insect metabolism, Or-ganophosphorus compounds.

2648-69

IN VIVO ACTION OF EXTRACTS OF THE CORPORA CARDIACA ON THE CARDIAC RHYTHM OF LOCUSTA MIGRATORIA L. (FR) J P Roussel M Cazal

Acad Sci Compt Rend Ser D Sci Nat 268(3, 1ST SEMESTER):581-583

20 Jan 1969 505 P21

Corpora cardiaca, Dorsal vessel, Insect physiology, Locusta migratoria.

2649-69

EXPERIENCES WITH THE HOUSE FLY, STERILIZED BY X RAYS. (1T)

G Sacca

Accod Noz Ital Entomol Atti 8:91-98 REF 1960 420 AC2

Biological control (insects), Dosage, Insect breeding, Irradiation, Musca domestica, Sterilization, Xrays. English summary.

2650-69

INSECT OLFACTION: DECIPHERING SYSTEM FOR CHEMICAL MESSAGES.

D Schneider

Science 163(3871):1031-1037 REF

07 Mar 1969 470 SC12

Cells, Chemicals, Chemoreceptors, Cuticle, Insect anatomy, Molecules, Olfactometers, Smell, Stimulants.

2651-69

VISUAL FORM DISCRIMINATION OF THE HONEY BEE WITHIN THE RANGE OF 6- AND 4-POINTED STARS. (GE)

B Schnetter

Z Vergleichende Physiol 59(1):90-109 REF 1968 444.8 Z3

Apis mellifera, Experimental insects, Insect behavior, Insect physiology, Tables (data), Vision. English summary.

8

2652-69

INVESTIGATIONS CONCERNING THE CON-TROL OF THE APPLE MOTH (CARPOCAPSA POMONELLA (L.)) WITH THE HELP OF TRICHOGRAMMA EMBRYOPHAGUM (HAR-TIG), (ABSTRACT), (GE) F Schutte J M Franz

Entomophaga 7(3):271-272

1962 421 EN835

Anagasta kuchniclla, Biological control (insects), Carpocapsa pomonella, Dosage, Insect eggs, Parasitism, Sitotroga cerealella, Trichogramma embryophagum. Report from First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Warwingen Netherland. Wageningen, Netherlands.

2653-69

MIMICRY OF HYMENOPTERA BY BEETLES WITH UNCONVENTIONAL FLIGHT.

R E Silberglied T Eisner

Science 163(3866):486-488

31 Jan 1969 470 SCI2

Colcoptera, Hymenoptera, Insect behavior, Insect flight, Insect identification, Mimicry.

2654-69

2655-69

E H Slifer

2656-69

D S Smith

2657-69

(GE)

H Steiner

2658-69

2659-69

1962 421 EN835

Mar 1968 385 T29

Jan 1969 421 C16

Biol Bull 136(2):253-263

Apr 1969 442.8 B52

MOSQUITO STUDIES IN NORTHERN WISCONSIN. 11. LIGHT TRAPPING STUDIES. R E Siverly G R DeFoliart

Mosquito News 28(2):162-167 MAP

Jun 1968 421 M85

Aedes, Anopheles, Culex, Culiseta, Demography, Insect ecology, Insect population density, Light traps, Mansonia perturbans, Seasonal variation. The relative abundance and seasonal succession of

adult mosquito populations of northern Wisconsin are described on the basis of 21,790 specimens

representing 26 species collected by means of the light trap method.

SENSE ORGANS ON THE ANTENNA OF A PARASITIC WASP, NASONIA VITRIPENNIS (HYMENOPTERA, PTEROMALIDAE).

Antennae, Chemoreceptors, Insect morphology,

OVIPOSITION, DEVELOPMENT OF EGGS, AND CHROMOSOME COMPLEMENT OF EGGS OF VIRGIN FEMALES OF THE

GRASSHOPPER MELANOPLUS SANGUINIPES.

Chromosomes, Experimental insects, Insect genetics, Insect morphology, Mclanoplus san-guinipes, Oviposition, Parthenogenesis.

METHODS FOR THE DETERMINATION OF POPULATION DYNAMICS IN ORCHARDS. (IN-CLUDING SAMPLING AND COLLECTION).

Insect collecting equipment, Insect populations, Methodology, Orchards, Pesticides, Tetranychidae. English summary. report from First

Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

ABSOLUTE CONFIGURATION OF IN-OKOSTERONE, AN INSECT-MOULTING SUB-STANCE FROM ACHYRANTHES FAURIEI.

Achyranthes fauriei, Hormones, Molting (insects), Plant extracts, Stereochemistry, Steroids.

ISOLATION OF NEW POLYISOPRENYL KETONE FROM SILKWORM FECES.

T Takemoto Y Hikino S Arihara H Hikino Tetrohedron Lett (20):2475-2478 REF

Insect physiology, Nasonia vitripennis.

Con Entomol 101(1):23-27 REF

Entomophaga 7(3):207-214

BIBLIOGRAPHY

M Toyoda H Fukawa T Shimizu

Tetrahedron Lett (35):3837-3840

Jul 1968 385 T29

Biochemistry, Bombiprenone, Bombyx mori, Feecs, Isoprenoids, Ketones, Moleeular distillation, Morus.

2660-69

THE IMMIGRATION OF PIERIS BRASSICAE L. (LEP., PIERIDAE) INTO FINLAND IN 1966, WITH A GENERAL DISCUSSION ON INSECT MIGRATION.

K Vepsalainen

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 34(4):223-243 MAP REF

1968 421 SU7

Insect migration, Pieris brassicae, Weather.

2661-69

A NEW ACTIVE ACARICIDE SUBSTANCE. (IT)

L Vieini

Giornate Fitopatol 411-414

26 Mar 1967 SB599.G5

Acaricides, Butylphenoxy) cyclohexyl 2-propynyl sulfite, 2-(p-tert-, Chemical control (insects), Panonychus ulmi, Tetranychus urticae.

2662-69

MORPHOLOGY AND BIOLOGY OF CULEX PIPIENS L. (DIPTERA, CULICIDAE) IN UZ-BEKISTAN.

Ye B Vinogradova R B Fomenko

Entomol Rev 47(1, JAN-MAR):1-4 REF

Mar 1968 421 R322AE

Culex pipiens, Demography, Insect biology, Insect morphology, Insect rearing, Ovaries, Oviposition.

2663-69

THE INFLUENCE OF SPRAY CHEMICALS ON PREDATORY- AND PHYTOPHAGOUS MITES ON APPLE TREES IN LABORATORY- AND FIELD TRIALS IN THE NETHERLANDS. M van de Vrie

Entoinophaga 7(3):243-250

1962 421 EN835

Apples, Chemical control (insects), Mites, Phytophagous mites, Predaceous insects, Spraying. German summary. report from First Colloquium on Integrated Control in Orehards, Sept. 5-9, 1961, Wageningen, Netherlands.

2664-69

BEEKEEPING METHODS IN NORTH AMER-ICA.

G M Walton

New Zeal J Agr 118(2):44-47

Feb 1969 23 N48J

Apieulture, Crop yields, Methodology, Pesticide residues, Pollen.

2665-69

RESPONSES OF APHIDS TO PRESSURE AP-PLIED TO LIQUID DIET BEHIND PARAFILM MEMBRANE. LONGEVITY AND LARVIPOSI-TION OF MYZUS PERSICAE (SULZ.) AND BREVICORYNE BRASSICAE (L.) (HOMOP-TERA: APHIDIDAE) FEEDING ON SUCROSE AND SINIGRIN SOLUTIONS.

C H Wearing

New Zealand J Sci 11(1):105-121 REF

Mar 1968 514 N482

Barometrie pressure, Brevicoryne brassicae, Diet, Feeding, Larvae, Longevity, Myzus persicae, Reproduction, Sinigrin, Suerose.

2666-69

LYSOZYME RETENTION BY COCKROACH PERIPLANETA AMERICANA L. D R A Wharton Science 163(3863):183-184

10 Jan 1969 470 SCI2

Blattidae, Blood, Muramidase, Periplaneta americana, Toxins.

2667-69

VARIATION AND DISTRIBUTION OF THE IN-TERTIDAL BEETLE HALOCORYZA

.

ARENARIA (DARLINGTON) IN MEXICO AND THE UNITED STATES (COLEOPTERA: CARABIDAE). D R Whitehead N Y Entomol Soc J 77(1):36-39 Mar 1969 420 N48J Carabidae, Habitats, Inseet geography, Inseet morphology, Littoral inseets. 2668-69 LABORATORY INVESTIGATIONS ON THE EF-

FECT OF INSECTICIDES ON THE LARVAE AND ADULTS OF COCCINELLA SEPTEM-PUNCTATA L. (COL., COCCINELLIDAE). S K Wiackowski B Nowacka

Pol Pismo Entomol 38(2):441-452

1968 421 P76

Chemical control (insects), Coceinella septempunctata, Coceinellidae, Experimental insects, Insecticide residues, Insecties, Insects, Larvae, Plant protection, Statistical analysis, Toxieity. Polish summary. 12 insecticides were tested.

2669-69

CONCERNING THE POSSIBILITIES OF FORECASTING, SUPERVISING THE INSECT OUTBREAK AND ON TOLERANCE LIMITS IN THE INTEGRATED PEST CONTROL IN FRUIT CULTURES. (GE) T Wildbalz

Entomorphane 7(2),272.2

Entoinophaga 7(3):273-283 REF

1962 421 EN835

Fruit culture, Insect outbreaks, Insect populations, Integrated control (pests), Mites, Tolerances, English summary, report from First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

2670-69

SOME CONCLUDING REMARKS.

J de Wilde

Entomophaga 7(3):285-288

1962 421 EN835

Bacillus thuringiensis, Fungicides, Insect populations, Insecticides, Integrated control (pests), Parasitism, Plant pest control, Trichogramma. Concluding remarks on First Colloquium on Integrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

2671-69

SCIENTIFIC RESULTS OF THE POLISH HINDU-KUSH EXPEDITION 1966. PART I. THE MIGRATION OF THE PAINTED LADY, PYRAMEIS (VANESSA) CARDUI L., IN THE HIGH HINDU-KUSH.

J Wojtusiak

Folia Biol (warsaw) 16(4):329-334 MAP 1968 442.8 F71

Insect behavior, Insect migration, Vanessa eardui. 2672-69

.072-09

REPRODUCTIVE ISOLATION BETWEEN TWO CLOSELY RELATED SPECIES OF THE QUEENSLAND FRUIT FLY, DACUS TRYONI (FROGG.) AND D. NEOHUMERALIS HARDY (DIPTERA: TEPHRITIDAE). I. VARIATION IN HUMERAL CALLUS PATTERN AND THE OC-CURRENCE OF INTERMEDIATE COLOUR FORMS IN THE WILD.

H Wolda

Australian J Zool 15(3):501-513 REF

May 1967 410 AU73

Dacus neohumeralis, Dacus tryoni, Demography, Inseet geography, Insect morphology, Insect mutation, Inseet reproduction.

2673-69

GROSS BIOENERGETICS OF BLATTELLA GERMANICA.

D J Woodland B K Hall J Calder Physiol Zool 41(4):424-431 REF

Oct 1968 410 P56

Blattella germanica, Inscet physiology, Methodology, Statistical analysis.

In analyzing the bioenergeties of Blattella germanica, the equation, Ingestion minus Excretia

9

equals Respiration plus Growth was used. The efficiency of assimilation was investigated, and all the factors were compared among different age groups and sexes.

2674-69

OBSERVATIONS ON THE FLUORESCENCE AND FUNCTION OF SPIDERS' EYES. M R Young F Wanless

J Zool 151(1):1-16 REF

Jan 1967 410.9 L84P

Eyes, Fluorescence, Fluorescence microscopy, Insect physiology, Phototropism, Spiders.

GENETICS

2675-69

CHROMOSOME ANALYSES OF QUANTITA-TIVE CHARACTERS IN DROSOPHILA MELANOGASTER. A A Dewees

Diss Abstr Sect B 29(3)886B

Sep 1968 Z5055.U49D53

Chromosomes, Drosophila melanogaster, Heredity, Insect eggs, Insect genetics, Insect morphology, Quantitative analysis.

2676-69

2677-69

2678-69

2679-69 NON-RANDOM

R K Sakai

2680-69

ON THE RESISTIBILITY OF DROSOPHILA TO SODIUM CHLORIDE. II. DIFFERENCES IN THE RESISTIBILITY AT DIFFERENT DEVELOPMENTAL STAGES.

Y Miyoshi K Nakamura

Jap J Genet 43(5):365-376 REF

H Planel J-p Soleilhavoup M-c Giess

breeding, Insect genetics, Irradiation.

LIIDAE, DIPTERA). (RUS)

Genetika 4(5):70-79 REF

1968 QH431.A1G4

G G Polianskaya R I Tzapygina

Polymorphism. English summary.

Diss Abstr Sect B 29(3):890B

Sep 1968 Z5055.U49D53

genetics, Meiosis.

E S Shcherbakov

1968 OH431.A1G4

Genetika 4(5):60-69 REF

Chromatin, Chromosomes,

geneties, Odagmia ornata. English summary.

Oct 1968 442.9 J27

SEMESTER):584-587

20 Jan 1969 505 P21

Drosophila melanogaster, Insect genetics, Insect morphology, Insecticide resistant insects, Larvae, Sodium chloride.

INFLUENCE OF MEDIUM AND STOCK ON

THE ROLE OF NATURAL IRRADIATION ON DROSOPHILA MELANOGASTER. (FR)

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

Demography, Drosophila melanogaster, Inscet

INVERSIONAL POLYMORPHISM IN BOOPHTORA ERYTHROCEPHALA (SIMU-

Chromosomes, Diptera, Insect genetics, Larvae,

CHROMOSOME PAIRS AND MEIOTIC DRIVE IN DROSOPHILA MELANOGASTER.

Chromosomes, Drosophila melanogaster, Insect

ON THE PROBLEM OF HETEROZYGOSITY

WITH RESPECT TO PUFFS AND TO TFE STRUCTURE OF SEPARATE BANDS IN THE

GIANT CHROMOSOMES OF TWO SPECIES OF

BLACK-FLIES (SIMULIIDAE, DIPTERA). (RUS

ASSORTMENT

OF

Diptera, Insect

ENTOMOLOGY

2681-69

2681-69

STUDIES ON THE SCUTELLAR BRISTLES OF DROSOPHILA MELANOGASTER. I. BASIC VARIABILITY, SOME TEMPERATURE AND CULTURE EFFECTS, AND RESPONSES TO SHORT-TERM SELECTION IN THE OREGON-RC STRAIN.

B L Sheldon

Australian J Biol Sci 21(4):721-740 REF Aug 1968 442.8 AU72

Drosophila melanogaster, Insect breeding, Insect genetics, Insect morphology, Temperature.

2682-69

COMPARATIVE ANALYSIS OF SPONTANE-OUS ANEUPLOIDY IN MALES AND FEMALES OF DROSOPIIILA. (RUS)

K V Vatti M M Tikhomirova Genetika (5):105-110 REF

1967 QH431.A1G4

Chromosomes, Drosophila, Insect genetics, Insect rearing, Meiosis, Oogenesis, Polyploidy, Sex determination, Spermatogenesis. English summary

2683-69

A SEX-RATIO ABERRATION IN DROSOPHILA MELANOGASTER (MEIGEN).

J E Watson

Diss Abstr Sect B 29(3):892B

Sep 1968 Z5055.U49D53

Chromosomes, Drosophila melanogaster, Insect abnormalitics, Insect morphology, Reproduction, Sex ratios.

2684-69

REPRODUCTIVE ISOLATION BETWEEN TWO CLOSELY RELATED SPECIES OF THE QUEENSLAND FRUIT FLY, DACUS TRYONI (FROGG.) AND D. NEOHUMERALIS HARDY (DI!'TERA: TEPHRITIDAE). II. GENETIC VARIATION IN HUMERAL CALLUS PATTERN IN EACH SPECIES AS COMPARED WITH LABORATORY-BRED HYBRIDS. H Wolda

Australian J Zool 15(3):515-539

May 1967 410 AU73

Dacus neohumeralis, Dacus tryoni, Hybrids, Insect color, Insect genetics, Insect rearing, Insect reproduction.

MEDICAL ENTOMOLOGY

2685-69

ISOLATION OF MYCOPLASMAS.

Nature 220(5168):649

16 Nov 1968 472 N21

Diagnosis, Epidemiology, Human diseases, Mycoplasma, Mycoplasmosis. Report of International Symposium on Mycoplasma Diseases of Man, East Germany on Oct. 2-5.

2686-69

A REFINEMENT IN AERIAL APPLICATIONS OF PARIS GREEN GRANULES.

T O Fultz F Harris

Mosquito News 28(3):323-326

Scp 1968 421 M85

Acdes sollicitans, Aerial insect control, Aircraft, Chemical control (insects), Insect control, Methodology, Organic compounds.

The author discusses the techniques used in the aerial application of paris green granules in Gcorgia for mosquito control.

2687-69

A FEASIBILITY STUDY ON THE UTILIZA-TION OF MONOMOLECULAR FILMS FOR MOSQUITO ABATEMENT.

G A Lorenzen W W Meinke Mosquito News 28(2):230-232

Jun 1968 421 M85

Alcohols, Chemical control (insects), Culex quinquefasciatus, Insect control, Interfacial tension, Larvicides.

BIBLIOGRAPHY

2688-69

INSECTICIDE SUSCEPTIBILITY STUDIES IN INDIAN STRAINS OF AEDES AEGYPTI L.. B V R Madhukar M K K Pillai

Mosquito News 28(2):222-225 MAP REF Jun 1968 421 M85

Acdes acgypti, Chemical control (insects), Chlorinated hydrocarbons, Insecticide resistant insccts.

2689-69

RESEARCH ON A TYPE OF DAM SPILLWAY UNFAVORABLE TO THE PROLIFERATION OF SIMULIUM DAMNOSUM (DIPTERA) SIMU-LIIDAE). (FR)

G Quelennee E Simonkovich M Ovazza World Health Organ Bull 38(6):943-956 1968 449.9 W892B

Dams, Human diseases, Insect vectors, Onchocerca volvulus, Onchocerciasis, Public health. Simuliidac, Simulium damnosum. English summary.

2690.69

STUDIES ON YELLOW FEVER IN ETHIOPIA. 6. EPIDEMIOLOGICAL STUDY. (FR)

C Serie L Andral A Poirier A Lindrcc P Neri World Health Organ Bull 38(6):879-884 1968 449.9 W892B

Aedes africanus, Epidemiology, Human diseases, Insect vectors, Mortality, Ycllow fever. English summary

2691.69

APHOLATE AND GAMMA IRRADIATION COMPARED AS STERILANTS FOR CULEX PIPIENS QUINQUEFASCIATUS SAY (DIP-TERA: CULICIDAE).

B J Smittle G A Mount M Das N Rajapaksa Mosquito News 28(2):201-204 REF Jun 1968 421 M85

Apholate, Biological control (insects), Chemosterilants, Culex pipiens quinquefasciatus, Gamma rays, Irradiation, Sterilization.

2692-69

ECOLOGICAL CONSIDERATIONS IN SCRUB **TYPHUS. I. EMERGING CONCEPTS. 2. VEC-**TOR SPECIES. 3. METHODS OF AREA CON-TROL.

R Traub C L Wisseman

World Health Organ Bull 39(2):209-237 REF

1968 449.9 W892B

Aldrin, Birds, Carbamates, Chemical control (in-sects), Dieldrin, Ecology, Fenthion, Human diseases, Insect vcctors, Isopropoxyphenyl N-mcthylcarbamate, 2-, Leptotrombidium, Lindane, Mammals, Organophosphorus compounds, Rodents, Scrub typhus, Trombiculidae, Zoogeography. French summary

CROP PROTECTION

2693-69

INTEGRATED CONTROL OF PESTS IN ORCHARDS.

H J de Fluiter

Entomophaga 7(3):199-206

1962 421 EN835

Bacillus thuringiensis, Biological control (insects), Chemical control (insects), Insecticides, Integrated control (pests), Orchards, Spraying, French sum-mary, report from First Colloquium on Inegrated Control in Orchards, Sept. 5-9, 1961, Wageningen, Netherlands.

2694-69

THE POSSIBILITY OF THE USE OF SOME BIOLOGICAL ANALYTICAL TECHNIQUES FOR THE CONTROL OF THE SAFETY PERIODS OF PESTICIDES. (IT)

S Foschi A Cesari E Olmo B Guiati R Stanzani A Brunelli

10

Giornate Fitopatol 133-139 REF 26 Mar 1967 SB599.G5

Biology, Crops, Drosophila melanogaster, Harvesting date, Pesticide application, Pesticides, Plant protection, Time, Tolerances. Tests were con-ducted with 9 pesticides.

2695-69

VARIATION IN THE SMUT FUNGL C S Holton J A Hoffman R Duran

Annu Rev Phytopathol 6:213-242 REF 1968 464.8 AN72

Fungi, Plant morphology, Plant physiology, Smut.

2696-69

THE CURRENT IMPORTANCE OF PLANT PROTECTION. (IT)

L Lintas G Goidanich M M Principi S Toschi Giornate Fitopatol 11-19

26 Mar 1967 SB599.G5

Acaricides, Chemical control (pests), Chemosterilants, Fungicides, Insecticides, Legislation, Ne-matocides, Plant diseases, Plant protection, Tolcrances

2697-69

MOISTURE LOSS AFTER APPLICATION OF SOIL FUMIGANTS.

C C Orr O H Newton Plant Dis Rep 53(2):163-164

Feb 1969 1.9 P69P

Equipment, Pesticide application, Seedbeds, Soil fumigation, Soil moisture, Soil scrics.

2698-69

POLLINATION OF SOME TUNDRA PLANTS WITH MINIATURE FLOWERS ON NIWOT RIDGE IN BOULDER COUNTY, COLORADO. B W Peterson Diss Abstr Sect B 29(3):882B

Sep 1968 Z5055.U49D53

Fertilization (plants), Flowers, Insect pollinators, Pollination. Seven tundra species discussed.

Aging, Fungi, Growth factors, Plant physiology,

BIRDS AND PLANT PROTECTION-A REPLY.

Birds, Legislation, Pesticide residues, Plant protec-tion, Wildlife pests.

INVESTIGATION CONCERNING THE NECTAR AND HONEY PRODUCTION OF THE QUINCE

Vissh Selskostopanski Inst Vasil Kolarov Nauch Tr 16(2):241-253 REF

Bees, Fruit culture, Honey, Nectar, Plant physiolo-gy, Quinces. German and Russian summaries.

FACTS AND FICTION CONCERNING THE FOREST AND SILVICULTURE. (FR

Balance of nature, Biological control (insects),

Chemical control (insects), Forests, Silviculture. Review of Les Français et leur foret by R. Fevrier

126p., Editions Hubert Baille, Paris, France 1968.

DISEASES

THE INFLUENCE OF LATENT APPLE VIRUSES ON THE GROWTH OF VARIOUS OR-

(CYDONIA VULGARIS PERS.). (BU)

2699-69

2700-69

2701-69

2702-69

H Siriez

2703-69

T Simidchiev

1967 106.3 P72

Phytoma 20(199):27-36

NAMENTAL APPLES. (GE)

Jun 1968 464.8 P563

H Schonbeck

Pflanzenarzt 20(8):84-85 01 Aug 1967 464.9 P482

THE GROWTH PROCESS IN FUNGI.

N F Robertson

Annu Rev Phytopathol 6:115-136 REF 1968 464.8 AN72 Plant reproduction, Plant water relations

CROP PROTECTION

2727-69

F Afscharpour L Kunze

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):157-161

Feb 1967 410.9 G31M

Apples, Crop varieties, Latent virus, Ornamental trees, Plant grafting, Plant physiology, Rootstocks, Virus diseases (plants). English abstract

EFFECT OF MALEIC HYDRAZIDE ON WHEAT AND BARLEY AGAINST DIFFERENT RUSTS. S T Ahmad S Singh

Indian J Agr Sci 38(4):620-622

Aug 1968 22 AG831

Barley, Fungus diseases (plants), Maleic hydrazide, Plant disease resistance, Puccinia, Rust, Wheat.

2705-69

GLOEOSPORIUM.

Anonymous

Rubber Res Inst Malaya Plant Bull (97):110-113 Jul 1968 78:9 R825

Chemical control (plant diseases), Dusting, Fertil-izers, Fungicides, Fungus diseases (plants), Glocosporium, Humidity, Oidium, Symptomatology, Weather.

2706-69

A NEW PROMISING SYSTEMIC FUNGICIDE AGAINST CERCOSPORA. (IT

C Antonelli A Ponti-Sgarbi

Giornate Fitopatol 179-183

26 Mar 1967 SB599.G5

Cereospora, Chemical control (plant diseases), Fentin acetate, Fungus diseases (plants), Sugar beets, Testing, Thiazolyl)-benzimidizole, 2-(4-.

2707-69

FOMES ANNOSUS AND CHEMICAL STUMP TREATMENT IN VIRGINIA--A THREE-YEAR STUDY.

J D Artman D H Frazier C L Morris Plant Dis Rep 53(2):108-110

Feb 1969 1.9 P69P

Borax, Chemical control (plant diseases), Fomes annosus, Fungus diseases (plants), Pinus taeda, Urea.

2708-69

MECHANISMS OF BIOLOGICAL CONTROL OF SOIL-BORNE PATHOGENS. R Baker

Annu Rev Phytopathol 6:263-294 REF 1968 464.8 AN72

Antibiosis, Biological control (plant diseases), Lysis, Soil-borne plant diseases.

2709-69

CONCENTRATION OF POTATO-M-VIRUS IN POTATOES AND TOMATOES. (GE

R Bartels

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):118-124

Feb 1967 410 9 G31M

Plant morphology, Potatoes, Serological tests, Tomatoes, Virus diseases (plants), Virus m, Virus s. English abstract.

2710-69

PROBLEMS IN PLANT VIRUS INVESTIGA-TIONS. (GE)

R Bereks

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):97-108 REF

Feb 1967 410.9 G31M

Electron microscopy, Plant diseases, Research, Virus diseases (plants). English abstract

2711-69

EPIDEMIOLOGY AND CONTROL OF BROWN ROT OF SOUR CHERRIES INCITED BY MONILINIA FRUCTICOLA (WINT.) HONEY. D A Biris

Diss Abstr Sect B 29(3):833B-334B

Sep 1968 Z5055.U49D53

Brown rot, Chemical control (plant diseases), Epidemiology, Fruit rot, Fungus diseases (plants), Monilinia fructicola, Sour cherries.

2712-69

WITH EXPERIMENTAL TESTS THIABENDAZOLE AGAINST CERCOSPORA BETICOLA SACC. (IT)

G C Bongiovanni Giornate Fitopatol 185-189

26 Mar 1967 SB599.G5

Cercospora beticola, Chemical control (plant dis-

eases), Fentin acetate, Fungus diseases (plants), Testing, Thiazolyl)-benzimidizole, 2-(4-,

2713-69

WHERE DOES POTATO BLIGHT COME FROM

A E W Boyd

Scot Agr 46(2,SPRING):78-82 1967 10 SC082SO

Blight, Plant disease control, Plant disease transmission, Potatoes, Seasonal variation.

2714-69

PLANT ELECTRON MICROSCOPY OF VIRUSES. BIBLIOGRAPHY 1935-1965.

J Brandes

Berlin Biol Bundesanst Land-forstwirtsch Mitt

(122):1-91 May 1967 410.9 G31M

Bibliography, Electron microscopy, Insect vectors, Methodology, Morphology, Plant hosts, Taxono-my, Virus diseases (plants). Citations also in German

2715-69

AERIAL PHOTOGRAPHY FOR THE STUDY OF PLANT DISEASES.

G H Brenchley

Annu Rev Phytopathol 6:1-22 REF

1968 464.8 AN72

Aerial photography, Air-borne plant diseases, Environment, Epidemiology, Plant diseases, Quantitative analysis.

2716-69

THE RECOVERY OF GIBBERELLA ZEAE FROM WHEAT STRAWS.

L W Burgess D M Griffin Australian J Exp Agr Anim Husb 8(32):364-370

REF Jun 1968 23 AU792

Fungus diseases (plants), Gibberella zeae, Plant physiology, Soil moisture, Soil temperature, Straw, Wheat.

2717-69

EARLY STAGES OF PATHOGENESIS ENGEN-DERED BY ERWINIA AMYLOVORA IN APPLE AND PEAR TISSUE. A Burkowicz

Diss Abstr Sect B 29(3):834B

Sep 1968 Z5055.U49D53

Apples, Bacterial diseases (plants), Erwinia amylovora, Pears, Plant diseases, Plant physiology, Tissues.

2718-69

MULTIVESICULAR BODIES IN SCLEROTINIA FRUCTIGENA AND THEIR POSSIBLE RELA-TION TO EXTRACELLULAR ENZYME SECRE-TION.

F D Calonge A H Fielding R T W Byrde J Gen Microbiol 55(2):177-184 REF Feb 1969 448.3 J823

Cytology, Electron microscopy, Enzymes, Extracellular substances, Histochemistry, Physiology, Selerotinia fructigena, Secretion, Tissue culture.

WESTERN GALL RUST ON JACK PINE NURSERY STOCK IN MANITOBA. L W Carlson

Plant Dis Rep 53(2):100 Feb 1969 1.9 P69P

Chemieal control (plant diseases), Fungicides, Fungus diseases (plants), Nurseries, Peridermium harknessii, Pinus banksiana, Plant galls, Rust.

11

2720-69

CONCERNING CONTRIBUTIONS THE DEFENSE AGAINST AGROBACTERIUM TU-MEFACIENS. (IT) B Casarini Giornate Fitopatol 271-285

26 Mar 1967 SB599.G5

Agrobaeterium tumefaciens, Chemieal control (plant diseases), Fumigants, Oxytetraeyeline, Soil sterilization.

2721-69

2722-69

2723-69

2724-69

L J Coek

2725-69

2726-69

J B Corbin

2727-69

STATES.

Feb 1969 1.9 P69P

1968 241 G796

methods are described.

NECROSIS IN VOLATILE MA

A A Cook R E Stall

Feb 1969 464.8 P56

Phytopathology 59(2):259-260

Diss Abstr Sect B 29(3):836B

J R Cotton J T Presley F Darvish

Plant Dis Rep 53(2):116-117 MAP

Sep 1968 Z5055.U49D53

B C Clifford

UM REPENS L.

D Choopanya

A NEW SPECIES OF PESTALOTIA ON THE LEAVES OF PHOENIX RUPICOLA ANDER. S Chandra R N Tandow

Dates, Fungus diseases (plants), Microscopy,

STUDIES OF PEANUT STUNT VIRUS ON

TRIFOLIUM SPECIES, ESPECIALLY TRIFOLI-

Clover, Epidemiology, Peanuts, Research, Stunt, Virus diseases (plants), White elover.

RELATIONS OF DISEASE RESISTANCE MECHANISMS TO PATHOGEN DYNAMICS IN

Crown rust, Epidemiology, Fungus diseases (plants), Oats, Plant disease resistance, Plant

Great Brit NAAS (nat Agr Adv Serv) Quart Rev (79,SPRING):126-138 REF

Catalogs, Chemical control (insects), Disease

transmission, Insect vectors, Lettuce, Sympto-

The virus diseases of lettuce in Britain are listed

and their symptoms, transmission, and control

VOLATILE MATERIALS PRODUCED IN VITRO BY BACTERIA.

Bacteria, Bacterial diseases (plants), Bush redpep-pers (vegetable), Cabbage, Leaves, Necrosis, Tobacco, Tomatoes, Xanthomonas phaseoli,

Xanthomonas vesicatoria. Other bacteria tested:Erwinia carotovora, E. amylovora, Pseu-domonas cichorii, P. tabaci, P. fluoreseens.

AEROBIOLOGY OF MONILINIA (SCLEROTINIA) LAXA (ADERH. AND RUHL.)

HONEY ON STONE FRUITS, PRUNUS SPP., IN CALIFORNIA.

Aprieots, Brown rot, Fungus diseases (plants), Monilinia laxa, Plant diseases, Prunus, Research.

DISTRIBUTION OF VERTICILLIUM WILT IN

COTTON-GROWING AREAS OF THE UNITED

LEAVES INDUCED

BY

OAT CROWN RUST EPIDEMIOLOGY.

Diss Abstr Sect B 29(3):835-836B

genetics, Puccinia coronata, Research.

VIRUS DISEASES OF LETTUCE.

matology, Virus diseases (plants).

Sep 1968 Z5055.U49D53

Cur Sci 38(2):47-48 20 Jan 1969 475 SC123

Pestalotia, Plant morphology.

Diss Abstr Sect B 29(3):835B

Sep 1968 Z5055.U49D53

2728-69

Cotton, Epidemiology, Fungus diseases (plants), Verticillium, Wilt.

CYLINDROCLADIUM SCOPARIUM **ON** AZALEA IN SOUTH FLORIDA. R S Cox

Plant Dis Rep 53(2):139 Fcb 1969 1.9 P69P

Azalca, Blight, Chemical control (plant diseases), Collectorriehum, Cylindrocladium scoparium, Fun-gicides, Fungus diseases (plants), Gloeosporium, Glomerella, Spraying, Wilt.

2729-69

DNA BASE COMPOSITION AND HYBRIDIZA-TION IN THE TAXONOMY OF PHIYTOPATHOGENIC BACTERIA. J De Ley

Annu Rev Phytapathal 6:63-90 REF

1968 464.8 AN72

Agrobaeterium, Bacterial diseases (plants), Breeding, Corynebacterium, Deoxyribonueleic acid, Er-winia, Pseudomonas, Rhizobium, Tables (data), Taxonomy, Xanthomonas.

2730-69

A PRELIMINARY STUDY ON THE VARIABILI-TY OF XANTHOMONAS ORYZAE ON SOME RICE VARIETIES.

S Devadath S Y Padmanabhan

Plant Dis Rep 53(2):145-148 REF

Feb 1969 1.9 P69P

Bacterial diseases (plants), Blight, Breeding, Crop varieties, Plant disease resistance, Rice, Xanthomonas oryzae.

2731-69

CONTROL OF TOBACCO MOSAIC VIRUS IN TOBACCO.

A D Doyle

Agr Gaz New S Wales 79(2):90-94

Feb 1968 23 N472

Cultural control (plant diseases), Milk, Plant discase control, Plant disease transmission, Sap, Seedbeds, Spraying, Symptomatology, Tobaeco, Tobacco mosaie virus.

2732-69

ERADICATING CITRUS CANKER FROM NEW ZEALAND.

D W Dye

New Zeal J Agr 118(2):20-21

Feb 1969 23 N48J

Baeterial diseases (plants), Canker, Citrus, Cultural control (plant diseases), Xanthomonas, Zoogcography.

The symptoms of baeterial eitrus canker arc discussed and it is recommended that any tree having the disease be destroyed.

2733-69

INOCULUM PRODUCTION AND INFECTION BY FOLIAGE PATHOGENS.

A H Ellingboe

Annu Rev Phytopathol 6:317-330 REF

1968 464.8 AN72

Fungi, Inoculum, Parasitism, Plant biochemistry, Plant diseases, Quantitative analysis.

2734-69

STUDIES ON VIRUS DISEASES OF STRAW-BERRIES IN THE WESTERN CAPE PROVINCE. II. THE LATENT PERIOD OF MILD YELLOWEDGE AND CRINKLE VIRUSES IN THE VECTOR CHAETOSIPHON FRAGAEFOLII (CKLL.),

D J Engelbrecht

S Afr J Agr Sci 10(3):575-581

Sep 1967 24 SU3

Chactosiphon fragaefolii, Crinkle, Inseet vectors, Plant disease transmission, Strawberries, Virus discases (plants), Yellow edge.

2735-69

RESISTANCE IN FLORIDA CITRUS TO CER-COSPORA CITRI-GRISEA. F E Fisher

BIBLIOGRAPHY

Plant Dis Rep 53(2):112-114 Feb 1969 1.9 P69P Cereospora citrigrisea, Citrus, Fungus discases (plants), Plant disease resistance.

2736-69

PHENOLIC SUBSTANCES AND OXIDASES IN CONNECTION WITH THE RESISTANCE OF BARLEY TO THE POWDERY MILDEW (ERYSIPHE GRAMINIS F. SP. HORDEI MARCHAL). (GE)

F Frie

Biologia (bratislava) 24(1):54-69 REF 24 Jan 1969 442.8 B5265

Barley, Erysiphe graminis, Fungus diseases (plants), Oxidases, Phenol compounds, Plant biochemistry, Plant disease resistance, Powdery mildew

2737-69

GENETICS OF PATHOGENICITY OF PHYTOPHTHORA INFESTANS.

M E Gallegly

Annu Rev Phytopathol 6:375-396 REF 1968 464.8 AN72

Cytology, Fungus diseases (plants), Hereditary dis-eases, Late blight, Phytophthora infestans, Plant disease resistance, Plant genetics, Potatoes, Tomatoes.

2738-69

DIPLODIA ZEAE (SCHW.) LEV. AND GIB-BERELLA ZEAE (SCHW.) PETCH. BEHAVIOR AGAINST CALCIUM CYANAMIDE. (IT)

P Gambogi Agr Ital 68(2,MAR-APR):81-83

1968 16 AG8259

Calcium cyanamide, Corn, Diplodia zeae, Fungi-cides, Fungus diseases (plants), Gibberella zeae. English summary.

2739-69

TESTS CONCERNING THE CONTROL OF THE WHITE ROT OF GARLIC. (IT

A Garibaldi

Giornate Fitopatol 249-250 26 Mar 1967 SB599.G5

Chemical control (plant diseases), Fungus diseases (plants), Garlic, Sclerotium cepivorum, White rot.

2740-69

VESICULAR-ARBUSCULAR **MYCORRHIZA** AND PLANT GROWTH.

J W Gerdemann

Annu Rev Phytapathal 6:397-418 REF

1968 464.8 AN72

Environment, Epidemiology, Fungus diseases (plants), Mycorrhiza, Plant morphology, Plant physiology, Roots.

2741-69

DOWNY MILDEW OF STOCKS.

A L Gertus

Agr Gaz New S Wales 79(3):178-179 Mar 1968 23 N472

Downy mildew, Fungicides, Fungus diseases (plants), Matthiola incana, Peronospora parasitica, Plant discase transmission, Symptomatology, Zineb.

Downy mildew of stock (Matthiola ineana) eaused by the fungus Peronospora parasitica. The symptoms, transmission, and chemical control of this disease are discussed.

2742-69

A FISSURE OF PHYSIOLOGICAL ORIGIN IN CARNATION PLANTS. (IT

R Gigante

Giornate Fitopatol 611-614

26 Mar 1967 SB599.G5

Dianthus caryophyllus, Humidity, Osmotic pres-sure, Parenchyma tissue, Plant physiological dis-eases, Symptomatology. Symptoms can be eases, Symptomatology. Symptoms can be mistaken for those produced by Pseudomonas caryophylli.

2743-69

A PHYSIOLOGICAL DEFOLIATION OF THE ROSE. (IT)

12

R Gigante G Bestagno Giarnate Fitopatol 615-619 26 Mar 1967 SB599.G5 Defoliation, Humidity, Plant physiological diseases, Rosa, Symptomatology, Temperature.

2744-69

SEROLOGICAL RELATIONSHIPS PHYSIOLOGIC RACES A-I TO A-8 PHYTOPHTHORA FRAGARIAE. OF OF H S Gill D Powell

Phytopathology 59(2):261-262 REF Feb 1969 464.8 P56

Antigens, Electrophoresis, Fungus diseases (plants), Neurospora crassa, Nutrient solutions (plants), Phytophthora caetorum, Phytophthora fragariac, Serological tests.

2745-69

RHYNCHOSPORIUM LEAF BLOTCH OF BAR-LEV.

Barley, Diagnosis, Fungus diseases (plants), Leaf blotch, Mcrcury compounds, Plant disease control, Plant disease transmission, Rhynehosporium, Seed

The symptomatology and etiology of rhynchospori-um leaf blotch of barley is discussed. Recom-mended control measures are seed selection and

treatment with methyl- organomereury compounds as well as crop rotation and tilling of erop residues.

INTERPRETING PLANT DISEASE DISPERSAL

Fungus diseases (plants), Late blight, Leaf roll, Mathematical analysis, Plant disease transmission, Potatoes, Pueeinia polysora, Rhizoctonia, Virus

SOME PRELIMINARY OBSERVATIONS ON CROWN GALL THERAPY WITH CHEMICALS.

Chelating agents, Chemical control (plant dis-eases), Copper compounds, Crown galls, Cyanoguanidine, Oxytetracycline, Peaches, Plant

DISEASES OF CORN AND SOYBEANS IN RIO

Bacterial diseases (plants), Blight, Corn,

LATENT VIRUSES IN APPLE VARIETIES AND

Apples, Crop varieties, Latent virus, Plant disease

transmission, Plant grafting, Rootstocks, Virus dis-cases (plants). English abstract.

ON THE EFFECT OF FAT EMULSION ON

Corn oil, Emulsions, Plant disease transmission,

Virueides, Virus diseases (plants), Viruses. English

Berlin Biol Bundesanst Land-forstwirtsch Mitt

Epidemiology, Plant ecology, Rust, Soybeans.

Berlin Biol Bundesaust Land-forstwirtsch Mitt

GRANDE DO SUL, BRAZIL IN 1968.

H W Guengerich R N Goodman D F Millikan

Plant Dis Rep 53(2):155-157

Annu Rev Phytapathal 6:189-212 REF

J Gilmour

treatment.

2746-69

GPADIENTS.

1968 464.8 AN72

diseases (plants).

Feb 1969 I.9 P69P

diseases, Seed treatment.

D J Hagedorn J P Crill

Feb 1969 1.9 P69P

2749-69

G Hamdorf

2750-69

A Hein

abstract

(121):109-112

Feb 1967 410.9 G31M

(121):152-156 Feb 1967 410.9 G31M

Plant Dis Rep 53(2):165-168

GRAFTING STOCK. (GE)

VIRUS TRANSMISSION. (GE)

2747-69

P H Gregory

Scot Agr 46(1,WINTER):34-36 1966 10 SC 082SO

2751-69

THE INFLUENCE OF HERBICIDES ON CER-COSPORELLA INFECTION AND LODGING OF WINTER WHEAT. (GE) **R** Heitcfuss

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):218-225

Feb 1967 410.9 G31M

Cercosporella herpotrichoides, Chemical control (plant diseases), Fungus diseases (plants), Herbicides, Lodging, Monolinuron, Simazine, Wheat. English abstract.

2752-69

TRENDS IN THE DEVELOPMENT OF PLANT VIROLOGY.

F O Holmes

Annu Rev Phytopathol 6:41-62 REF

1968 464 8 AN72

Crop losses, Plant disease control, Plant disease transmission, Quantitative analysis, Symptomatolo-gy, Virology, Virus diseases (plants).

2753-69

LONG-TERM PRESERVATION AND PATHOGENICITY OF SELECTED STRAINS OF COLLETOTRICHUM, RHIZOCTONIA, AND PHYTOPHTHORA. (ABSTRACT).

S W Hwang A L Anderson G C Papavizas R H Converse

Phytopathology 57(8):816

Aug 1967 464.8 P56

Collctotrichum, Freezing, Fungus diseases (plants), Phytophthora, Rhizoctonia.

2754-69

INHERITANCE OF RESISTANCE TO BAC-TERIAL BLIGHT OF COTTON. IV. TANZANIA SELECTIONS. N L. Innes

J Agr Sci &london& 72(1):41-57 REF Jan 1969 10 J822

Bacterial blight, Cotton, Plant breeding, Plant disease resistance, Plant genetics.

2755-69

FUNGICIDAL CONTROL OF DISEASE IN COT-TON.

A J Kappelman

Plant Dis Rep 53(2):161-163

Feb 1969 1.9 P69P

Chemical control (plant diseases), Cotton, Environment, Fungicides, Fungus diseases (plants), Mortality, Seed treatment:

2756-69

THE MULTIPLICITY OF BANDS IN THE GEL DIFFUSION PRECIPITIN ANALYSIS OF THE PROTEIN OF TOBACCO MOSAIC VIRUS. A Kleczkowski

Virology 36(4):700-701

Dcc 1968 448.8 V81

Diffusion, Gels, Mosaic, Precipitin test, Proteins, Tobacco, Virus diseases (plants).

2757-69

CHICKPEA, A NEW HOST OF FUSARIUM SOLANI F. SP. PISI.

J M Kraft

Plant Dis Rep 53(2):110-111

Feb 1969 1.9 P69P

Chickpeas, Fungus diseases (plants), Fusarium solani pisi, Peas, Plant disease resistance, Root rot.

2758-69

PROTEIN-LIPID-POLYSACCHARIDE COM-PLEX FROM THE CULTURE AND MYCELIUM OF THE FUNGUS VERTICILLIUM DAHLIAE KLEB, THE CAUSATIVE AGENT OF VER-TICILLIACEOUS WILT OF COTTON. K M Malysheva S S Zel'tser

Acod Sci U Ssr Dokl Bot Sci 179(MAR-APR):51-54 REF

1968 511 P444AE

Cotton, Culturc media, Fungus diseases (plants), Lipids, Mycelium, Polysaccharides, Proteins, Ver-ticillium dahliae, Wilt. Translated from Russian.

2759-69

THE INHERITANCE OF RESISTANCE TO STEM AND CROWN RUST IN KYTO OATS. J W Martens R I H McKenzie G Fleischmann

Can J Genet Cytol 10(4):808-812

Dec 1968 443.8 C16

Crop varietics, Crown rust, Fungus diseases (plants), Oats, Plant genetics, Resistance, Stem rust, Temperature.

2760-69

RESIDUAL EFFECT OF TREATMENT WITH METHYL BROMIDE AGAINST VERTICILLI-UM INFECTION OF TOMATOES IN THE SECOND YEAR OF CULTIVATION. (IT)

A Matta A Garibaldi

Giornate Fitopatol 241-243

26 Mar 1967 SB599.G5

Fumigants, Fungus diseases (plants), Methyl bro-mide, Soil fumigation, Tomatoes, Verticillium dabliac.

2761-69

A DAY OF STUDY ON THE PELARGONIUM. (FR)

J Mimaud

Phytoma 20(199)21-23

Jun 1968 464.8 P563

Conferences, Flowers, Fungus diseases (plants), Insect pests, Pelargonium, Plant galls, Seedlings, Virus diseases (plants), Xanthomonas. Report on a conference on Pelargonium held at Paris, France on 24 Feb 1968.

2762-69

APPLE AND PEAR CANKER.

Great Brit Min Agr Fish Food Adv Leafl (100):1-

Apr 1968 10 G79LA

Apples, Bordeaux mixture, Canker, Chemical control (plant diseases), Cultural control (plant diseases), Fungus diseases (plants), Mercury compounds, Nectria galligena, Pears, Plant disease transmission, Plant grafting, Plant injuries, Pruning, Symptomatology

I ne fungal agent, symptoms, transmission and con-trol measures of apple and pear canker arc discussed. Cultural control by pruning discased wood, scaling tree injurics, burning discased cuttings and top-grafting and chemical control with mercury compounds and Bordeaux mixture are recommended. The fungal agent, symptoms, transmission and con-

2763-69

CAULIFLOWER MOSAIC.

Great Brit Min Agr Fish Food Adv Leafl (370):1-

Dec 1967 10 G79LA

Brevicoryne brassicae, Cauliflower, Chemical con-trol (insects), Cultural control (plant diseases), In-sect vectors, Malathion, Mosaic, Myzus persicae, Organophosphorus compounds, Plant disease control, Plant disease transmission, Symptomatology, Virus diseases (plants).

The virus disease, cauliflower mosaic, its symptoms, transmission by aphids, and control are discussed. No cure for the disease is known, only preventive measures such as destruction of crop residues, control of aphid vectors and selective cropping effectively control the disease.

2764-69

RED CLOVER NECROTIC MOSAIC VIRUS, A NEW VIRUS INFECTING RED CLOVER (TRIFOLIUM PRATENSE) IN CZECHOSLOVAKIA.

M Musil

Biologia (brotislova) 24(1):33-43

24 Jan 1969 442.8 B5265

Morphology, Mosaic, Red clover, Virus diseases (plants).

2765-69

COURSE OF RED CLOVER MOTTLE VIRUS INFECTION IN SOME HOST PLANTS. M Musil O Leskova

13

Biologia (bratislova) 24(1):23-31 Jan 1969 442.8 B5265

Host indexing (plants), Mottle, Rcd clover, Virus diseases (plants)

2766-69

CONTROL OF BRANCH WILT DISEASE OF GRAPES.

R M Natour J M Ahmed

Plant Dis Rep 53(2):152-153

Feb 1969 1.9 P69P

Chemical control (plant diseases), Epidemiology, Fungicides, Fungus diseases (plants), Grapes, Hendersonula toruloidea, Mercury compounds, Pruning, Wilt.

2767-69

BARLEY YELLOW DWARF VIRUS.

Agr Gaz New S Wales 79(4):BACK COVER Apr 1968 23 N472

Aphididae, Barley, Discase transmission, Insect vectors, Oats, Symptomatology, Virus discases (plants), Yellow dwarf.

HALO BLIGHT OF BEAN (PSEUDOMONAS

Beans, Cultural control (plant diseases), Halo

Chemical control (plant diseases), Cultural control (plant diseases), Fungus diseases (plants), Late blight, Phytophthora infestans, Plant disease con-trol, Plant disease transmission, Potatocs.

DOWNY MILDEW OF CEREALS AND GRASSES (PHYTOPHTHORA MACROSPORA).

Cultural control (plant diseases), Fungus diseases

ANTIBIOTIC SUBSTANCES IN THE POTATO FORMED DURING THE NECROTIC REAC-

Acod Sci U Ssr Dokl Bot Sci 178(JAN-FEB):6-8

Phytophthora infestans, Plant disease resistance, Plant diseases, Potatoes. Translated from Russian.

SPRAY WARNINGS FOR THE CONTROL OF SEASONAL DISEASE OUTBREAKS IN FIELD CROPS UNDER SEMI-ARID CONDITIONS.

Arid regions, Environment, Epidemiology, Field crops, Plant discases, Spraying. First International Congress of Plant Pathology, London 14-26 July,

ABOUT POTATO VIRUS DIAGNOSED IN YU-GOSLAVIA. (SE)

Crop losses, Diagnosis, Potatoes, Virus diseases (plants). English summary.

Viruses diagnosed were: Y-virus, A-virus, potato

leafroll virus, X, S, M-virus, aucuba virus, stolbur

virus, bouguet virus, rattle virus, calico virus.

DUTCH ELM DISEASE IN IDAHO-1968.

A D Partridge H N Ward

O L Ozcretskovskaya N I Vasyukova L V

Fusarium

Grasses,

solani.

Agr Gaz New S Wales 79(5):BACK COVER

Grain,

AND

Phytophthora

Necrosis.

Pseudomonas phaseolicola, Secd-borne

Agr Gaz New S Wales 79(11):BACK COVER

Agr Gaz New S Wales 79(2):BACK COVER

2768-69

blight.

2769-69

2770-69

(plants),

2771-69

TION.

Metlitskii

Antibiotics,

J Palti J Rotem

Plont Protect Abs 4:187-188

Zostito Biljo 18(93/95):25-35 REF

Sep 1968 241.75 P69

2772-69

1968

2773-69

M Panjan

2774-69

1967 464.8 Z1

1968 511 P444AE

macrospora.

plant diseases.

PHASEOLICOLA).

Nov 1968 23 N472

Fcb 1968 23 N472

May 1968 23 N472

LATE BLIGHT OF POTATO.

Plant Dis Rep 53(2):140-141 MAP

Feb 1969 1.9 P69P Ccratocystis ulmi, Dieback, Fungus diseases (plants), Ulmus pumila.

2775-69

THE USE OF DISEASE RESISTANCE IN THE GLASSHOUSE TOMATO.

J Pelham J W M Smith H C Harries Great Brit NAAS (nat Agr Adv Serv) Quart Rev (81 AUTUMN): 19-27 REF

1968 241 G796

Brown root rot, Cladosporium, Fusarium, Plant breeding, Plant disease resistance, Tomatoes, Verticillium.

Breeding for resistant varieties of tomatoes is discussed with reference to the diseases of Verticillium, Fusarium, brown root rot, Cladosporium and mosaic viruses

2776-69

APPLICATION OF ARK'S METHOD MODIFIED IN ISOLATION OF AGROBAC-TERIUM RHIZOGENES IN ASSOCIATION WITH AGROBACTERIUM TUMEFACIENS IN GALLS FROM ROSA SP. AND INFECTED SOILS. (POR

A L G Percira A G Zagatto

Sao Paulo Inst Biol Arg 35(4,OCT-DEC):133-139 Dec 1968 442.9 SA6

Agrobacterium rhizogenes, Agrobacterium tumefaciens, Bacterial diseases (plants), Methodology, Plant galls, Rosa, Soil bacteria. English abstract

2777-69

STATUS OF AMERICAN STEM RUSTS OF PINE.

R S Peterson F F Jewell

Annu Rev Phytopathol 6:23-40 REF

1968 464.8 AN72

Epidemiology, Fungus diseases (plants), Pinus, Plant disease control, Plant injuries, Stem rust.

2778-69

EFFECT ON YOUNG SUGAR BEET (BETA VULGARIS L.) PLANTS OF HETERODERA SCHACHTII SCHMIDT 1871, ALONE, AND IN COMBINATION WITH PHILOCTONIA COMBINATION WITH RHIZOCTONIA SOLANI KUHN 1858.

A G Polychronopoulos Diss Abstr Sect B 29(3):838B

Scp 1968 Z5055.U49D53

Fungus discases (plants), Greenhouse culture, Hetcrodera schachtii, Plant injuries, Plant ne-matodes, Rhizoctonia solani, Scedlings, Sugar bects.

2779-69

CONTRIBUTION TO THE KNOWLEDGE OF DOMINANT BIOTYPES OF THE PHYTOPHTHORA INFESTANS ON THE POTATO. (SE)

Z Prpic

Zastita Bilja 18(93/95):101-114 REF 1967 464.8 Z1

Biotypes, Fungus discases (plants), Leaves, Nodules (plants), Phytophthora infestans, Plant disease resistance, Plant genetics, Potatoes, Testing, Tomatoes. English summary.

2780-69

THE ACCUMULATION OF PHENOLIC ACIDS IN TISSUE CULTURE PATHOGEN COMBINA-TIONS OF SOLANUM TUBEROSUM AND PHYTOPHTHORA INFESTANS.

N F Robertson J Friend M Aveyard J Brown M Huffee Et Al

J Gen Microbiol 54(2):261-268 REF

Dec 1968 448.3 J823

Chromatography, Phenols, Phytophthora infestans, Plant disease resistance, Potatoes, Tissue culture, Toxicity

2781.69

RESEARCH RESULTS CONCERNING MEANS OF AGRO-CHEMICAL CONTROL AGROBACTERIUM TUMEFACIENS. (IT) OF D Rui N Rizzotto S Bonfante

Giornate Fitopatol 255-269

26 Mar 1967 SB599.G5

Agrobacterium tumcfaciens. Chemical control (plant diseases), Cultural control (plant diseases), Soil fumigation, Tables (data).

BIBLIOGRAPHY

2782-69

ELECTRON MICROSCOPE STUDY OF THE FIRST STAGES OF ALTERATIONS OF THE CHLOROPLASTS IN NICOTIANA XANTHI N. C. IN ITS HYPERSENSITIVE REACTION TO THE TOBACCO MOSAIC VIRUS. (FR

R Scalla R Mcignoz C Noirot-Timothee C Martin Acad Sci Compt Rend Ser D Sci Nat 268(3, 1ST SEMESTER):527-530 REF

20 Jan 1969 505 P21

Chloroplasts, Electron microscopy, Nicotiana, Plant cytology, Plant physiology, Tobacco mosaic virus, Virus diseases (plants).

2783-69

FURTHER EVIDENCE SUPPORTING THE HYPOTHESIS THAT TWO GENETIC SYSTEMS CONTROL DISEASE REACTION TO MAIZE DWARF MOSAIC VIRUS STRAIN A AND STRAIN B.

G L Scheifele C C Wernham

Plant Dis Rep 53(2):150-151

Feb 1969 1.9 P69P

Biological control (plant diseases), Breeding, Corn, Dwarf disease, Dwarf mosaic, Greenhouse culture, Mosaic, Plant disease resistance, Plant genetics, Virus diseases (plants).

2784-69

APPEARANCE OF WEEDS AND DISEASE IN GRAIN AND CORN AFTER DIRECT DRILLING. (GE) F Schwerdtle W Koch

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):214-217

Feb 1967 410.9 G31M

Corn, Cultural control (plant diseases), Cultural control (weeds), Grain, Methodology, Plant dis-eases, Seed planting, Weed control, Wheat. English abstract

2785-69

TOBACCO MOSAIC VIRUS INHIBITION BY BARK EXTRACTS.

R Singh

Experientia 25(2):218

15 Feb 1969 475 EX7

Bark, Biological assay, Inhibitors, Plant extracts, Tobacco mosaic virus, Virus diseases (plants).

2786-69

STRUCTURAL FEATURES OF THE DEVELOP-MENT OF THE POLYSTICHOUSTUBERCU-LATE FORM OF THE BLISTER SMUT (CAUSA-TIVE AGENT USTILAGO MAYDIS (0DC). CDA.) ON MAIZE LEAVES. (RUS)

E J Slepian I V Karatygin

Bot Zhur (moscow) 53(11):1617-1621 Nov 1968 451 R923

Corn, Fungus discases (plants), Fungus germination, Fungus physiology, Smut, Ustilago maydis. English abstract

2787-69

CALLUSOMORPHIC STAGE IN DEVELOP-MENT OF GALLS CAUSED BY USTILAGO MAYDIS (DC) CDA. ON CORN LEAVES. E I Slepyan

Acad Sci U Ssr Dokl Bot Sci 179(MAR-APR):61-63

1968 511 P444AE

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

2788-69

REACTION OF BARLEY VARIETIES TO HEL-MINTHOSPORIUM TERES SACC. AND HEL-MINTHOSPORIUM SATIVUM PAM. KING AND BAKKE. (SE

14

H Smiljakovic B Kostic Zastita Bilja 18(93/95):125-131 1967 464.8 Z1

Barley, Crop varieties, Crop yields, Fungus diseases (plants), Helminthosporium sativum, minthosporium tercs, Plant breeding, Plant disease resistance. English summary.

2789-69

OCCURENCE OF A NEW PHYSIOLOGIC RACE OF COFFEE RUST (HEMILEIA VASTATRIX).

M S Sreenivasan C C Chinnappa Indian Coffee Monthly Bull 32(3):94

Mar 1968 68.29 IN23M

Biological control (plant diseases). Coffee, Crop varieties, Fungus diseases (plants), Hemileia vastatrix, Leaf rust, Parasitism, Plant disease resistance

2790-60

AN INVESTIGATION OF CERTAIN FACTORS IN THE HOST-PATHOGEN RELATIONSHIP OF CERCOSPORA ARACHIDICOLA ON THE PE-ANUT PLANT ARACHIS HYPOGAEA VAR. AR-GENTINE.

R V Sturgcon

Diss Abstr Sect B 29(3):839B

Sep 1968 Z5055.U49D53

Cercospora arachidicola, Chemical control (plant diseases), Fungus diseases (plants), Leaf spot, Mancb, Peanuts, Temperature.

2791-69

INFECTION, RECOVERY FROM INFECTION AND RESISTANCE OF APRICOT TREES TO VERTICILLIUM ALBO-ATRUM.

J B Taylor N T Flentje

New Zeal J Bot 6(4):417-426 REF

Australian J Biol Sci 21(5):929-935

Zastita Bilja 18(93/95):45-53 REF

New Zeal J Bot 5(2):197-202 REF

A D Thomson B A Smirk

Jun 1967 450 N48

eases (plants).

absorption test. 2795-69

M Tosic M Misovic

1967 464.8 Z1

Dec 1968 450 N48

Oct 1968 442.8 AU72

Apricots, Fungus diseases (plants), Fungus pathogenicity, Plant disease control, Plant disease resistance, Verticillium albo-atrum.

2792-69

2793-69

Z P Tesic

summary.

2794-69

1967 464 8 71

(SE)

PURIFICATION AND PROPERTIES OF BROAD BEAN WILT VIRUS. R H Taylor P R Smith C Reinganum A J Gibbs

Broadbeans, Centrifugation, Electron microscopy,

Broad bean wilt virus was purified and its

THE SPECIAL FORMS IN THE CLASSIFICA-TION OF PHYTOPATHOGENIC BACTERIA.

Bacteria, Bacterial diseases (plants), Microbiology, Nomenclature, Saprophytes, Taxonomy. English

AN UNUSUAL STRAIN OF TOBACCO MOSAIC VIRUS FROM ORCHIDS.

Cymbidium, Disease transmission, Orchidaceae,

Serological tests, Tobacco mosaic virus, Virus dis-

A strain of TMV isolated from Cymbidium orchids

exhibited differences from the common TMV

strain in that it induced small lesions on N, glu-tinosa it did not infect N, tabacum and it was scrologically distinguishable by means of the cross

A STUDY OF THE MAIZE MOSAIC VIRUS OC-CURRENCE AND ITS EFFECT ON THE GROWTH AND YIELD OF SOME CORN VARIETIES AND HYBRIDS. (SE

Zastita Bilia 18(93/95):173-181 REF

physiological and serological properties described.

Serological tests, Virus diseases (plants), Wilt.

2817-69

Corn, Crop varieties, Crop yields, Mosaie, Plant breeding, Plant physiology, Virus diseases (plants). English summary

2796-69

PERMEABILITY PHENOMENA IN PLANT DIS-EASE.

H Wheeler P Hanchey Annu Rev Phytopathol 6:331-350 REF

1968 464.8 AN72

Calcium, Cell wall, Permeability, Plant disease resistance, Plant diseases, Plasma membrane, Plasmolysis.

2797-69

THE ULTRASTRUCTURE OF THE STROMA OF THE BROWN ROT FUNGI.

H J Willetts F D Calonge

Arch Mikrobiol 64(4):279-288

30 Jan 1969 442.8 AR26

Brown rot, Electron microscopy, Fungus diseases (plants), Morphology, Verticillium albo-atrum.

ARTHROPODS

2798-69

ROLE OF APHIDS IN THE ECOLOGY OF PLANT VIRUSES. SWENSON, K G. Annu Rev Phytopathol 6:351-374 REF

1968 464.8 AN72

Aphididae, Ecology, Epidemiology, Insect popula-tions, Insect vectors, Plant disease transmission, Virus diseases (plants).

2799-69

THE USE OF STERILE MALES TO CONTROL POPULATIONS OF QUEENSLAND FRUIT FLY, DACUS TRYONI (FROGG.) (DIPTERA: DACUS TRYONI (FROGG.) (DIPTERA: TEPHRITIDAE). II. FIELD EXPERIMENTS IN NEW SOUTH WALES.

H G Andrewartha J Monro N L Richardson Australian J Zool 15(3):475-499 MAP

May 1967 410 AU73

Biological control (inseets), Daeus tryoni, Field test. Sterile males.

2800-69

SIMPLIFICATIONS IN THE CONTROL OF THE PHYTOPHAGA OF OLIVES. (IT E Antongiovanni

Giornate Fitopatol 373-381

26 Mar 1967 SB599.G5

Chemical control (insects), Daeus oleae, Dimethoate, Liothrips oleae, Olives, Phenthoate, Prays oleelus.

2801-69

PSYLLA PRUNI SCOP.-THE PLUM PSYLLA. (SE)

M Bogavac

Zastita Bilja 18(93/95):169-171

1967 464 8 71

Insect eggs, Insect pests, Larvac, Plums, Prunus spinosa, Psylla, Temperature. German summary.

2802-69

SOME PROBLEMS REGARDING THE DEFENSE OF THE APPLE AGAINST THE IN-FESTATIONS BY SOME APHID SPECIES. (IT) P L Castellari P Giunchi M M Principi

Giornate Fitopatol 309-320

26 Mar 1967 SB599.G5

Aphididae, Aphis pomi, Apples, Biological control Dysaphis plantaginea, (insects), Eriosoma lanigerum, Parasitism, Predaccous inseets.

2803-69

INFLUENCE OF FEEDING, OVIPOSITION, AND EGG AND LARVAL DEVELOPMENT OF THE BOLL WEEVIL ON ABSCISSION OF COT-TON SQUARES.

J M Coakley F G Maxwell J N Jenkins

J Econ Entomol 62(1):244-245

17 Feb 1969 421 J822

Abseission, Anthonomus grandis, Cotton, Feeding, Insect eggs, Insect morphology, Larvae, Oviposition, Plant physiology.

2804-69

THE SPINED CITRUS BUG--BIPRORULUS BIBAX BREDD. (HEMIPTERA: PEN-TATOMIDAE).

J G Gellatley

Agr Gaz New S Wales 79(1):31-33 MAP

Jan 1968 23 N472

Carbaryl, Chemieal control (insects), Citrus, Diazinon, Dimethoate, Fenthion, Insect geography, Insect morphology, Life cycle, Malathion, Mevinphos, Pentatomidae.

The spined citrus bug (Biprorhus bibax) is described as a citrus pest and several insecticides are recommended for its control.

2805-69

EPIMEGASTIGMUS BREVIVALVUS GIR. (HYMENOPTERA: TORYMIDAE), A PARASITE OF CITRUS GALL WASP IN THE SYDNEY DIS-TRICT.

F A Gibson J G Gellatley

Agr Gaz New S Wales 79(5):312-314 MAP May 1968 23 N472

Bruchophagus, Citrus, Biological control. Epimegastigmus brevivalvus, Parasitic insects.

Epimegastigmus brevivalvus, a parasite of the citrus gall wasp, Bruchophagus fellis was released in Australia as a biological control agent. The intesity of parasitimsm and effectiveness of the project are discussed.

2806-69

RESOLUTE RESEARCH TO DEFEAT GRASS-GRUB.

B B Given

New Zeal J Agr 116(4):82-83

Apr 1968 23 N48J Costelytra zealandica, Grasses, Insect adaptation, Integrated control (insects), Mcthodology, Odontria variceolorata, Pasture management, Pinus.

In the process of developing the best kind of pasture for livestoek, the ideal environment for the grass grub was also created and Costelytra zealandica and a related species, Odontria variecolorata, have become major pests. Control research was slowed with the use of DDT, but extensive research into all aspects of the biology of the grassgrub and possible control measures is now being carried out.

2807-69

INSECTS OF THE SEASON 1967 RELATED TO FRUIT, VEGETABLES AND ORNAMENTALS. H W Goble

Entomol Soc Ontario Proc 98:5-6

1967 420 ON8

Crops, Fruit, Insect pests, Ornamental plants, Plant injuries, Surveys, Time, Vegetables. Many insect pests are mentioned.

2808-69

A VIRUS-LIKE STRUCTURE IN THE DESERT LOCUST.

F Hawkes

Naturwissenschaften 55(11):547

Nov 1968 474 N213

Larvae, Schistocerca gregaria, Spermatoeytes, Virus diseases (insects).

A virus-like structure was observed in the spermatoeytes of the desert locust by means of the cleetron microscope.

2809-69

NEW HOST PLANT OF ACHERONTIA ATROPOS LINN. (LEPIDOPTERA: SPHIN-GIDAE).

H P van Heerden

S Afr J Agr Sci 10(3):847-848 Scp 1967 24 SU3

Acherontia, Ekcbergia eapensis, Host plants, Plant gcography.

15

2810-69

PHYSIO-CHEMICAL PROBLEMS OF DEVELOPING DUSTING CHEMICALS AND SEED INCRUSTING CHEMICALS ADHERING IN NET CONDITIONS. (HU K Jenev

Kiserletugyi Kozlemenyek 58/C(3):79-85 1967 105.9 H89

Dusting, Flaxsced, Insecticide application,

Methodology, Paraffins, Seed treatment, Wheat. English and Russian abstracts

2811-69

INSECT SECRETIONS IN PLANTS.

P W Miles

Annu Rev Phytopathol 6:137-164 REF

1968 464.8 AN72

Feeding, Gall-making insects, Glands (insects), Ovulation, Plant disease resistance, Plant disease transmission, Plant physiology, Salivary glands (in-sects), Secretion, Tissues, Virus diseases (plants).

2812-69

2813.69

2814-69

Srinivasalu

2815-69

2816-69

2817-69

INSECT TRANSMISSION AND PATHOGENICI-TY STUDIES OF CERATOCYSTIS FIMBRIATA IN STONE FRUITS.

W J Moller Diss Abstr Sect B 29(3):837B-839B

Sep 1968 Z5055.U49D53

J Monro A W Osoorn

May 1967 410 AU73

Aug 1968 22 AG831

Asphondylia sesami,

New Zeal J Agr 118(1):85

R A Normand T P Pirone

Dec 1968 448.8 V81

OF ARTHROPODS. (IT

diseases (plants).

Virology 36(4):538-544 REF

Jan 1969 23 N48J

Ceratocystis fimbriata, Fungus discases (plants), Insect vectors, Plant disease transmission, Prunus, Rescarch.

THE USE OF STERILE MALES TO CONTROL POPULATIONS OF QUEENSLAND FRUIT-FLY, DACUS TRYONI (FROGG.) (DIPTERA: TEPHRITIDAE), I. METHODS OF MASS-REAR-

ING, TRANSPORTING, IRRADIATING, AND RELEASING STERILE FLIES,

Biological control (insects), Dacus tryoni, Insect

NOTE ON THE CONTROL OF GALL-FLY (ASPHONDYLIA SESAMI FELT.) ON SESAME.

Chemical control (insects), Chlorinated hydrocar-bons, DDT, Endrin, Gall-making insects, Or-

Of the insecticides tested, BHC dust at ten per cent

proved most effective in controlling the gall fly,

Biological control, Braeonidae, Coleophoridae, Parasitie insects, White clover.

Coleophora spissicornis and C. alcyonipennella at-

tack the economically important white clover of New Zealand. Recently the hymenopterous

parasite, Bracon variegator, has been introduced,

DIFFERENTIAL TRANSMISSION OF STRAINS OF CUCUMBER MOSAIC VIRUS BY APHIDS.

Aphididae, Cucumbers, Inseet vectors, Mosaic,

Myzus persicae, Plant disease transmission, Virus

RESEARCH AND CURRENT DIRECTIONS IN THE FIELD OF THE DEFENSE OF CUL-TIVATED PLANTS AGAINST THE ATTACKS

ganophosphorus compounds, Parathion, Sesame.

A PARASITE TO DESTROY CLOVER PEST.

Asphondylia sesami, on sesame plants.

to aid in the contol of these insect pests.

Benzene hexachloride,

rearing, Irradiation, Methodology, Sterilc males.

S V Muhammad N R Chandrasekharan N

Indian J Agr Sci 38(4):666-667

Australian J Zool 15(3):461-473 REF

2818-69

M M Principi Giornate Fitopatol 305-308 26 Mar 1967 SB599.G5 Biological control (insects), Chemical control (inseets), Insect pests, Italy, Research.

2818-69

CONCERNING MATERIALS THE KNOWLEDGE OF LEPIDOPTERA PESTS OF **ORCHARDS.** (POL)

T Ricdl Pol Pismo Entomol 38(2):417-428 REF 1968 421 P76

Apples, Insect pests, Larvae, Lepidoptera, Orehards.

2819-69

IMPORTANT FOREST INSECTS OF ONTARIO IN 1967.

A H Rose

Entomol Soc Ontario Proc 98:8-10

1967 420 ON8 Forest insects, Forests, Insect pests, Time, Tree in-

juries, Trecs.

2820-69

INSECTICIDAL TRIALS TO CONTROL MUSTARD APHID, LIPAPHIS ERYSIMI KALT., AND LARGER MOTH, CROCIDOLMIA BINOTALIS ZELL., AFFECTING MUSTARD CROP.

G Rout S C Pani

Indian J Agr Sci 38(5):828-831 Oct 1968 22 AG831

Chemical control (insects), Croeidolmia, Crop losses, Endrin, Insecticides, Lipaphis erysimi,

Endrin and menazon proved most sucessful in controlling Lipaphis erysimi and Crocidolmia binotalis, serious pests of mustard crops.

2821-69

EFFECTIVENESS OF STANDARD AND NEW COMPOUNDS FOR THE CONTROL OF BUD MITE, ACERIA SHELDONI EWING, ON NAVEL ORANGES.

A Schwartz F J Riekert

S Afr J Agr Sci 10(3):609-

Sep 1967 24 SU3

Menazon, Mustard.

Aceria sheldoni, Chemieal control (insects), Chlorobenzilate, Dicofol, Dimethoate, Endosulfan, Morestan, Oranges, Parathion.

2822-69

ENVIRONMENTAL BIOLOGY OF ERIOSOMA PYRICOLA BAKER AND DAVIDSON.

S L Sethi

Diss Abstr Sect B 29(3):882B-883B Sep 1968 Z5055.U49D53

Environment, Eriosoma pyricola, Inscet biology, Insect cultures, Pears, Photoperiodism, Roots, Temperature.

2823-69

ESTIMATION OF LOSS IN JUTE FIBRE YIELD DUE TO JUTE STEMWEEVIL, APION CORCHORI MARSHALL (CURCULIONIDAE: COLEOPTERA).

R L Tripathi S P Bhattacharya Indian J Agr Sci 38(5):870-873

Oct 1968 22 AG831

Apion corchori, Chemical control (insects), Crop losses, Endrin, Jute.

2824-69

INVESTIGATIONS ON THE ENTOMOFAUNA ACCOMPANYING APHIDS OCCURRING ON FRUIT TREES AND BUSHES.

S K Wiackowski I Wiackowska

Pol Pismo Entomol 38(2)-255-283

1968 421 P76

Aphididae, Fruit, Insect control, Insect identifica-tion, Insect pests, Larvae, Nomenelature, Parasites, Plant protection, Predaccous insects, Quantitative analysis. Polish summary.

BIBLIOGRAPHY

2825-69

RESULTS OF INVESTIGATIONS ON THE RESULTS OF INVESTIGATIONS ON THE SUSCEPTIBILITY OF DIFFERENT VARIETIES OF PISUM SATIVUM L. TO ATTACKS OF LASPEYRESIS NIGRICANA STEPH. (LEP., TORTRICIDAE). (POL) A Wnuk

Pol Pismo Entomol 38(2):453-461 REF 1968 421 P76

Crop varieties, Insect pests, Laspeyresia nigricana, Oviposition, Peas, Pisum sativum, Plant physiology, Susceptibility. English summary

2826-69

SOME FACTORS INFLUENCING THE POPU-LATION DYNAMICS OF SYNANTHEDON TIPULIFORMIS CL. (LEPIDOPTERA, AEGERIIDAE).

N L Yakimova

Entomol Rev 47(1 JAN-MAR):10-16 REF Mar 1968 421 R322AE

Cultural control (insects), Currants, Insect pests, Plant pest control, Population, Pruning, Synanthedon tipuliformis.

NEMATODES

2827-69

GOLDEN NEMATODE. NOTICE OF PUBLIC HEARING. **R** J Anderson Fed Regist 34(40):3630 28 Feb 1969 L1.451 Heterodera rostochiensis, Plant nematodes, Potatoes, Regulations.

2828-69

PATHOGENECITY OF PRATYLENCHUS BRACHYURUS TO CITRUS. T L Brooks

Diss Abstr Sect B 29(3):819B Sep 1968 Z5055.U49D53

Citrus, Plant nematodes, Pratylenchus brachyurus, Radopholus similis, Seedlings, Trees.

2829-69

MELOIDOGYNE INCOGNITA ACRITA INFEC-TION FAILURE IN AERIAL PARTS OF COT-TON.

F E Caveness

Plant Dis Rep 53(2):97-99 Feb 1969 1.9 P69P

Cotton, Mcloidogyne incognita acrita, Plant nematode resistance, Plant nematodes, Roots.

2830-69

POTATO CYST EELWORM AND THE ADVENT OF EELWORM-RESISTANT POTATOES IN SW. LANCASHIRE.

G M Dixon J M Holliday G M Jones D D Barber P A Dover et. al69A

Great Brit NAAS (nat Agr Adv Serv) Quart Rev (81,AUTUMN):27-34 MAP REF

1968 241 G796

Heterodera rostochiensis, Plant breeding, Plant nematode resistance, Potatoes.

2831-69

RELATIONSHIPS BETWEEN INFECTION PRESSURE AND TERMINAL INFECTION IN THE CASE OF HETERODERA ROSTOCHIEN-SIS WOLL.,. (GE M Ebert

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):33-38

Fcb 1967 410.9 G31M

Cysts, Heterodera rostochicnsis, Plant nematode resistance, Potatoes. English abstract

2832-69 **OBSERVATIONS ON SOIL EXHAUSTION BY** ROSACEAE. (GE)

16

H Faber

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):29-32

Feb 1967 410.9 G31M

Malus, Plant nematodes, Prunus, Rosa, Soil science, Soil sterilization, Soil-borne pests. English abstract

2833-69

CROP ROTATION EFFECTS AND NE-MATODES. (GE)

M 1 Hijink

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):21-28

Feb 1967 410.9 G31M

Crop rotation, Nematode populations, Plant disease transmission, Plant nematodes. English abstract

2834-69

SUGAR BEET NEMATODE (HETERODERA SUGAK BELI NEMATODE (HETERODERA SCHACHTII) REARED ON AXENIC BETA VUL-GARIS ROOT EXPLANTS. II. SELECTED EN-VIRONMENTAL AND NUTRITIONAL FAC-TORS AFFECTING DEVELOPMENT AND SEX RATIO.

R N Johnson D R Viglierchio

Neinatologica 15(1):144-152 REF

Mar 1969 436.8 N342

Beets, Heterodera schachtii, Insect morphology, Insect rearing, Sucrose, Temperature, Vitamins.

2835-69

2836-69

A Kemper

(121):88-92

stract

2837-69

H Kohler

2838-69

D Krnjaie

2839-69

2840-69

1967 464.8 Z1

PROBLEM. (GE)

E Lucke H Weber

(121):66-70 REF

Feb 1967 410.9 G31M

KNOT NEMATODES.

(121):62-65

Feb 1967 410.9 G31M

Wheat, English abstract

Feb 1967 410.9 G31M-

SUGAR BEET NEMATODE (HETERODERA SCHACHTII) REARED ON AXENIC BETA VUL-GARIS ROOT EXPLANTS. I. SELECTED EN-VIRONMENTAL FACTORS AFFECTING AFFECTING PENETRATION.

R N Johnson D R Viglierehio Nematologica 15(1):129-143 REF

Mar 1969 436.8 N342

Beets, Heterodera schachtii, Insect rearing, Ne-matode infestation, Plant nematode resistance, Sucrose, Vitamins.

DISTRIBUTION AND DAMAGING EFFECT OF THE GENUS PRATYLENCHUS IN WESTPHALIA-LIPPE. (GE)

Barley, Crop yields, Nematode infestation, Plant nematodes, Pratylenchus, Soil acidity. English ab-

TEN YEAR OBSERVATIONS ON THE AP-PEARANCE OF OAT NEMATODES IN THE RHEINLAND-PFALZ. (GE)

Barley, Heterodera avenae, Nematode infestation,

Oats, Plant disease transmission, Plant nematodes,

DISCOCRICONEMELLA YOSSIFOVICHI N. SP. (NEMATODA: CRICONEMATIDAE) ON GRAPE VINE IN YUGOSLAVIA. (SE)

Climbing plants, Criconematidae, Grapes, Plant nematodes, Taxonomy. English summary.

INVESTIGATION INTO THE OAT NEMATODE

Barley, Heterodera avenae, Oats. Plant breeding,

Plant nematode resistance, Wheat. English abstract

ADDITIONS TO HOST RECORDS OF ROOT

Berlin Biol Bundesanst Land-forstwirtsch Mitt

Zastita Bilja 18(93-95):155-160 REF

Berlin Biol Bundesanst Land-forstwirtsch Mitt

Berlin Biol Bundesanst Land-forstwirtsch Mitt

2862-69

R L Mathur B N Mathur D K Handa Nematologica 15(1):160-161 Mar 1969 436.8 N342 Host range, Meloidogyne, Plant hosts, Root knot nematode.

2841-69

CEREAL CYST NEMATODE--A NEMATODE NEW TO NEW SOUTH WALES. R W McLeod

Agr Gaz New S Wales 79(5):293-295

May 1968 23 N472

Crop rotation, Grain, Hetcrodera avenae, Plant disease transmission, Plant nematodes, Zoogeography.

The grain nematode, Heterodera avenae, its development, transmission, distribution and control through crop rotation are discussed.

2842-69

OOGENESIS AND REPRODUCTION OF HETERODERA ORYZAE AND H. SACCHARI (NEMATODA: HETERODERIDAE). (FR) C Netscher

Nematologica 15(1):10-14 REF

Mar 1969 436.8 N342

Chromosomes, Cytology, Heterodera, Meiosis, Mitosis, Nematology, Oogenesis, Reproduction. English summary.

2843-69

ECONOMICALLY IMPORTANT PLANT PARASITIC NEMATODES IN ONTARIO. T H A Olthof J L Townshend J W Potter Entamol Soc Ontario Proc 98:6-8

1968 420 ON8

Ditylenchus dipsaci, Economics, Heterodera, Meloidogyne, Parasitism, Plant injuries, Plant nematodes, Pratylenchus.

2844-69

REDUCTION OF ROOT KNOT OF TOMATOES IN DEXTROSE-AND AMMONIUM NITRATE-AMENDED SOIL INFESTED WITH THE NE-MATOPHAGOUS FUNGUS ARTHROBOTRYS OLIGOSPORA.

Th H A Olthof R H Estey Nematologica 15(1):157-159

Mar 1969 436.8 N342

Ammonium nitrate, Arthrobotrys, Biological control, Glucose, Meloidogyne, Nematode controlling fungi, Root knot, Tomatoes.

2845-69

RESULTS OF THE CONTROL OF TYLENCHU-LUS SEMIPENETRANS COBB., A PARASITIC NEMATODE OF CITRUS, BY MEANS OF 1,2-DIBROMO-3-CHLOROPROPANE. (IT)

G Perrotta M Salerno Giornate Fitopatol 449-453

26 Mar 1967 SB599.G5

Chemical control (nematodes), Citrus, Dibromo-3chloropropane, 1,2-, Plant nematodes, Tylenchulus scmipenetrans.

2846-69

WILD AND CULTIVATED GRASS HOSTS OF THE SOUTHERN ROOT-KNOT NEMATODE, MELOIDOGYNE INCOGNITA.

J W Potter J L Townshend T R Davidson Nematologica 15(1):29-34 REF

Mar 1969 436.8 N342

Grasses, Host range, Meloidogyne incognita, Plant hosts, Reproduction.

2847-69

THE CONDITION OF CYSTS OF POTATO NE-MATODES IN PURIFICATION PLANTS. (GE) F Sprau

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):39-44

Feb 1967 410.9 G31M

Heterodera rostochiensis, Plant discase transmission, Potatoes, Water pollution, Water treatment. English abstract

2848-69 INVESTIGATION INTO THE VERTICAL **MIGRATION OF MELOIDOGYNE HAPLA. (GE**

W Stein

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):93-96

Feb 1967 410.9 G31M

Demography, Meloidogyne hapla, Nematode migration, Plant nematodes, Sandy soils. English abstract

2849-69

APPEARANCE AND DAMAGING EFFECT OF HETERODERA SCHACHTII IN SUGAR BEET FARMS IN THE RHEIN. (GE)

W Steudel

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):45-49

Feb 1967 410.9 G31M

Chemical control (nematodes), Crop rotation, Heterodera schachtii, Nematocides, Sugar beets. English abstract

2850-69

COSTS AND RESULTS OF THE CONTROL OF THE GOLDEN NEMATODE OF THE POTATO. (IT)

R Verneau

Giornate Fitopatol 437-441

26 Mar 1967 SB599.G5

Chemical control (nematodes), Costs, Crop varieties, Dichloropropane dichloropropene mixture, Heterodera rostochiensis, Methyl bromide, Plant nematodes, Potatoes.

2851-69

THE DYNAMICS OF NEMATODE MOVE-MENT.

H R Wallace

Annu Rev Phytopathol 6:91-114 REF

1968 464.8 AN72

Animal ecology, Animal protective devices, Locomotion, Plant nematodes, Soil analysis, Water.

2852-69

DEVELOPMENTAL TENDENCIES IN PHYTONEMATOLOGY. (GE)

B Weischer

Berlin Bial Bundesanst Land-forstwirtsch Mitt (121):12-20 REF

Feb 1967 410.9 G31M

Crop rotation, Host relationships, Nematode control, Plant disease transmission, Plant nematodes, Research. English abstract

WEEDS

2853-69

WHEN ALGAE ARE A NUISANCE.

Nature 220(5168):648

16 Nov 1968 472 N21

Algae, Aquatic plants, Biological control (pests), Gases, Light, Pest control.

2854-69

HERBICIDE SCREENING TRIALS ON VEGETABLE CROPS.

M Aravindakshan

Agr Res J Kerala 5(1/2,MAR-SEP):31-39 1967 22 AG823

Chemical control (weeds), Herbicides, Plant inju-

ries, Vegetables. 16 herbicides were tested.

2855-69

SEVERAL YEAR OLD TESTS ON CHEMICAL CONTROL OF WILD SORGUM (ECHINOCLOA CRUS GALLI) IN CORN. (GE) G Bachthaler F G Hoyos

17

Berlin Bial Bundesanst Land-forstwirtsch Mitt (121):234-240 Feb 1967 410.9 G31M

Atrazine, Chemical control (weeds), Chlorophenyl)-1-methoxy-1-methyl-urea, 3-(p-, Corn, Echin-ochloa crus-galli, Prometryne, English abstract

2856-69

SOME CONSIDERATIONS ON CHEMICAL WEED CONTROL IN ITALIAN BEET FIELDS AND A SURVEY OF SOME EXPERIMENTAL DATA COLLECTED IN 1966. (IT) G C Bongiovanni

Giornate Fitopatol 511-521 REF

26 Mar 1967 SB599 G5

Chemical control (weeds), Herbicide application, Lenacil, Methodology, Pyrazon, Sugar beets, Ta-bles (data). Other less effective herbicides were also tested

2857-69

EFFECT OF REPEATED ANNUAL USE OF ATRAZINE ON CORN.

O C Burnside G A Wicks C R Fenster

Agron J 61(2, MAR-APR): 297-299

Apr 1969 4 AM34P

Atrazine, Chemical control (weeds), Corn, Crop losses, Herbicide residues, Plant physiology, Weed control.

2858-69

2859-69

ING. **G** W Cussans

control.

2860-69

R Diercks

stract

2861-69

H Faber

2862-69

(121):281-284

TREATMENTS

LOW ROTATION.

Apr 1969 4 AM34P

aestivum, Weed control.

(121):226-233

Feb 1967 410.9 G31M

BY BURNING OFF. (GE)

Feb 1967 410.9 G31M

WEED CONTROL TESTS IN ONION FIELDS. (\mathbf{IT})

Chemical control (weeds), Chlorinated hydrocar-bons, Dacthal, Onions, Tables (data), Weeds. Other less effective herbicides were tested.

PERENNIAL WEED GRASSES AND THEIR

CONTROL IN RELATION TO CEREAL GROW-

Great Brit NAAS (nat Agr Adv Serv) Quart Rev (81,AUTUMN):7-12

Agropyron repens, Amitrole, Chemical control (weeds), Dalapon, Defoliation, Drying, Grain, Paraquat, Plowing, Seasonal variation, TCA, Weed

Physical and chemical control methods for couch

grass (Agropyron repens) in grain fields are discussed.

EFFECT OF HERBICIDES ON GROWING

WHEAT APPLIED SIMULTANEOUSLY WITH CALCIUM CYANAMIDE FERTILIZERS. (GE)

Alopecurus myosuroides, Calcium cyanamide,

Cercosporella herpotrichoides, Chemical control

(weeds), Dicotyledons, Fertilizers, Herbicides,

Plant physiology, Simazine, Wheat. English ab-

WEED CONTROL IN SEPARATE CULTURES

Equipment, Herbicides, Methodology, Weed burners, Weed control. English abstract

WEED CONTROL AND PLANT RESIDUE MAINTENANCE WITH VARIOUS TILLAGE

Bromus tectorum, Mulches, Plowing, Triticum

C R Fenster C E Domingo O C Burnside

Agron J 61(2, MAR-APR): 256-259 REF

IN A WINTER WHEAT-FAL-

Berlin Biol Bundesanst Land-forstwirtsch Mitt

Berlin Biol Bundesanst Land-forstwirtsch Mitt

B Casarini G Silvestri

1968 241 G796

Giornate Fitopatol 499-506

26 Mar 1967 SB599.G5

2863-69

2863-69 INFLUENCE OF VARIOUS SOIL PROPERTIES AND MOISTURE ON THE ACTION OF UREA DERIVITIVES ON GRASSY WEED CONTROL IN WINTER GRAINS. (GE.)

M Hanf J Jung Berlin Biol Bundesaust Land-forstwirtsch Mitt (121) 186-191

Feb 1967 410.9 G3IM

Barley, Buturon, Chemical control (weeds), Cycluron, Soil moisture, Soil properties, Urca deriva-tives, Wheat. English abstract 2864-69

HERBICIDES IN PLANT PROTECTION. (GE) K Hofmann

Berlin Biol Bundesanst Land-farstwirtsch Mitt (121):277-280 Feh 1967 410.9 G31M

Agropyron repens, Convolvulus, Domatol special, Herbicides, Plant protection, Weed control, Windbreaks. English abstract.

2865-69

CIILORTHIAMID AGAINST BIND WEED IN BASKET WILLOW CULTURES. (GE W Kampe

Berlin Biol Bundesaust Land-farstwirtsch Mitt (121):259-262

Feb 1967 410.9 G31M

Chemical control (weeds), Chlorthiamid, Convolvulus, Herbicides, Salix viminalis, Weed control. English abstract

2866-69

UPTAKE AND TRANSLOCATION OF SUB-STITUTED ANILINE HERBICIDES IN PEANUT SEEDLINGS.

M L Ketchersid T E Boswell M G Merkle Agrou J 61 (2, MAR-APR): 185-187 Apr 1969 4 AM34P

Chromatography, Herbicides, Peanuts, Plant physiology, Plant translocation, Seedlings, Triflu-ralin.

2867-69

AUTUMN WEED CONTROL FOR CONTINU-OUS CEREAL GROWERS.

G H MacKenzie Scat Apr 47(4.AUTUMN):192-193

1968 10 SCO82SO Agropyron repens, Chemical control (weeds), Fer-

tilizers, Grain, Juncus, Plowing, Weed control. 2868-69

WHEAT CONTROL IN WHEAT.

A D Mears

Agr Gaz New S Wales 79(2):66-71 Feh 1968 23 N472

Barban, Chemical control (weeds), Crop yields, Cultural control (weeds), D, 2,4-, Herbicides, In-tegrated control (weeds), Methodology, Tri-allate, Wheat.

Wheat crops are damaged considerably by weeds and the author presents cultural and chemical methods of weed control.

2869-69

CHEMICAL WEED CONTROL IN FINLAND IN 1887--1965.

J Mukula E Ruuttunen

Ann Agr Fenn 8(SUPPL 1):1-45 MAP REF 1969 20 AN7

Catalogs, Chemical control (weeds), Herbicide application, Herbicide residues, Herhicides, History, Weed control.

2870-69

THE SIGNIFICANCE OF THE GRANULATION OF DICHLOBENIL FOR WEED CONTROL IN SEVERAL YEAR OLD CULTURES. (GE) H H Nolle

Berlin Biol Bundesaust Land-forstwirtsch Mitt (121):251-258

Feh 1967 410.9 G31M

Agricultural economics, Chemical control (weeds), Chlorthiamid, Dichlohenil, Granular her-bicides, Weed control. English abstract

2871-69 PROGRESS AND GOALS OF CHEMICAL WEED CONTROL. (GE) H Orth

BIBLIOGRAPHY

Berlin Bial Bundesanst Land-forstwirtsch Mitt (121):168-176 REF

Feb 1967 410.9 G31M

Carrots, Chemical control (weeds), Corn, Grain, Herbicide application, Plant mutation, Sugar beets, TBA, Weed control. English abstract

2872-69

TESTS OF CHEMICAL WEED CONTROL IN ONION FIELDS. (IT)

G Rapparini G Marocchi

Giarnate Fitapatal 507-510 26 Mar 1967 SB599.G5

Chemical control (weeds), Chlorinated hydrocarbons, C1PC, Dacthal, Onions, Weeds. Other less effective herbicides were tested.

2873-60

CHEMICAL WEED CONTROL EXPERIMENTS DPA IN RICE. (HU)

Z Sajo

Kiserletugyi Kozlemenyek 58/A(1):27-45 REF 1966 105.9 H89

Chemical control (weeds), Cyperaceae, DPA, Rice, Weed control. English and Russian abstracts 2874-69

WEED CONTROL WITH GROWTH REGULAT-ING SUBSTANCES IN MICRO GRANULE HER-BICIDES. (GE) K H Walther

Berlin Bial Bundesanst Land-forstwirtsch Mitt (121):248-250 Feb 1967 410.9 G31M

Agricultural economics, Chemical control (weeds), Grain, Granular herbicides, Plant growth regulator, Weed control. English abstract

CONTROL OF DICOLYLEDON WEED SEEDS AND MILLET WEED IN BEANS WITH SOIL HERBICIDES. (GE)

B Wurzer

Berlin Biol Bundesaust Land-forstwirtsch Mitt (121):241-247

Fcb 1967 410.9 G31M

Beans, Chemical control (weeds), Chlorophenyl)-1-methoxy-1-methyl-urea, 3-(p-, Dicotyledons, Herbicides, Millet, Sceds, Weed control. English abstract

LIVESTOCK PROTECTION

2876-69

ASCARIASIS IN PIG AND IN MAN. J M Barry F J O'frourke Ray Dublin Sac Sci Proc Ser A 3(4):39-55 REF 1967 501 D85

Animal morphology, Ascariasis, Ascaris lumbri-coides, Ascaris lumbricoides suum, Epidemiology, Humans, Parasites, Serological tests, Swine, Zoonoses.

2877-69

EPIDEMIOLOGICAL TRENDS IN DISEASE OF LIVESTOCK KEPT UNDER INTENSIVE CON-DITIONS.

P G Box

Vet Rec 83(24):613

14 Dec 1968 41.8 V641

Coccidiosis, Environment, Epidemiology, Livestock diseases, Parasitism, Poultry, Respiratory diseases, Virus diseases (animals). Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

18

2878-69 SHEEP DISEASE PROBLEMS ASSOCIATED WITH HIGH DENSITY STOCKING.

G E Charles Agr Gaz New S Wales 79(5):271-273 May 1968 23 N472

Anoplura, Bacterial diseases (animals), Coccidiosis, Haemonchus contortus, Hypocalcemia, Livestock discases, Mites, Pest control, Phalaris tuberosa, Pregnancy disease, Shecp, Trichostrongyhas

The etiology and control of communicable diseases and parasites of sheep are discussed.

2879-69

KOAGAMIN VETERINARY PARENTERAL HEMOSTAT. DRUGS FOR VETERINARY USE -DRUG EFFICACY STUDY IMPLEMENTATION. H L Jr. Ley

Fed Regist 34(22):1611

01 Feb 1969 L1.451

Drugs, Malonic acid, Oxalic acid, Phenol com-pounds, Veterinary medicine.

2880-69

MAMMARY DEVELOPMENT IN HYPOPHYSECTOMIZED CASTRATED RAB-BITS INJECTED WITH, THYROXINE, COR-TISONE, AND OVARIAN HORMONES.

A Norgren

Lund Univ Acta Univ Lundensis Sect 11 Med Math Sci Ker Nat (33):19P REF

1967 502 L97A

Castration, Cortisone, Growth factors, Hormones, Laboratory animals, Mammary glands, Ovaries, Pituitary gland, Progesterone, Rabbits, Tahles (data), Thyroxine.

2881-69

THE EFFECTS OF BALANCING AND IM-BALANCING SAFFLOWER PROTEIN ON FOOD CONSUMPTION, BODY WEIGHT GAIN AND CONCENTRATIONS OF PLASMA FREE AMINO ACIDS IN THE YOUNG RAT.

C F Wells

Diss Abstr Sect B 29(3):825B

Sep 1968 Z5055.U49D53

Amino acids, Animal physiology, Blood plasma, Diet, Feeding, Proteins, Rats, Salflower.

DISEASES

2882.69

2883-69

(POR)

REF

2884-69

mary.

2885-69

V do Amaral E H Birgel

Jun 1968 442.9 SA6

VIRUS IN RATS.

1968 449.9 W892B

MORTALITY AMONG CHINOOK SALMON AS-SOCIATED WITH THE FUNGUS DERMO-CYSTIDIUM,

R L Allen T K Meekin G B Pauley M P Fujihara Can Fish Res Board J 25(11):2467-2475 Nov 1968 442.9 C16J Chemical control (animal diseases), Dermocystidi-

um, Diquat, Fungus discases (animals), Salmon.

NOTE ON OCCURRENCE OF THE ISOSPORA

BIGEMINA (STILES, 1891) LUHE, 1906 IN CANIS FAMILIARIS IN SAO PAULO AND GEO-GRAPHIC DISTRIBUTION OF THE ISOSPORA SPECIES IN DOGS AND CATS, IN BRAZIL

Saa Paula Inst Bial Arg 35(2, APR-JUN):77-81

Cats, Coccidiosis, Dogs, Isospora, Isospora higemina, Zoogeography. English abstract

THE PATHOGENESIS OF STREET RABIES

Antihodies, Central nervous system, Mortality, Ra-hies, Rats, Virus diseases (animals). French sum-

STUDIES ON WILD RESERVOIRS AND VEC-TORS OF TRYPANOSOMA CRUZI. XXVIII. ON THE PRESENCE OF TRIATOMA SORDIDA STAL., 1859 AND RHODNIUS NEGLECTUS LENT, 1954 IN NESTS OF FURNARIID BIRDS (HEMIPTERA, REDUVIDAE). (POR)

World Health Organ Bull 38(1):119-125 REF

G M Baer T R Shantha G H Bourne

LIVESTOCK PROTECTION

2910-69

M P Barretto J da R Carvalheiro Rev Brasil Biol 28(3):289-293 REF Sep 1968 442.8 R326 Bird nests, Birds, Habitats, Host relationships, In-sect vectors, Rhodnius, Triatoma, Trypanosoma cruzi. English summary.

2886-69

IN VITRO ANTIMICROBIAL ACTIVITY OF DIMETHYLSULFOXIDE.

H Basch H H Gadebusch Appl Microbiol 16(12):1953-1954 Dec 1968 448.3 AP5

Animal diseases, Antibiotics, Bacteria, Culture media, Dimethylsulfoxide, Drugs, Fungus diseases (animals), Solubility.

2887-69

PORCINE ENTERITIS DUE TO CLOSTRIDIUM PERFRINGENS TYPE C. 1. EPIZOOTIOLOGY AND DIAGNOSIS.

M E Bergeland T A Dermody D K Sorensen US Livestock Sanit Ass Proc 70:601-606 MAP 10 Oct 1966 49.9 UN3R

Clostridium perfringens, Diagnosis, Enteritis, Epizootic discases, Livestock diseases, Swine.

2888-69

EGG PRODUCTION AND DISEASE.

D M Berry Vet Rec 83(24):611-612

14 Dec 1968 41.8 V641

Antigens, Chickens, Eggs, Infectious bronchitis virus, Mycoplasma gallisepticum, Productivity, Virus diseases (animals). Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2889-69

NITRITE-INDUCED GERMINATION OF CLOS-TRIDIUM BUTYRICUM AND CLOSTRIDIUM TYROBUTYRICUM SPORES.

B H Bester J W Claassens P M Lategan S Afr J Agr Sci 10(4):1055-1058

Dec 1967 24 SU3

Biochemistry, Clostridium, Culture media, Nitrites, Spore germination.

2890-69

DIFFERENTIAL DIAGNOSIS OF BOVINE EN-CEPHALITIDES.

E J Bicknell

US Livestock Sanit Ass Proc 70:162-165

10 Oct 1966 49.9 UN3R

Animal diseases, Cattle, Diagnosis, Encephalitis, Listeriosis, Livestock diseases, Polioencephalo-myclitis, Rabies.

2891-69

THE LEUCOCYTE COUNTS OF CATTLE ABORTING DUE TO BRUCELLA ABORTUS IN-FECTION COMPARED TO LEUCOCYTE COUNTS OF NONINFECTED CATTLE CALV-ING NORMALLY.

B W Bicrcr H S Powell

U S Livestock Sanit Ass Proc 70:107-109 10 Oct 1966 49.9 UN3R

Abortion, Bacteria, Brucella abortus, Cattle, Leukocytes, Livestock diseases, Reproduction.

2892-69

PROTEIN-DEFICIENT DIET AND DDT TOXICI-TY.

E M Boyd E S Dc Castro

World Health Organ Bull 38(1):141-150 REF 1968 449.9 W892B

Animal nutrition, Chlorinated hydrocarbons, Diet, DDT, Insecticides, Kidneys, Liver, Proteins, Rats. French summary.

2893-69

CLINICAL SIGNS AND PATHOLOGY OF CHRONIC PANCREAS DISEASES OF THE DOG. (GE)

M Brack P Bartels

Kleintier-Praxis 13(1):9-16 REF

Feb 1968 41.8 K67

Animal diseases, Dogs, Neoplasms, Pancrcas, Serological tests, Symptomatology.

2894-69 CONTROL OF DNA SYNTHESIS IN CELLS IN-FECTED WITH POLYOMA VIRUS. P E Branton R Sheinin

Virology 36(4):652-661 REF Dec 1968 448.8 V81 Cells, Deoxyribonucleic acid, Mice, Polyoma virus, Synthesis, Virus diseases (animals).

2895-69

SYMPOSIUM: MYCOSIS.

Vet Rec 83(24):633-635 14 Dec 1968 41.8 V641 Animal diseases, Mycosis, Symposia, Veterinary medicine. Summaries of papers and discussions presented to the B.V.A. Congress in Swansea from Sept. 16-20, 1968.

2896-69

EPIDERMAL CHALONE AND MITOTIC CON-TROL IN THE VX2 EPIDERMAL TUMOUR.

W S Bullough E B Laurence Nature 220(5163):134-135

12 Oct 1968 472 N21

Animal diseases, Biochemistry, Cancer, Drug therapy, Extracts, Hamsters, Hormones, Inhibitors, Mice, Mitosis, Neoplasms, Skin, Synthesis, Tissues.

2897-69

INACTIVATION OF CANDIDA ALBICANS BY ULTRAVIOLET RADIATION. D L Busbee A Sarachek

Arch Mikrobiol 64(4):289-314 REF

30 Jan 1969 442.8 AR26

Candida albicans, Deoxyribonucleic acid, Metabolism, Physiology, Ultraviolet rays.

2898-69

SHEEP FOOT ROT CONTROL.

G L Crenshaw B McGowan U S Livestock Sanit Ass Proc 70:471-475

10 Oct 1966 49.9 UN3R Foot rot (animals), Livestock, Livestock diseases, Research, Sheep, Veterinary medicine.

2899-69

EQUINE INFECTIOUS ANEMIA. W J B Ditchield

U S Livestock Sanit Ass Proc 70:219-223 REF 10 Oct 1966 49.9 UN3R

Diagnosis, Equine infectious ancmia, Horses, Infectious diseases, Serological tests, Virus diseases (animals).

2900-69

SALMONELLOSIS.

P R Edwards M M Galton Advances Vet Sci 11:1-63 REF 1967 41.8 AD9

Animals, Bacterial diseases (animals), Bibliog-raphy, Disease control, Discase transmission, Salmonclla, Salmonellosis, Surveys, Taxonomy

The bacterium Salmonella is discussed as to its taxonomy, isolation, occurrence in man and other animals, transmission in food materials, and control.

2901-69

HAEMORRHAGIC NEPHRITIS IN EXPERI-MENTAL BOVINE LEPTOSPIROSIS BRATISLAVA.

K L Fennestad T S Olsen C B Petersen Acta Pathol Microbiol Scand 71(2):245-264 REF 1967 448.3 AC8

Cattle, Leptospires, Leptospirosis, Livestock dis-eases, Nephritis, Scrological tests, Symptomatology, Toxins.

2902-69 EPIZOOTIOLOGY.

D H Ferris

Advances Vet Sci 11:261-320 MAP REF

1967 41.8 AD9

Bibliography, Ecology, Epidemiology, Epizootic diseases, Methodology.

The principles, organization, and experimental design of epizootiologic research arc reviewed in depth and an extensive bibliography is included.

19

2903-69

EFFECTS OF DIETS LOW IN CALCIUM AND/OR PHOSPHORUS IN LAMBS. A C Field N F Suttle D I Nisbet

Vet Rec 83(24):605

14 Dec 1968 41.8 V641

Animal nutrition, Bones, Calcium, Diet, Phosphorus, Physiology, Sheep. Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2904-69

FEEDING CHLORTETRACYCLINE TO RANGE CATTLE TO ELIMINATE THE CARRIER STATE OF ANAPLASMOSIS.

T E Franklin R W Cook D J Anderson

U S Livestock Sanit Ass Proc 70:85-90

10 Oct 1966 49.9 UN3R

Anaplasmosis, Antibiotics, Cattle, Chlortetracycline, Drug therapy, Feeding, Livestock diseases.

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2907-69

plants.

presented.

P C C Garnham

1967 436.8 AD9

2908-69

2909-69

Brodey

2910-69

LUPINOSIS.

M R Gardiner

1967 41.8 AD9

U Freudiger

Kleintier-Praxis 13(1):4-9 REF Feb 1968 41.8 K67

Advances Vet Sci 11:85-138 REF

Advances Parasitol 5:139-204 REF

sis, Plasmodium, Taxonomy.

Virology 36(4):678-680 REF

tests, Virus diseases (animals).

S Geyer B Bibrack T Hanichen

Kleintier-Praxis 13(1):17-24 REF

Dec 1968 448.8 V81

Feb 1968 41.8 K67

Tables (data).

ETIOLOGY OF KIDNEY DISEASE IN DOGS AND CATS.

Animal diseases, Cats, Dogs, Kidneys, Nephritis,

Pathogenesis. English, French, and Italian summa-

THE VIRUS-CAUSED RESPIRATORY DIS-EASES OF THE CAT. (GE)

Cats, Climate, Diagnosis, Epidemiology, Feline in-fectious enteritis, Feline pneumonitis, Her-pesviruses, Picornaviruses, Respiratory diseases,

Rhinotracheitis, Serological tests, Symptomatolo-gy, Virology, Virus diseases (animals).

Alkaloids, Bibliography, Disease control, Jaundice,

Live, diseases, Lupine, Pathology, Poisonous

A literature review of the ctiology, pathology and control of lupinosis, a livestock disease resulting from ingestion of the toxic herb, Lupinius, is

MALARIA IN MAMMALS EXCLUDING MAN.

Bibliography, Disease transmission, Immunity, Life

cycle, Malaria, Mammals, Morphology, Pathogene-

A literature review of the taxonomy, life cycles,

morphology, transmission, pathogenesis, immu-nology and serology of Plasmodia is presented.

SHARED GROUP-SPECIFIC ANTIGEN OF MU-

Antigens, Cats, Leukemia, Mice, Rats, Serological

CLINICAL SIGNS AND PATHOLOGY OF PAN-CREAS DISEASES OF THE DOG. (GE)

Animal diseases, Cirrhosis, Diagnosis, Dogs, Pan-

creas, Pancreatic cystic fibrosis, Symptomatology.

RINE AND FELINE LEUKEMIA VIRUSES.

G Geering W D Hardy L J Old E Harven R S

U Freudiger

Sweiz Arch Tierheilk 110(6):275-288 REF Jun 1968 41.8 SCH9

LIVESTOCK PROTECTION

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2911-69

THE EFFECT OF CONDITIONS OF CULTIVA-TION OF THE POLIOMYELITIS VIRUS ON THE FREQUENCY OF MUTATIONS AFFECT-ING THE GUANIDINE CHARACTER. (RUS) U Z Ghendon A T Marchenko

Genetika (5):143-147

1967 OH431.A1G4

Animal genetics, Guanidine, Monkeys, Mutation, Poliomyelitis, Temperature, Tissue culture, Virolo-gy, Virus diseases (animals). English summary 2912-69

ABORTIONS IN CATTLE: ISOLATION OF SAL-MONELLA DUBLIN. (POR)

W Giorgi A O Lobad C A Santa Rosa E Franca Sao Paulo Inst Biol Arg 35(4,OCT-DEC):185-188 Dec 1968 442.9 SA6

Abortion, Cattle, Salmonella dublin, Serological tests, Vaccines, English abstract

2913-69

TOXOPLASMOSIS INFRCTION FROM RABBIT TO MEN. REPORT OF A CASE. (POR)

W Giorgi O Campedelli Filho V do Amaral Sao Paulo Inst Biol Arg 35(2, APR-JUN):87-88 Jun 1968 442.9 SA6

Animal disease transmission, Human diseases, Rabbits, Toxoplasma gondii, Toxoplasmosis. English abstract.

2914-69

PATHOGENIC ESCHERICHIA COLI STRAINS PREVALENT IN POULTRY FLOCKS IN ISRAEL.

E D Heller M Perek

Brit Vet J 124(11):509-513 REF

Nov 1968 41.8 V643

Bacterial diseases (animals), Chickens, Escherichia coli, Lesions, Poultry diseases, Serological tests.

2915-69

THE OUTBREAK OF FOOT-AND-MOUTH DIS-THE OUTBREAK OF FOOT-AND-MOUTH DIS-EASE IN WORCESTERSHIRE. AN EPIDEMIOLOGICAL STUDY: WITH SPECIAL REFERENCE TO SPREAD OF THE DISEASE BY WIND-CARRIAGE OF THE VIRUS.

R J Henderson J Hyg 67(1):21-33

Mar 1969 449.8 J82

Epidemiology, Foot-and-mouth disease, Swine, Virus diseases (animals), Wind dispersal.

2916-69

A TREND IN THE PREVALENCE OF BRUCEL-LOSIS IN IOWA SWINE.

S L Hendricks W J Hausler

US Livestock Sanit Ass Proc 70:110-115 MAP 10 Oct 1966 49.9 UN3R

Agglutination test, Brucellosis, Immunochemistry, Livestock diseases, Serological tests, Swine.

2917-69

EVOLUTIONARY TRENDS IN MAMMALIAN TRYPANOSOMES.

C A Hoare

Advances Parasitol 5:47-91 MAP REF 1967 436.8 AD9

Bibliography, Evolution, Protozoa, Taxonomy, Trypanosoma, Trypanosomatidae.

2918-69

EPIDEMIOLOGICAL STUDIES ON SAL-MONELLA SENFTENBERG. II. INFECTIONS IN FARM ANIMALS.

M E Hugh-Jones

J Hyg 67(1):89-94 REF

Mar 1969 449.8 J82

Cattle, Epidemiology, Livestock diseases, Poultry, Salmonella senftenberg, Sheep.

2919-69

STAND-BY SERVICE MAINTAINS CONSTANT VIGILANCE AGAINST ANIMAL DISEASE OUTBREAKS, W H Hughes

New Zeal J Agr 116(5):35 May 1968 23 N48J

BIBLIOGRAPHY

Agricultural legislation, Disease control, Epizootic diseases, Livestock diseases.

2920-69

ANTIMICROBIAL EVALUATION OF METHYL-3-NITRO-1-NITROSOGUANIDINE. 1-D E Hunt R F Pittillo

Appl Microbiol 16(12):1879-1880

Dec 1968 448.3 AP5

Animal diseases, Antibiotics, Bacteria, Escherichia coli, Fungus diseases (animals), Methyl-3-nitro-1-nitrosoguanidine, 1-, Mice, Staphylococcus aureus.

2921-69

STUDIES ON E. COLI VACCINES TO PRO-TECT PIGS AGAINST POSTWEANING COLIFORM INFECTIONS.

P L Ingram

Vet Rec 83(24):606

14 Dec 1968 41.8 V641

Bacteria, Escherichia coli, Gastroenteritis, Livestock diseases, Research, Swine, Vaccines. Gastroenteritis, Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2922-69

SALMONELLA AND ARIZONA IN REPTILES AND MAN IN WESTERN AUSTRALIA.

J B Iveson E M Mackay-Scollay V Bamford J Hyg 67(1):135-145 REF Mar 1969 449.8 J82

Paracolobactrum arizonae, Reptilia, Salmonella, Surveys, Zoogeography.

2923-69

TOXOPLASMA AND TOXOPLASMOSIS.

L. Jacobs

Advances Parasitol 5:1-45 REF

1967 436.8 AD9

Bibliography, Disease transmission, Electron microscopy, Epidemiology, Physiology, Protozoa, Serological tests, Tissue culture, Toxoplasma gondii, Toxoplasmosis.

Toxoplasma is discussed with respect to its electron microscopy, mechanisms of transmission, serology, epidemiology, pathology, physiology, and therapy.

2924-69

EPIDEMIOLOGICAL CONSIDERATIONS FOR THE CONTROL OF BOVINE VIRUS DIARR-HEA.

R F Kahrs D S Robson J A Baker

U S Livestock Sanit Ass Proc 70:145-153 10 Oct 1966 49.9 UN3R

Antibodies, Bovine virus diarrhea virus, Cattle, Epidemiology, Immunology, Livestock diseases, Virus diseases (animals).

2925-69

LASTING INTERRUPTIONS IN EPIZOOTIC ACTIVITY OF NATURAL PLAGUE FOCI AND THEIR POSSIBLE CAUSES. (RUS) N I Kalabukhov

Zool Zhur 48(2):165-178 Feb 1969 410 R92

Animal ecology, Animal vectors, Epizootic dis-eases, Rodents, Siphonaptera. English abstract

2926-69

VALUE AND INTERPRETATION OF SEROLOGICAL TESTS FOR THE DIAGNOSIS OF CRYPTOCOCCOSIS. L Kaufman S Blumer

Appl Microbiol 16(12):1907-1912 REF Dec 1968 448.3 AP5

Agglutination, Animal diseases, Antibodies, Cryptococcosis, Cryptococcus neoformans, Diagnosis, Fluorescent antibody technic, Latex, Serological tests.

2927-69

VENEZUELAN EQUINE ENCEPHALITIS.

R E Kissling R W Chamberlain Advances Vet Sci 11:65-84 REF 1967 41.8 AD9 Disease concernent Pathology, Pathology, dis-Culicidae, Bibliography, Epidemiology, Insect vectors, Venezuelan equine encephalitis virus, Virus dis-

20

eases (animals).

A review of Venezuelan Equine Encephalitis including its epidemiology, symptomatology, pathology and control is presented.

2928-69

CYTOCHEMICAL STUDIES ON THE LEP-TOMONAD FORM OF **LEISHMANIA** DONOVANI.

T Koyama A Ilardi Parassitologia 10(1):17-32 REF

Jul 1968 436.8 P212

Biochemistry, Cytology, Histology, Leishmaniasis.

2929-69

HETEROTRANSMISSION OF AVIAN MYELOBLASTOSIS VIRUS TO HAMSTERS. (FR)

F Lacour E Delain G Camus F May-Levin Acad Sci Compt Rend Ser D Sci Nat 268(3, 1ST SEMESTER):631-634 REF 20 Jan 1969 505 P21

Animal physiology, Antigens, Avian myeloblastosis virus, Hamsters, Immunization.

2930-69

tests. Sodium.

2931-69

BOV1NE

STUDY.

2932-69

2933-69

H L Ley

2934-69

2935-69

R M MacKenzie

1968 10 SCO82SO

tests. Tissue culture.

A P C MacLaren

1967 10 SC082SO

VI Larson

STUDIES ON THE BLOOD CHEMISTRY OF CATTLE IN A HERD INFECTED WITH JOH-NE'S DISEASE.

A B Larsen K E Kopecky

U S Livestock Sanit Ass Proc 70:189-193 REF 10 Oct 1966 49.9 UN3R Bacteria, Blood, Calcium, Cattle, Chemistry, Joh-

LEUKEMIA:

Diss Abstr Sect B 29(3):825B-826B

SUSPENDED TISSUE CULTURE.

Fed Regist 34(38):2622-2623

26 Feb 1969 L1.451

P E Lemoine A Karl C E Schwerdt

Sep 1968 Z5055.U49D53

Research, Symptomatology.

1968 449 9 W892B

ne's disease, Livestock diseases, Magnesium, Phosphorus, Potassium, Research, Serological

EPIDEMIOLOGICAL AND EXPERIMENTAL

Cattle, Environment, Epidemiology, Hematology, Leukemia, Livestock diseases, Lymphocytosis,

SHOPE FIBROMA VIRUS GROWTH CURVE IN

Kidneys, Pox-tumor viruses, Rabbit fibroma virus,

CHLOROTHIAZIDE, DRUGS FOR VETERINA-RY USE; DRUG EFFICACY STUDY IMPLE-MENTATION.

Accident prevention, Chlorothiazide, Cirrhosis,

Dogs, Dosage, Drug therapy, Drugs, Heart failure, Symptomatology, Veterinary medicine.

Antibodies, Brucellosis, Culture media, Diagnostic

procedures, Guinea pigs, Microscopy, Serological

Bacterial diseases (animals), Calves, Diagnosis, Disease control, Disease transmission, Salmonella

The symptoms, diagnosis, transmission, prevention.

and control of salmonellosis in calves are discussed.

typhimurium, Salmonellosis, Symptomatology

DIAGNOSTIC TESTS FOR BRUCELLOSIS.

Scot Agr 47(3,SUMMER):115-117

SALMONELLOSIS IN CALVES.

Scot Agr 46(4,AUTUMN):191-193

World Health Organ Bull 38(1):127-133 REF

Rabbits, Tissue culture. French summary.

CLINICAL.

2936-69

MANAGEMENT AND DISEASES OF CAGED BIRDS.

W Marbach M Lindtner Agr Gaz New S Wales 79(11):690-696

Nov 1968 23 N472

Birds, Chemical control (animal diseases), Deficiency diseases, Drug therapy, Helminths, Psittacosis, Psocoptera, Salmonellosis

The symptomatology and therapeutics of bacterial, helminthic and deficiency diseases and control of external parasites are presented.

29.37-69

CONTROL OF CALF SCOURS IN THE SUCKLER COW HERD.

A O Mathieson Scot Agr 46(1,WINTER):40-44

1966 10 SCO82SO

Antibiotics, Calves, Colibacillosis, Diagnosis, Drug therapy, Livestock diseases.

The symptomatology and etiology of colibacillosis in suckling calves in scotland are described. Preventative measures consist of sanitary farm practises. The sclective use of antibiotics is the recommended therapy.

29.38-69

OBSERVATIONS ON POLYOMA VIRUS FILA-MENTS.

C F T Mattern DeLeva

Virology 36(4):683-685

Dec 1968 448.8 V81

Cell nucleus, Deoxyribonucleic acid, Polyoma virus, Virus diseases (animals).

2939-69

INFLUENZA IN ANIMALS.

J L McQueen J H Steele R Q Robinson Advances Vet Sci 12:285-336 REF 1968 41.8 AD9

Birds, Diagnosis, Disease control, Horses, Influen-za, Swine, Taxonomy, Virus diseases (animals).

Research on equine, swine, and avian influenza is reviewed as to its diagnosis, serology, etiology, and control. The classification of the myxovirus and isolation techniques are also included.

2940-69

DERMAL LESIONS IN AVAIN LEUCOSIS. D H McWade J N Beasley

US Livestack Sanit Ass Proc 70:607-613 10 Oct 1966 49.9 UN3R

Avian leukosis complex, Avian lymphomatosis, Diagnosis, Poultry, Poultry diseases, Skin, Virus diseases (animals).

2941-69

HOST-PARASITE RELATIONSHIPS IN BRU-CELLOSIS. I. RESERVOIRS OF INFECTION AND INTERHOST TRANSMISSIBILITY OF THE PARASITE.

M E Meyer

US Livestock Sanit Ass Prac 70:129-134 10 Oct 1966 49.9 UN3R

Animal discases, Bacteria, Brucellosis, Livestock, Parasitism, Rodents, Susceptibility, Wildlife.

2942-69

PORCINE POLIOENCEPHALOMYELITIDES. JHL Mills S W Nielsen

Advances Vet Sci 12:33-104 REF

1968 41.8 AD9

Diagnosis, Disease control, Disease transmission, Epidemiology, Pathology, Swine, Teschen disease, Tissue culture, Vaccines, Virus diseases (animals).

Research on porcine polioencephalomyelitides, Teschen disease, is reviewed with regard to diagno-sis, epidemiology, pathology, scrology, experimen-tal disease transmission, and vaccination.

2913-69

EQUINE INFECTIOUS ANEMIA-A DIAG-NOSTIC PROBLEM.

R W Moore H E Redmond D H Lewis US Livestack Sanit Ass Prac 70:255-260 10 Oct 1966 49.9 UN3R

Antigens, Diagnosis, Equine infectious anemia, Horses, Precipitin test, Virus diseases (animals). 2911-69

INFECTIOUS KERATOCONJUNCTIVITIS IN SHEEP CAUSED BY MORAXELLA BOVIS. (POR)

G Moreno J A Bottino E N Mos Sao Paula Inst Bial Arg 35(4,OCT-DEC):181-183 REF

Dec 1968 442 9 SA6

Infectious diseases, Keratoconjunctivitis, Moraxel-la bovis, Sheep. English abstract

INFECTIOUS KERATOCONJUNCTIVITIS IN CATTLE CAUSED BY NEISSERIA (NEISSERIA OVIS N. SP. LINDQVIST, 1960). (POR) G Moreno J A Bottino E N Mos R M Yanaguita

Sao Paula Inst Bial Arq 35(4,OCT-DEC):173-179 REF

Dec 1968 442.9 SA6

Biochemistry, Cattle, Infectious diseases, Keratoconjunctivitis, Neisseria ovis, Physiology. diseases, English abstract

2946-69

THE DISCOVERY OF TWO SPECIES OF TRICHOMONAS IN FECES OF TWO DOGS, (IT

L Morganti G Ricci Bitti Parassitologia 10(1):11-16 Jul 1968 436.8 P212 Feces, Morphology, Baby pigs, Dogs,

Trichomonas. English summary. 2917-69

INFECTIOUS BURSAL DISEASE (GUMBORO). I M Moulthrop

U S Livestock Sanit Ass Proc 70:438-439 10 Oct 1966 49.9 UN3R

Eggs, Feed, Gumboro disease, Poultry, Poultry diseases, Virus diseases (animals).

2948-69

ACCREDITED PULLORUM TESTED FLOCK SCHEME HATCHERY SCHEME.

Agr Gaz New S Wales 79(10):630-632 Oct 1968 23 N472

Germ-free life, Poultry disease prevention, Poultry hatcheries, Salmonella pullorum.

In order to control Salmonella pullorum in poultry a classification scheme for accrediting hatcherics and a list of accredited hatcheries in New Zealand are presented.

2919-69

THE BIOLOGY OF THE ACANTHOCEPHALA. W L Nicholas

Advances Parasitol 5:205-246 REF

1967 436.8 AD9

Acanthocephala, Bibliography, Cytology, Emb-ryology, Histochemistry, Histology, Host relation-ships, Morphology.

A literature review on the embryology, post embryonic development, histology, cytology, histochemistry, host-parasite interactions, and the importance of acanthoccphala in medicine is presented.

2950-69

NOCARDIA ASTEROIDES, CAUSE OF AN EN-DEMIC MASTITIS IN THE COW. (FR)

J Nicolet A Repond H Konic H Baumgartner Sweiz Arch Tierheilk 110(6):289-301 Jun 1968 41.8 SCH9

Dairy cattle, Epidemiology, Lactation, Livestock diseases, Lymph nodes, Mastitis, Metastasis, Nocardia asteroides, Nocardiosis, Serological tests, Symptomatology, Udders. French, English and Italian summary

2951-69

RABIES DIAGNOSIS. COMPARATIVE STUDY ON SUSCEPTIBILITY OF ADULT AND SUCK-LING MICE.

21

M R Nilsson W Sugay O L Pasqualin S B K Miller

Saa Paulo Inst Biol Arg 35(2, APR-JUN):43-47 REF Jun 1968 442.9 SA6

Diagnosis, Micc, Rabies, Serological tests.

2952-69

IN VITRO ABSORPTION OF BOVINE SERUM-ALBUMIN, GAMMAGLOBULIN AND BRUCEL-LA-ANTIGENS BY SPLEEN CELLS. (GE) H Noltenius W Haas

Naturwissenschaften 55(11):547-548

Nov 1968 474 N213

Absorption, Antigens, Brucella, Cattle, Gamma globulins, Serum albumin, Tissuc culture.

2953-69

EQUINE INFECTIOUS ANEMIA--THE SECOND TIME AROUND .

S R Nusbaum

U S Livestock Sanit Ass Prac 70:224-237

10 Oct 1966 49.9 UN3R

Drug therapy, Equine infectious anemia, Horses, Precipitin test, Steroids, Virus diseases (animals).

2954-69

THE DEVELOPMENT OF FELINE CELL LINES FOR THE GROWTH OF FELINE INFECTIOUS ENTERITIS (PANLEUCOPAENIA) VIRUS. K J O'Reilly A M Whitaker

THE FRACTIONATION OF FOOT-AND-MOUTH DISEASE HYPERIMMUNE SERUM FROM CATTLE BY A COMBINATION OF GEL FILTRATION AND COLUMN ELEC-TROPHORESIS. (GE) A-f Olechnowirz

Cattle, Electrophoresis, Foot-and-mouth disease, Gels, Immunity, Serum, Virus diseases (animals). Russian and English summaries reprint: Archive for

Experimental Vcterinary Medicine vol. 20 no. 4,

RECENT ADVANCES IN OUR KNOWLEDGE OF PARTURIENT PARESIS WITH PARTICU-LAR REFERENCE TO THE ROLE OF VITAMIN

Animal nutrition, Calcium, Dairy cattle, Immunity,

Livestock diseases, Metabolism, Milk fever, Pare

sis, Parturition, Vitamin d. Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

SAFETY TESTING HOG CHOLERA LIVE VIRUS MODIFIED VACCINES.

Hog cholera vaccines, Hog cholera virus, Immu-

THE STATUS OF THE STATE-FEDERAL TU-

NOTES ON PASTEURELLA TULARENSIS ISO-LATED FROM A VOLE, MICROTUS OECONOMUS PALLAS, IN ALASKA.

diseases.

BERCULOSIS ERADICATION PROGRAM.

U S Livestock Sanit Ass Prac 70:194-207 MAP

U S Livestock Sanit Ass Proc 70:302-309

nization, Swine, Virus diseases (animals).

Agricultural regulation, Livestock

R L Rausch B E Huntley J G Bridgens Can J Microbiol 15(1):47-55 REF

Mycobacterium bovis, Tuherculosis.

Riems Isl Friedrich-laeffler Inst Arb 981-987

Feline infectious enteritis,

J Hyg 67(1):115-124 REF

Mar 1969 449.8 J82 Cats, Cytology, Feline infectious enteritis, Genetics, Methodology, Tissue culture, Virus dis-

eases (animals).

A-f Olechnowitz

1967 41.9 R44

D IN ITS PREVENTION.

14 Dec 1968 41.8 V641

10 Oct 1966 49.9 UN3R

10 Oct 1966 49.9 UN3R

Jan 1969 448.8 C162

1967

2956-69

J M Payne Vet Rec 83(24):610

2957-69

2958-69

2959-69

A F Ranney

C E Phillips

2955-69

LIVESTOCK PROTECTION

2960-69

Animal adaptation, Animal morphology, Bacterial diseases (animals), Field mice, Isolates, Pasteurella tularensis, Serological tests, Tables (data), Tularemia, Zoogeography.

2960-69

THE ONOGENIC ACTION OF BOVINE PAPIL-LOMA VIRUS IN HAMPSTERS.

M G Robl

Diss Abstr Sect B 29(3):826B

Sep 1968 Z5055.U49D53

Cattle, Hamsters, Laboratory animals, Neoplasms, Oogenesis, Papilloma, Research, Transplanting, Virus diseases (animals).

2961-69

B,V,A, DISTEMPER PILOT SCHEME,

D N Ryland

Vet Rec 83(24):608-609

14 Dec 1968 41.8 V641

Animal diseases, Caninc distemper, Dogs, Immu-nization. Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2962-69

EQUINE LEPTOSPIROSIS. (POR)

C A Santa Rosa A F P de Castro O C Filho D de Mello

Sao Paulo Inst Biol Arg 35(2, APR-JUN):61-65 REF

Jun 1968 442.9 SA6

Agglutination test, Guinea pigs, Horses, Immunodiagnosis, Leptospirosis, Serum. English abstract

2963-69

STATUS OF STATE-FEDERAL BRUCELLOSIS ERADICATION PROGRAM.

E A Schilf

U S Livestock Sanit Ass Proc 70:116-128 MAP 10 Oct 1966 49.9 UN3R

Agricultural regulation, Brucellosis, Eradication, Livestock diseases.

2961-69

ANTIBIOTIC-SENSITIVITY OF S- AND R-FORMS OF SALMONELLA MINNESOTA. (GE) S Schlecht O Westphal

Naturwissenschaften 55(10):494-495

Oct 1968 474 N213

Ampicillin, Antibiotics, Bacteriostats, Erythromycin, Salmonella, Tetracycline.

2965-69

MYCOSIS IN ANIMALS - SYSTEMIC DISEASE. IG Shaw

Vet Rec 83(24):635

14 Dec 1968 41.8 V641

Abortion, Aflatoxicosis, Aspergillosis, Fog fever, Fungus diseases (animals), Mycosis. Summary only: British Vcterinary Assoc. Congress, Sept. 16-20, 1968.

2966-69

SOME ASPECTS OF CARDIO-VASCULAR DIS-EASE IN THE DOG.

J P Sheridan

Vet Rec 83(24):608

14 Dec 1968 41.8 V641

Animal diseases, Animal physiology, Blood vessels, Diagnosis, Dogs, Heart, Surgery, Therapeutics. Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2967-69

USE OF ADULT MICE FOR POTENCY TEST-ING OF INACTIVATED TYPE O FOOT AND MOUTH DISEASE VACCINE,

F F Shevetsov S Kumar A C Goel B S Negi P N Khanna

Cur Sci 38(2):44-45

20 Jan 1969 475 SC123

Foot-and-mouth disease, Immunogenicity, Mice, Vaccines.

2968-69

RENAL PATHOLOGY OF THE FOWL. W G Siller

Vet Rec 83(24):611

14 Dec 1968 41.8 V641

Glomerulonephritis, Gout, Kidneys, Livestock diseases, Poultry, Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

BIBLIOGRAPHY

2969-69

BRUCELLOSIS IN BRITAIN.

J W Simpson Scot Agr 47(3,SUMMER):109-115 1968 10 SCO82SO

Aging, Agricultural legislation, Brucella abortus,

Brucellosis, Cattle, Disease control, Serological tests, Vaccines.

2970-69

A PROSPECTUS ON EQUINE INFECTIOUS ANEMIA WITH GUIDELINES.

W L Sippel

U S Livestock Sanit Ass Proc 70:245-254

10 Oct 1966 49.9 UN3R Agricultural regulation, Equine infectious anemia,

Horses, Virus diseases (animals).

2971-69

TRIALS AND TRIBULATIONS OF A STATE-WIDE MASTITIS PROGRAM.

A R Smith

U S Livestock Sanit Ass Proc 70:177-180

10 Oct 1966 49.9 UN3R

Agricultural regulation, Livestock discases, Mastitis, Milk.

2972-69

A NEW APPROACH TO DEVELOPMENT OF LIVE VACCINE AGAINST TICK-BORNE EN-CEPHALITIS.

A A Smorodintsev A V Dubov V I Ilyenko V G Platonov

J Hyg 67(1):13-20

Mar 1969 449.8 J82

Encephalitis, Insect vectors, Ixodes persulcatus, Ixodes ricinus, Methodology, Viral vaccines.

2973-69

THE PROTEINS SPECIFIED BY HERPES SIM-PLEX VIRUS. I. TIME OF SYNTHESIS, TRANSFER INTO NUCLEI, AND PROPERTIES OF PROTEINS MADE IN PRODUCTIVELY IN-FECTED CELLS.

P G Spear B Roizman Virology 36(4):545-555 REF

Dec 1968 448.8 V81

Cell nucleus, Electrophoresis, Herpes simplex, Human diseases, Proteins, Synthesis, Virus diseases (animals),

2974-69

ABC OF DOG DISEASES: A GUIDE FOR OWNERS AND BREEDERS. 3RD, EDITION. (GE) P Teichmann

270P REF LEIPZIG, EAST GERMANY, S.

HIRZEL VERLAG 1968 SF991.T4

Animal breeding, Animal diseases, Animal physiology, Dogs, Pets, Veterinary medicine.

2975-69

STATUS OF STATE-FEDERAL HOG CHOLERA ERADICATION PROGRAM.

M J Tillery

U S Livestock Sanit Ass Proc 70:326-334 MAP 10 Oct 1966 49.9 UN3R

Agricultural regulation, Hog cholera virus, Livestock diseases, Swine, Virus diseases (animals).

2976-69

THE ROLE OF MEAT INSPECTION IN A DIS-EASE REPORTING SYSTEM. G B Van Ness

U S Livestock Sanit Ass Proc 70:396-402 MAP 10 Oct 1966 49.9 UN3R

Agricultural regulation, Animal diseases, Livestock diseases, Meat, Meat inspection, Mycobacterium avium, Mycobacterium bovis.

22

2977-69

10 Feb 1969 505°P21

cines, Virology.

RESPONSE.

(animals)

LEIDEA). (GE)

1967 442.8 Z33F

Vet Rec 83(24):604

14 Dec 1968 41.8 V641

EAST COAST FEVER.

Advances Vet Sci 11:207-259 REF

B Volkmann

2980-69

CYST.

J Whitney

2981-69

2982-69

GEON.

E Williams

Brucellosis.

2983-69

K Work

2984-69

ABORTUS.

M J Zanardi

1967 448.3 AC8

Vet Rec 83(24):610

14 Dec 1968 41.8 V641

J K H Wilde

1967 41.8 AD9

2979-69

2978-69

ESSAY ON PREVENTION OF RABBIT RABIES BY MEANS OF A TISSUE EXTRACT OF THE INTERFERENCE TYPE INJECTED DURING THE INCUBATION PERIOD. (FR) J Vieuchange A Fayaz Acad Sci Compt Rend Ser D Sci Nat 268(6, 1ST SEMESTER):991-993 REF

Immunity, Rabbits, Rabies, Tissue culture, Vac-

HETEROTYPIC HOG CHOLERA PROTEC-TION IN SWINE: AN ANALYSIS OF THE

Antibodies, Hog cholera virus, Immunization, Livestock diseases, Swine, Virus diseases

COMPARATIVE ELECTRON MICROSCOPE

AND LIGHT MICROSCOPE STUDIES ON DIF FERENT DEVELOPMENTAL STAGES OF KLOSSIA HELICINA (COCCIDIA, ADE-

Coccidiosis, Cytology, Electron microscopy, Histology, Snails. English abstract

THE PATHOGENESIS OF INTERDIGITAL

Animal diseases, Diagnosis, Dogs, Interdigital fibroma, Keratins, Staphylococcus aureus. Summa-ry only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

Bibliography, Cattle, Disease transmission, East

coast fever, Epizootic diseases, Immunity, Morphology, Pathology, Protozoa, Taxonomy, Theileria parva, Tissue culture.

A literature review concerning East Coast Fever in

cattle including etiologic, pathologic, immunologic and therapeutic aspects of infection is presented.

The life cycle and means for culturing the disease

BRUCELLOSIS AND THE VETERINARY SUR-

Veterinarians. Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

ISOLATION OF TOXOPLASMA GONDII FROM

THE FLESH OF SHEEP, SWINE AND CATTLE.

Acta Pathol Microbiol Scand 71(2):296-306 REF

Antibodies, Cattle, Digestion, Dyes, Livestock dis-

eases, Parasitism, Serological tests, Sheep, Surveys,

AN ELECTRON MICROSCOPIC ANALYSIS OF PHAGOCYTES INFECTED WITH BRUCELLA

Swine, Toxoplasma gondii, Toxoplasmosis.

Diss Abstr Sect B 29(3):864B-865B

Livestock

diseases.

agent, Theileria parva, is also discussed.

Diagnosis,

U S Livestock Sanit Ass Proc 70:295-301 REF

F J Volenec D E Sheffy J A Baker

Z Parasitenk 29(2):159-208 REF

10 Oct 1966 49.9 UN3R

Sep 1968 Z5055.U49D53

Bacteriology, Brucella abortus, Electron microscopy, Guinea pigs, Parasitism, Phagocytes, Tissue culture, Virulence.

2985-69

SPREADING CHARACTERISTICS OF COM-MERCIAL HOG CHOLERA MODIFIED LIVE VIRUS VACCINES IN SWINE. I. IN VIVO STU-DIES.

M R Zinober L O Mott

US Livestock Sanit Ass Proc 70:310-325 REF 10 Oct 1966 49.9 UN3R

Hog cholera vaccines, Hog cholera virus, Immu-nization, Livestock discases, Research, Swinc, Virus diseases (animals).

ARTHROPODS

2986-69

INSECTS AND OTHER ARTIIROPODS OF IM-PORTANCE DURING 1967 IN HOUSEHOLDS AND ON LIVESTOCK IN ONTARIO. W C Allan

Entomol Soc Ontario Proc 98:11-12 MAP 1967 420 ON8

Arthropoda, Household pests, Insects, Livestock, Surveys, Time.

2987-69

A STUDY OF THE DISTRIBUTION OF GLOS-SINA IN ETHIOPIA. (FR)

J Balis P Bergeon World Health Organ Bull 38(5):809-813 REF 1968 449.9 W892B

Glossina, Insect identification, Livestock diseases, Trypanosomiasis, Zoogcography.

2988-69

A METHOD FOR ACCURATE COUNTING OF BLACKFLY LARVAE (DIPTERA: SIMU-LIIDAE).

L C Curtis

Mosquito News 28(2):238-239 Jun 1968 421 M85

Insect population statistics, Methodology, Sampling (statistics), Simuliidac.

2989-69

MITE PARASITES OF SMALL MAMMALS FROM SCRUB TYPHUS FOCI IN AUSTRALIA. **R** Domrow

Australian J Zool 15(4):759-798 MAP REF Aug 1967 410 AU73

Catalogs, Ecology, Host range, Host relationships, Mammals, Parasitic mitcs, Zoogeography.

2990-69

CONTROL OF LICE IN SHEEP AND CATTLE. N S M Macleod

Scot Agr 46(4,AUTUMN):201-204 1967 10 SCO82SO

Anoplura, Cattle, Chemical control (insects), In-secticides, Organophosphorus compounds, Shcep.

2991-69

CUTEREBRID INFESTATION OF MICROTUS IN EASTERN NORTH DAKOTA, PENNSYL-VANIA, AND NEW YORK. F W Maurer J E Skaley J Mammal 49(4):773-774 Nov 1968 410 J823 Cuterebra, Field mice, Larvac, Mice, Myiasis, Parasitic insects, Zoogcography.

PARASITES

2992-69

OESOPHAGOSTOMUM LONGICAUDUM GOODEY, 1925, (NEMATODA: CYATHOSTOMIDAE) IN PIG FROM THE STATE OF SAO PAULO, BRAZIL. (POR) V do Amaral A J L Develey Sao Paulo Inst Biol Arg 35(2, APR-JUN):83-85

Jun 1968 442.9 SA6 Oesophagostomiasis, Oesophagostomum longicaudum, Swine. English abstract

2993-69

DEMODECTIC PARASITES IN LIVESTOCK. D W Baker W F Fisher

US Livestock Sanit Ass Proc 70:409-416 REF 10 Oct 1966 49.9 UN3R

Acariasis, Demodex, Livestock diseases, Nematodes. Parasitism, Rhabditis, Verminous dermatitis.

2994-69

PHARMACODYNAMIC PROPERTIES ON NEW ANTHELMINTICS.

P Eyre Vet Rec 83(24):605

14 Dec 1968 41.8 V641

Anthelmintics, Fascioliasis, Livestock diseases, Nematodiasis, Parasitism, Pharmacology, Properties, Taeniasis, Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2995-69

TRICHINAE IN GARBAGE FED SWINE.

J C Jefferies V Beal T R Murtishaw W J Zimmermann

U S Livestock Sanit Ass Proc 70:349-357 MAP 10 Oct 1966 49.9 UN3R

Garbage, Livestock diseases, Parasitism, Swine, Trichinae, Trichinosis.

2996-69

HOST RESISTANCE IN THE CONTROL OF COCCIDIAL INFECTIONS.

L P Joyner Vet Rec 83(24):612

14 Dec 1968 41.8 V641 Chemicals, Coccidiosis, Immunity, Livestock diseases, Parasitism, Poultry, Resistance. Summary only: British Veterinary Assoc. Congress, Sept. 16-20, 1968.

2997-69

THE LIFE HISTORY OF COOPERIA PEC-TINATA RANSOM. **R** K Kcith

Australian J Zool 15(4):739-744 REF Aug 1967 410 AU73

Calves, Cooperia, Eggs, Larvac, Life cycle, Ne-matode morphology, Parasitic nematodes.

The life history of the nematode, Cooperia pectinata, a cattle parasite in Australia is discussed with observations on the morphology of its eggs and larvac.

2998-69

THE ULTRASTRUCTURE OF THE ALIMENTA-RY TRACT OF THE SKIN-PENETRATING LARVA OF NIPPOSTRONGYLUS BRASILIEN-SIS (NEMATODA). D L Lcc

J Zool 154(1):9-18 REF

Jan 1968 410.9 L84P

Electron microscopy, Gastrointestinal system, Histology, Larvac, Nematode morphology, Nippostrongylus brasiliensis, Ultrastructure.

2999-69

STOMACH WORM DISEASE IN YOUNG CAT-TLE.

A P C MacLaren

Scot Agr 47(1,WINTER):32-34

1967 10 SCO82SO

Cattle, Disease control, Life cycle, Livestock diseases, Organophosphorus compounds, Ostertagia ostertagi, Parasites, Symptomatology.

Cattle are parasitized by Ostertagia ostertagi which they pick up while grazing in infested pastures. The life cycle, symptoms, prevention, and treatments are discussed.

3000-69

SPRING RISE PHENOMENON IN OVINE HEL-MINTHIASIS II. IN STABLED EWES EXPERI-MENTALLY INFECTED WITH HAEMONCHUS CONTORTUS.

23

B G Procter H C Gibbs Exp Parasitol 23(3):323-330 REF Dec 1968 436.8 EX7 Diagnosis, Haemonchus contortus, Pregnancy, Sheep.

3001-69

SOME PARASITES FROM THE CEYLON FLEPHANT (ELEPHAS MAXIMUS). P Seneviratna

Ceylon Vet J 16(1/2,MAR-JUN):23 1968 41.8 C33 Animal discases, Elephants, Helminths, Parasites,

Zoogeography.

3002-69

LIVER FLUKE IN THE NORTH OF SCOT-LAND.

P L. Shanks

Scot Agr 47(3,SUMMER):159-160

1968 10 SCO82SO

Cattle, Drug therapy, Fasciola, Pest control, Sheep, Snails.

Liverfluke damage to cattle and sheep in Scotland and methods of eradicating both the fluke itself and its snail host are discussed.

3003-69

THE POST-EMBRYONIC DEVELOPMENTAL STAGES OF CESTODES. M Voge

Advances Parasitol 5:247-297 REF 1967 436.8 AD9

Animal diseases, Cestoda, Insects, Mites, Physiology. Includes animal diseases; insects and mites as intermediate hosts.

3004-69

THE POST-EMBRYONIC DEVELOPMENTAL STAGES OF CESTODES.

Development, Histochemistry, Host relationships,

A literature review of the life historics, structure, histochemistry, host relationships, and in vitro development of Cestoda is presented.

COMMODITY PROTECTION

MICROBIAL CONTAMINATION

SCREENING OF FEED COMPONENTS FOR SALMONELLA WITH POLYVALENT H AG-

THE ROLE OF MEAT INSPECTION IN PUBLIC

Agricultural regulation, Bacteria, Food contamina-

EXPERIENCES WITH CULTURE MEDIA FOR SELECTIVE MICROBIOLOGICAL ANALYSIS OF MEAT PRODUCTS. (GE)

Bacteria, Culture media, Food sanitation, Meat,

U S Livestock Sanit Ass Proc 70:376-395 REF

tion, Meat, Meat inspection, Public health.

Arch Lebensmittelhyg 19(4):84-89 REF

Food contamination,

Appl Microbiol 16(12):1872-1874 REF

Agglutination, Feed, Food co Proteins, Salmonella, Serological tests.

M Voge

3005-69

GLUTINATION.

Dec 1968 448.3 AP5

10 Oct 1966 49.9 UN3R

J A Barkate

3006-69

HEALTH.

J Payton

3007-69

G Reuter

Apr 1968 41.8 L49

Microhiology, Tables (data).

Advances Parasitol 5:247-297 REF 1967 436.8 AD9

Morphology, Tissue culture.

Asexual reproduction, Bibliography, Cestoda,

COMMODITY PROTECTION

3008-69

3008-69

THE BEHAVIOR OF SOME HUMAN-PATHOGENIC GERMS AND BACTERIAL TOX-INS IN FOOD AND THEIR DESTRUCTION THROUGH HEAT TREATMENTS OF THE FOOD PRODUCTS. I. SALMONELLA. (GE) D Streichan

Arch Lebensmittellig 19(4):89-93 REF Apr 1968 41.8 L49

Food, Food contamination, Fruit, Heat treatment, Human diseases, Meat, Milk, Oysters, Poultry products, Salmonella, Tobaeco, Toxins, Vegeta-bles.

ENVIRONMENTAL CONTAMINATION

3009-69

ON THE DISTRIBUTION OF PEST CONTROL AGENTS, (GE) H Majer-Bode

Naturwissenschaften 55(10):470-473 REF Oet 1968 474 N213

Adipose tissue (animals), Chlorinated hydrocar-bons, Dieldrin, DDT, Endosulfan, Insecticide residues, Organophosphorus compounds, Parathion, Soil contamination, Surveys.

A survey is made of pesticide residues found in soil, animal and plant tissues, and water. The degradation of organophosphorous compounds and ehlorinated hydrocarbons as they pass through various ecological systems are discussed.

RESIDUES

3010-69

EFFECTS OF SOIL MICROORGANISMS AND SOIL PROPERTIES OF THE DISSIPATION OF SELECTED PESTICIDES.

D A Addison

Diss Abstr Sect B 29(3):844B

Sep 1968 Z5055.U49D53

Pesticides, Soil bacteria, Soil fungi, Soil microorganisms, Soil properties.

3011-69

DDT RESIDUES AND METABOLITES IN CANADIAN ATLANTIC COAST FISH. J R Duffy D O'Connell

Can Fish Res Board J 25(1):189-195 R5F Jan 1968 442.9 C16J

Chlorinated hydroearbons, Chromatography, DDT, Fish, Insecticide residues, Metabolites, Salmon, Trout,

Tissues and organs of salmon, brook trout and mackerel were analyzed for DDT, DDD, DDE and other metabolites.

3012-69

PESTICIDE RESIDUE IN FRESHWATER FISH OILS AND MEALS.

L C Dugal

Can Fish Res Board J 25(1):169-172

Jan 1968 442.9 C16J

Animals, Biological assay, Chlorinated hydrocar-bons, Chromatography, Dieldrin, DDT, Feed, Fish meal, Heptachlor, Insecticide residues.

The level of pestieide residues in four freshwater fish used for animal foods was found to be at a satisfactory level with the exception of oil from the Lake Michigan alewife.

3013-69

INSECTICIDE MIXTURE, NOTICE OF EXTEN-SION OF TEMPORARY TOLERANCE. R E Duggan

Fed Regist 34(38):2624

26 Feb 1969 L1.451

Corn, Feed, Forage plants, Insecticide residues, Insecticides, Tolerances, Trimethylphenyl methylcar-bamate, 2,3,5-.

BIBLIOGRAPHY

3014-69 NOTICE OF FILING OF PETITION REGARD-ING PESTICIDE CHEMICALS.

R E Duggan

Fed Regist 34(48):5128

12 Mar 1969 L1.451 Agricultural products, Chemicals, Chloro-1-(2,4,5-

trichlorophenyl)vinyl dimethyl phosphate, 2-, Chromatography, Corn, Forage plants, Insecticide residues, Pesticides, Toleranees.

3015-69

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODI-TIES. ENDOSULFAN. R E Duggan Fed Regist 34(48):5100-5101 12 Mar 1969 L1.451 Agricultural products, Chemicals, Endosulfan, Fruit, Pesticide residues, Pesticides, Tolerances, Vegetables.

3016-69

NOTICE OF FILING OF PETITION REGARD-ING PESTICIDE CHEMICALS.

R E Duggan Fed Regist 34(44):4899

06 Mar 1969 L1.451

Cattle, Chemieals, Chloro-1-(2,4,5-triehlorophen-yl)vinyl dimethyl phosphate, 2-, Fats, Insecticide residues, Meat, Milk, Pesticides, Regulation (pesticides).

3017-69

DRUG RESIDUES, SYNERGISM AND AN-TAGONISM.

G T Edds

U S Livestock Sanit Ass Proc 70:421-426 REF 10 Oct 1966 49.9 UN3R

Aspergillus flavus, Drugs, Fungi, Insecticides, Pestieide residues, Steroids, Synergism, Toxicology.

3018-69

BIOLOGICAL METHODS FOR THE DETEC-TION OF PESTICIDE RESIDUES. (IT

S Foschi A Cesari E Olmo

Giornate Fitopatol 91-104 REF

26 Mar 1967 SB599.G5

Biology, Fungi, Inseets, Methodology, Pesticide residues, Protozoa, Statistical methods.

The method uses the following animals and fungi: Drosophila melanogaster, Tribolium confusum, T. eastaneum, Calandra oryzac, Daphnia magna, D. pulex, Artemia salina, Tetrahymcna pyriformis, Aspergillus niger, Alternaria solani, A. tenuis, Botrytis cinerea, Rhodotorula glutinis, Saccharo-myces eerevisiae and Torulopsis puleherimma.

3019-69

A STUDY OF PYRAZON AND ITS HER-BICIDAL RESIDUES IN THE SOIL. H M Hepworth

Diss Abstr Sect B 29(3):899B

Sep 1968 Z5055.U49D53

Beans, Grain, Growth factors, Herbieide residues, Humidity, Mustard, Pyrazon, Soil temperature, Soils, Sugar beets, Toxicology.

3020-69

RESIDUES OF MALATHION ON INDIAN RAPE SEED (BRASSICA CAMPESTRIS 6. VAR. DICHOTOMA WATT).

V S Kavadia R Lal

Indian J Agr Sci 38(4):708-713

Aug 1968 22 AG831

Biologieal assay, Bird rape, Chemieal analysis, Chemieal control (insects), Drosophila melanogaster, Insecticide residues, Malathion, Statistical analysis.

3021-69

QUALITATIVE AND QUANTITATIVE DETER-MINATION OF EKATIN RESIDUES AND ANALYTICAL RESULTS OBTAINED IN VARI-OUS CULTURES. (IT) B La Roche

24

Giornate Fitopatol 87-90

26 Mar 1967 SB599.G5

Aearieides, Aphididae, Chemical analysis, Chromatography, Degradation, Ekatin, Food plants, Insecticide residues, Metabolites, Toxieity.

3022-69

REPRODUCTION IN BROOK TROUT (SAL-VELINUS FONTINALIS) FED SUBLETHAL CONCENTRATIONS OF DDT. K J Maeek

Can Fish Res Board J 25(9):1787-1796

Sep 1968 442.9 C16J

DDT, Fish, Insecticide residues, Mortality, Reproduction.

3023-69 **INVESTIGATION**

INTO HERBICIDE **RESIDUES. (GE)**

H Majer-Bode

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):203-209

Feb 1967 410.9 G31M

Chemical analysis, Diquat, Herbicide residues, Herbicides, Plant analysis, Potatocs, Rye, Surveys. English abstract

3024-69

DRUG RESIDUES AND THE VETERINARY PROFESSION.

P C Manley

U S Livestock Sanit Ass Proc 70:434-435

10 Oct 1966 49.9 UN3R

Antibioties, Drugs, Food, Humans, Pesticides, Residues, Vcterinary medicine.

3025-69

3026-69

D L Mays

traeers. Rats.

3027-69

3028-69

3029-69

R C Meier

COMMERCIAL ASPECTS OF PESTICIDE RESIDUES IN FOODSTUFF. (IT

Agricultural products, Chlorinated hydroearbons, Dieldrin, DDT, Food contamination, Forcign trade, Organophosphorus compounds, Parathion, Pesticide residues, Tolerances, Vegetables.

THE DISTRIBUTION, EXCRETION, AND METABOLITES OF MALEIC HYDRAZIDE IN RATS AND A METHOD FOR THE DETECTION OF MET A DETUNION OF METHOD STREAM

Animal metabolism, Carbon, Chromatography, Excreta, Lettuce, Malcic hydrazide, Metabolites, Metaldehyde, Pesticide residues, Radioaetive

Midwest Reg Turf Conf Proc 1968 MEETING:26

Accident prevention, Chemicals, Equipment, Fun-gieides, Herbicides, Insecticides, Turf.

A CHECK OF THE RESISTANCE TO WASII-ING OF VARIOUS PESTICIDES ON APPLES AND GRAPES. (IT)

Apples, Captan, Chlorinated hydrocarbons, Deter-

gents, Grapes, Irrigation, Mevinphos, Or-ganophosphorus compounds, Parathion, Pestieide residues, Resistance, Tables (data), Water.

GAS CHROMATOGRAPHIC STUDY ON THE ENVIRONMENTAL AND FOODSTUFF POLLU-TION THROUGH RESIDUES OF SYNTHETIC ORGANO-CHLORINATED INSECTICIDES. (IT

OF METALDEHYDE IN PLANTS.

Diss Abstr Sect B 29(3):915B Sep 1968 Z5055.U49D53

WOULD YOU BELIEVE .

04 Mar 1968 60.19 M58

E Olmo B Guiati R Stanzani

B Paeeagnella L Prati G Cavazzini

Giornate Fitopatol 67-77 REF

26 Mar 1967 SB599.G5

Giornate Fitopatol 59-65 26 Mar 1967 SB599.G5

G Mannelli

Giornate Fitopatol 45-48 26 Mar 1967 SB599.G5

Chlorine, Chromatography, Crops, Environment, Insecticide residues, Milk, Organic compounds, Water pollution. Residues of 10 insecticides were investigated among them were DDT, BHC, lindanc, dieldrin and heptachlor.

3030-69

A KINETIC ANALYSIS OF HERBICIDE DEGRADATION IN SOIL. R L Zimdahl

Diss Abstr Sect B 29(3):849B

Sep 1968 Z5055.U49D53

Degradation, Herbicide residues, Herbicides, Kinetics, Loam, Soil analysis.

TOXICOLOGY

3031-69

THE ROLE OF INTERFACIAL WATER IN THE TOLERANCE OF ROOTS TO TOXIC SOLU-TIONS.

E E Albregts

Diss Abstr Sect B 29(3):839B-840B

Scp 1968 Z5055.U49D53

Corn, Growth factors, Plant physiology, Roots, Tolerances, Toxicology, Water.

3032-69

EFFECT OF SUBLETHAL DDT ON THE LATERAL LINE OF BROOK TROUT, SAL-VELINUS FONTINALIS.

J M Anderson

Can Fish Res Board J 25(12):2677-2682

Dec 1968 442.9 C16J

Animal physiology, DDT, Mortality, Nervous system, Temperature, Toxicology, Trout.

DDT makes the lateral line nerve of the trout, Salvelinus fontinalis, hypersensitive to low frequency pressure waves and cold temperatures.

3033-69

EFFECT OF PH AND IONIC FORCE ON THE REACTION RATE OF ORGANOPHOSPHORUS COMPOUNDS WITH SERUM-DERIVED COMPOUNDS W CHOLINESTERASE. A P Brestkin I L Brik

Biokhimiya 32(5,PT 2,SEP-OCT):833-838 REF Oct 1967 385 B523

Cholinesterases, Horses, Hydrogen-ion concentra-tion, Organic compounds, Phosphorus compounds, Scrum, Toxicology. Russian journal- vol. 32(5):1004-1010, Sep-Oct, 1967

30.34-69

PROCEDURE FOR AERIAL SPRAYING OF SERRATED TUSSOCK.

M H Campbell

Agr Gaz New S Wales 79(1):16-20 Jan 1968 23 N472

Aerial weed control, Chemical control (weeds),

DPA, Methodology, Nassella trichotoma, Pasture management, Poisonous plants, Spraying.

Serrated tussock (Nassella trichotoma) is a plant toxic to livestock, methods of its erradication are discussed, especially acrial spraying with DPA.

3035-69

NITRATE-NITRITE INTOXICATION IN SWINE.

T M Curtin W T London US Livestock Sanit Ass Proc 70:339-348 REF

10 Oct 1966 49.9 UN3R

Livestock diseases, Nitrates, Nitrites, Poisoning, Swine, Toxicology.

3036-69

FIRST AID IN CASES OF ACUTE POISONING WITH AGRICULTURAL PESTICIDES. (IT) F Fini

Giornate Fitopatol 35-43

26 Mar 1967 SB599.G5

Accident prevention, Medicine, Poisoning, Symp-tomatology, Therapy. Contains listing of active in-gredients of pesticides, symptoms of poisoning and indicated therapy.

3037-69

THE METABOLISM OF PIPERONYL BUTOX-IDE IN THE RAT WITH CI4 IN THE METHYLENEDIOXY OR ALPHA-METHYLENE GROUP.

L Fishbein H L Falk J Fawkes S Jordan B Corbett

J Chromatography 41(1):61-79

22 Apr 1969 475 J824

Animal metabolism, Carbon-14, Chromatography, Insecticide syncrgists, Piperonyl butoxide, Radioactive tracers, Rats.

3038-69

DEGRADATION OF DDT IN ATLANTIC SAL-MON (SALMO SALAR).

G L Greer U Paim

Can Fish Res Board J 25(11):2321-2326 REF Nov 1968 442.9 C16J Adsorption, Chemical analysis, Chromatography,

DDT, Metabolism, Salmon.

DDT absorbed by Atlantic salmon (Salmo salar) was changed metabolically into the less toxic substances DDE and TDE within nine hours, as shown by thin-layer chromatography.

3039-69

WATER CONTAINING ALGAE MAY BE DAN-GEROUS TO STOCK. J S Healey

Agr Gaz New S Wales 79(3):157-159

Mar 1968 23 N472

Algae, Anacystis cyanea, Animal physiology, Aquatic plants, Livestock, Poisoning, Water pollution.

Certain strains of algae contain a substance that is quite toxic to animals. Drinking of algae con-taminated water may cause death; dcad algae are more toxic. The symptoms and prevention of this kind of poisoning are discussed.

3040-69

GROWTH AND RESISTANCE TO STRESS IN BROOK TROUT FED SUBLETHAL LEVELS OF DDT.

K J Macek

Can Fish Res Board J 25(11):2443-2451 REF Nov 1968 442.9 C16J

DDT, Environmental effects, Mating habits, Mortality, Starvation, Stress, Temperature, Toxicity, Trout.

Evidence suggests that the mortality of DDT ex posed trout was due to the interaction of DDT residues with a combination of environmental stresses, namely starvation, decreasing water tem-perature, and possibly the physiological stress as-sociated with the spawning season.

3041-69

ELECTROCARDIOGRAPHIC ASPECTS OF EX-PERIMENTAL POISONING. (IT) **METHYL-PARATHION** E Orlando G B Raffi Giornate Fitopatol 29-34 REF 26 Mar 1967 SB599.G5 Animal adaptation, Animal physiology, Electrocar-diograms, Laboratory animals, Methyl parathion, Poisoning, Symptomatology. 3042-69

ASPERTOXIN, A HYDROXY DERIVATIVE OF O-METHYLSTERIGMATOCYSTIN FROM AFLATOXIN-PRODUCING CULTURES OF ASPERGILLUS FLAVUS.

J V Rodricks E Lustig A D Campbell L Stoloff Tetrahedron Lett (25):2975-2978 May 1968 385 T29

Aflatoxin, Aspergillus flavus, Aspertoxin, Sterigmatocystins.

3013-69

POSSIBLE TOXIC EFFECTS OF ACCESSORY SUBSTANCES OF PESTICIDE PRODUCTS. (IT) M Tirelli Giornate Fitopatol 79-80 26 Mar 1967 SB599.G5 Aerosols, Botrytis cincrea, Chlorine, Copper, Fungicides, Oxides, Pesticides, Toxicity, Winc

25

3044-69

INFLUENCE OF REFRIGERATION ON AFLATOXIN PRODUCTION. (ABSTRACT). M Van Walbeek T Clademenos F S Thatcher Can J Public Health 60(1):34 Jan 1969 449.8 P964 Aflatoxin, Aspergillus flavus, Refrigeration, Temperature, Toxins.

PLANT PHYSIOLOGY & BIOCHEMISTRY

3045-69

HISTONES--ANIMAL AND VEGETABLE. Nature 220(5168):650 16 Nov 1968 472 N21 Animals, Biochemistry, Deoxyribonucleic acid, En-zymes, Gencs, Histoncs, Vcgctables.

3046-69

THE INFLUENCE OF PLANTS ON THE INAC-TIVATION OF SOIL HERBICIDES FOR EXAM-PLE OF SIMAZINE AND ATRAZINE. (GE) J Alkamper

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):195-202

Feb 1967 410.9 G31M

Atrazine, Corn, Cover crops, Decomposition, Herbicides, Phytotoxicity, Plant metabolism, Simazine. English abstract

3047-69

A NEW HERBICIDE FOR USE ON CUL-TIVATED PLANTS. (IT) G Bernardini

Giornate Fitopatol 493-497

26 Mar 1967 SB599.G5 Beans, Cabbage, Carrots, Cauliflower, Chemical control (weeds), Chlorinated hydrocarbons,

Redpeppers (vegctable), Tomatoes, Trifluralin.

30.18-69

GIBBERELLIC ACID AND ITS USE IN FRUIT CULTURES, (IT)

B Dal Bianco Giornate Fitopatol 631-634 REF

26 Mar 1967 SB599.G5

31 Jan 1969 470 SCI2

P Grignac A Salis

Phytoma 20(199):15-20

Jun 1968 464.8 P563

07 Mar 1969 470 SCI2

3052-69

W W Heck

Apples, Fruit culture, Gibberellic acid, Peaches, Plant regulators.

3049-69

Bacteria,

3050-69

TESTS

co.

CHLOROPLAST **RIBOSOMES:** STEREOSPECIFICITY OF INHIBITION BY CHLORAMPHENICOL. **R** J Ellis Science 163(3866):477-478 REF

Chloroplasts, Plant physiology, Ribosomes, Tobac-

CHLOROETHYL)TRIMETHYLAMMONIUM

CHLORIDE ON VARIETIES OF HARD WHEAT.

Chloroethyl)trimethylammonium chloride, (2-, Crop varieties, Dosage, Nitrogen, Plant physiology, Plant regulators, Research, Wheat.

ETHYLENE: A FACTOR IN DEFOLIATION IN-DUCED BY AUXINS.

Aerial spraying, D, 2,4-, Defoliation, Ethylene, Plant physiology, Plant regulators, T, 2,4,5-.

FACTORS INFLUENCING EXPRESSION OF OXIDANT DAMAGE TO PLANTS.

M Hallaway D J Osborne Science 163(3871):1067-1068 REF

OF

Chloramphenicol,

(2-

Biochemistry,

Annu Rev Phytopathol 6:165-188 REF

1968 464.8 AN72 Air pollution, Photochemistry, Phytotoxicity, Plant biochemistry, Plant injuries, Plant physiology.

3053-69

STORAGE EFFECTS ON FORCING RESPONSE AND GIBBERELLIN LEVELS IN EASTER LI-LIES.

L L Hill

Diss Abstr Sect B 29(3):832B

Sep 1968 Z5055.U49D53

Biological assay, Gibberellins, Lilium longillorum, Plant metabolism, Plant physiology, Storage, Temperature.

3054-69

MOTHER-DAUGHTER FROND INTERACTION IN THE COURSE OF GROWTH OF IN THE COURSE OF GROWTH OF DUCKWEED (LEMNA MINOR L.) COLONY, (RUS)

V B Kasinov

Bot Zhur (moscow) 53(11):1558-1568 Nov 1968 451 R923

Lemna minor, Plant ecology, Plant physiology. English abstract

3055-69

THE STEROL ESTERS OF MAIZE SEEDLINGS. R J Kemp E I Mercer

Biochem J 110(1):111-118 REF

Nov 1968 382 B52

Biochemistry, Chromatography, Corn, Esters, Ex-tracts, Lipids, Plant physiology, Residues, Scutel-lum, Seed germination, Seedlings, Sterols, Tables (data). Tissue culture.

3056-69

STUDIES ON THE STEROLS AND STEROL ESTERS OF THE INTRACELLULAR OR-GANELLES OF MAIZE SHOOTS. R J Kemp E I Mercer

Biochem J 110(1):119-125

Nov 1968 382 B52

Biochemistry, Cell nucleus, Cells, Chloroplasts, Cholesterol, Corn, Esters, Microsomes, Mitochondria, Sterols, Tables (data), Tissues.

3057-69

LOSS OF GIBBERELLINS BY LEACHING BY FOLIAGE OF FROM STEMS AND FOLIAGI CHRYSANTHEMUM MORIFOLIUM CESS ANNE'

P C Kozel H B Tukey

Amer J Bot 55(10,NOV-DEC):1184-1189 REF 1968 450 AM36

Biological

assay Chromatography, Chrysanthemum morifolium, Extraction, Frac-tionation, Gibberellins, Metabolites, Photoperiodism, Plant nutrition, Plant physiology, Rainfall, Silica gels, Soil leaching.

3058-69

PHYSIOLOGICALLY ACTIVE SUBSTANCE IN CAPSELLA BURSAPASTORIS.

K Kuroda K Takagi Nature 220(5168):707-708

16 Nov 1968 472 N21

Alcohols, Biochemistry, Capsella hursa-pastoris, Drug plants, Peptides, Pharmacology, Plant ex-tracts, Plant physiology.

3059-69

PHENETIIYL ALCOHOL AND TRYPTOPHOL: AUTOANTIBIOTICS PRODUCED BY THE FUN-GUS CANDIDA ALBICANS.

B T Lingappa M Prasad Y Lingappa D F Hunt K Biemann

Science 163(3863):192-194

10 Jan 1969 470 SCI2

Alcohols, Antibiotics, Candida alhicans, Chemicals, Fungus cultures, Plant growth inhibitors, Spectrometry.

3060-69

LOCALIZATION OF DEHYDROGENASES IN THE NODULAR TISSUES OF LEGUMINOUS CROPS,

Y V Peive B A Yagodin G A Ovcharenko G F Khailova

Acad Sci U Ssr Dokl Bot Sci 179(MAR-APR):58-60 RFF

1968 511 P444AE

Beans, Dehydrogenases, Field crops, Legumes, Nitrogen-fixing bacteria, Plant biochemistry, Rhizobium, Symbiosis, Tissues. Translated from Russian.

3061-69

THE EFFECT OF ANTI-FUNGAL ANTIBIOTICS ON THE NODULATION OF TRIFOLIUM SUB-TERRANEUM AND THE ESTIMATION OF **RIHZOBIUM TRIFOLII POPULATIONS.** A C Robinson

Australian J Exp Agr Anim Husb 8(32):327-331 REF

Jun 1968 23 AU792

Antibiotics, Cycloheximide, Fungicides, Griseoful-vin, Mycostatin, Nodules (plants), Plant physiolo-gy, Rhizobium trifolii, Subterranean clover.

3062-69

TRANSLOCATION PATTERNS OF SELECTED HERBICIDES AND INFLUENCE OF FENAC ON SOME PHYSIOLOGICAL AND HISTOLOGI-CAL CHANGES IN MUGWORT. A B Rogerson

Diss Abstr Sect B 29(3):833B Sep 1968 Z5055.U49D53

Artemisia vulgaris, Biochemistry, Fenae, Green-house culture, Herbicides, Plant histology, Plant physiology, Plant translocation, Radioactive tracers.

3063-69

METAMORPHOSIS IN ONTOGENESIS OF PARASITIC ANGIOSPERMOUS PLANTS, E S Terekhin

Acad Sci U Ssr Dokl Bot Sci 178(JAN-FEB):20-22

1968 511 P444AE

Angiospermae, Metamorphosis, Parasitism, Plant physiology, Plants. Translated from Russian.

3064-69

SEASONAL CHANGES IN GIBBERELLIN-LIKE COMPOUNDS IN OVARIES AND YOUNG FRUITS OF NAVEL ORANGE.

W J Wiltbank

Diss Abstr Sect B 29(3):820B Sep 1968 Z5055.U49D53

Abscission, Biochemistry, Climate, Gihberellins, Indoleacetic acid, Oranges, Ovaries, Plant metabol-Plant physiology, Radioactive tracers, ism. Weather.

3065-69

THE EFFECTS OF TREATMENTS AGAINST OSTRINIA (PYRAUSTA) NUBILALIS HB. ON THE PRODUCTION OF HYBRID CORN. (IT) S Zangheri L Masutti

Giornate Fitopatol 345-352

26 Mar 1967 SB599.G5

Chemical control (insects), Chlorinated hydrocar-bons, Corn, Crop varieties, Crop yields, DDT, Ostrinia nubilalis.

CHEMISTRY

3066-69

A NOVEL METHOXYLATION DURING OX-IDATION OF SIMPLE DIHYDROPYRIMIDO (5,4-E)-AS- TRIAZINES.

M E C Biffin D J Brown Tetrahedron Lett (21):2503-2506 Apr 1968 385 T29 Antibiotics, Chemical reactions, Defoliants, Triazines

3067-69

THE UTILIZATION OF THE IN VITRO CHOLINESTERASIS REACTION FOR THE IDENTIFICATION AND SEPARATION OF IN-SECTICIDE RESIDUES. (IT)

26

A Cesari E Olmo B Gujatj Giornate Fitopatol 129-132 26 Mar 1967 SB599.G5 Azinphosmethyl, Chemical analysis, Chemical reactions, Cholinesterases, Chromatography, In vitro, Insecticide residues, Mevinphos, Parathion.

3068.69

ABSORBTION AND DEGRADATION OF ZINEB, (IT)

A A Del Re P Fontana

Giornate Fitopatol 287-290 26 Mar 1967 SB599.G5

Absorption, Degradation, DMSO, Solvents, Thiocarbamates, Zineb.

3069-69

GIBBERELLIN A24, AN ALDEHYDIC GIB-BERELLIN FROM GIBBERELLA FUJIKUROI. D M Harrison J MacMillan R H B Galt Tetrahedron Lett (27):3137-3139 May 1968 385 T29 Aldehydes, Chromatography, Gibberella fujikuroi, Gibberellins, Lupinus luteus

3070-69

THE PISCICIDAL CONSTITUENTS CALOPHYLLUM INOPHYLLUM LINN. OF K Kawazu H Ohigashi T Mitsui

Tetrahedron Lett (19):2383-2385

Mar 1968 385 T29

Biological assay, Calophyllum inophyllum, Chro-matography, Fish poisons, Leaves, Plant extracts.

3071-69

3072-69

W G Wang

3073-69

3074-69

G Costantino

Helicopters.

IN RICE FIELDS. (IT)

26 Mar 1967 SB599.G5

Giornate Fitopatol 465-474

3075-69

A Finassi

compounds.

(IT)

STRUCTURE OF LEMMASTERONE, A NOVEL C29 INSECT-MOULTING SUBSTANCE FROM LEMMAPHYLLUM MICROPHYLLUM. T Takemoto Y Hikino T Arai H Hikino

Tetrahedron Lett (37):4061-4064 Jul 1968 385 T29

Diss Abstr Sect B 29(3):904B-905B

Sep 1968 Z5055.U49D53

FRUIT ORCHARDS, (IT)

A Cesari F Donati S Foschi A Ugolini

Giornate Fitopatol 569-592 REF 26 Mar 1967 SB599.G5

Giornate Fitopatol 593-609 REF 26 Mar 1967 SB599.G5

Hormones, Lemmaphyllum microphyllum, Lem-

masterone, Mass spectra, Molting (insects). Protein synthesis, Sarcophaga, Steroids.

THE EFFECT OF THE ASSOCIATION OF OR-

GANIC MATERIAL WITH CLAYS ON PARATHION AND DDT ADSORPTION.

Adsorption, Clay soils, DDT, Parathion, Surface chemistry, Water.

ENGINEERING

COMPARATIVE TESTS AMONG VARIOUS MACHINES USED FOR PEST CONTROL IN

Costs, Dusting equipment, Equipment, Fumigation, Fungi, Insect pests, Mist blowers, Nematodes.

AERIAL ACTIVITY IN ITALIAN AGRICUL-TURE IN THE PERIOD FROM 1963 TO 1966.

Aerial spraying, Aircraft, Chemical control (pests).

MECHANICAL MEANS FOR WEED CONTROL

Aerial spraying, Carbamates, Chemical control (weeds), Propanil, Rice, Spraying equipment, Urea

3079-69

3076-69

THE SOUTH COOK COUNTY MOSQUITO ABATEMENT DISTRICT RIGHT HAND DRIVE IN SERVICE. B E Johns

Mosquito News 28(2):237-238 Jun 1968 421 M85

Chemical control (insects), Culicidae, Methodology, Spraying equipment.

3077-69

AN AUTOMATIC SPRAYING APPARATUS FOR LABORATORY EXPERIMENTS. (GE F Kersting

Berlin Biol Bundesanst Land-forstwirtsch Mitt (121):285-288

Feb 1967 410.9 G31M Herbicide application, Laboratory equipment, Spraying equipment. English abstract

INDUSTRY

3078-69

THE CAMPAIGN OF THE NATIONAL SOCIETY FOR THE PREVENTION OF AC-CIDENTS AGAINST THE USE OF PESTICIDES, WITH PARTICULAR REFERENCE TO THE EMILIA-ROMAGNA REGION. (IT) A Rimondi

Giornate Fitopatol 141-149 MAP 26 Mar 1967 SB599.G5 Accident prevention, Chemical control (pests), Education, Pesticides, Public health, Societies, Toxicity.

ECONOMICS

3079-69 MODERN HONEY PROCESSING. V A Cook New Zeal J Agr 118(2):51,53,55 Feb 1969 23 N48J Equipment, Food processing, Honey.



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The leucocyte counts of cattle aborting due to Brucella abortus infection compared to leucocyte counts of noninfected cattle calving normally.

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