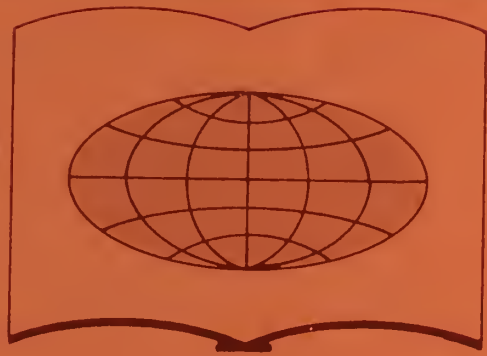


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# Pesticides DOCUMENTATION BULLETIN

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Volume 4  
JULY 19, 1968

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# PESTICIDES DOCUMENTATION BULLETIN

A BI-WEEKLY PUBLICATION OF

U. S. DEPARTMENT OF AGRICULTURE

Volume 4

July 19, 1968

Number 15

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

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- 10 Entomology
- 20 Crop Protection
- 30 Livestock Protection
- 40 Commodity Protection
- 50 Environmental Contamination
- 55 Residues
- 60 Toxicology
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- 70 Chemistry
- 80 Engineering
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# 10 ENTOMOLOGY

## Systematics

- Aug 1967 Q1.S34  
Arthropoda, Insect ecology, Oases.
- 14800-68  
DIPTERA FROM NEPAL. ANTHOMYIIDAE.  
D M Ackland  
Brit Mus (natur Hist) Entomol Bull Suppl 20(4):105-139  
1967 420 B773  
Anthomyiidae.  
\*Includes n. spp.
- 14801-68  
THE COEXISTENCE OF INSECT PARASITES AND HOSTS IN LABORATORY ECOSYSTEMS.  
B Al-Hafidh  
Entomol Soc Amer Ann 56(5):676-678, 3 REFS.  
Sep 1963 420 EN82  
Insect rearing, Parasitic insects, Trialeurodes.
- 14802-68  
INTERESTING CAPTURES FROM THE TOUDON REGION (A-H). (FB )  
G Alziar  
Entomops 8:262-264  
28 Apr 1967 QL461.E53  
Lepidoptera.
- 14803-68  
DYNAMICS OF POPULATIONS. II. FACTORS CONTROLLING POPULATION GROWTH AND POPULATION SIZE IN DROSOPHILA PSEUDOOSCUBA AND IN DROSOPHILA MELANOGASTER.  
F J Ayala  
Ecology 48(1):67-75, BEP. 410 EC7  
Drosophila melanogaster, Drosophila pseudoobscura, Insect ecology.  
Abstract
- 14804-68  
MINED RUDS, A HIBERNATION SITE FOR SPBUCE BUDWOBB.  
H O Batzer  
J Econ Entomol 53(4):684, BIRL.684-685  
Aug 1960 421 J822  
Balsams, Choristoneura, Hibernation, Picea.
- 14805-68  
HYMENOPTERA FROM TUBKEY SPHECIDAE, I. (FB )  
J De Beaumont  
Brit Mus (natur Hist) Entomol Bull Suppl 19(5):251-382  
02 Jun 1967 420 B773  
Sphecidae.  
Includes n. spp.
- 14806-68  
ESTIMATION OF DENDROCTONUS BREVICOMIS (COLEOPTERA-SCOLYTIDAE) MORTALITY CAUSED BY INSECT PREDATORS.  
A A Berryman  
Can Entomol 99(10):1009-1014  
Oct 1967 421 C16  
Predaceous insects, Scolytidae.
- 14807-68  
CHEMICAL RELEASES OF SOCIAL BEHAVIOR-IV. THE BINDGUT AS THE SOURCE OF THE ODOB TRAIL PREGHONE IN THE NEOTROPICAL ABMY ANT GENUS ECITON.  
M S Blum C A Portocarrero  
Entomol Soc Amer Ann 57(6):793-794, 6 BEFS.  
Nov 1964 420 EN82  
Eciton, Pheromone, Scent glands.
- 14808-68  
SOME DIFFICULT TO DISTINGUISH SPECIES OF THE GENUS HYPEBECTEINA SCRIBER (DIPTERA, LARVAEVOBIDAE). (BUS )  
K B Borisova-Zinoveva  
Acta Ent Bohemoslov 63(6):420-439  
1969 420 C33  
Hyperecteina, Tachinidae.  
Includes h. subcinerea n. sp., key.
- 14809-68  
ECOLOGY OF AN OASIS.  
J L Cloudsley-Thompson  
Sci J 3(8):47-53, MAP
- 14810-68  
ON THE ECOLOGY OF ANTHOCORIS NEMORUM (L) (HEMIPTERA: HETEROPTERA).  
E Collyer  
Boy Entomol Soc London Proc Ser A Gen Entomol 42(719):107-118 REF  
26 Sep 1967 420 L84PA  
Heteroptera, Insect ecology, Insect rearing.
- 14811-68  
THE DISTRIBUTION, LIFE HISTORY, AND ECONOMIC IMPORTANCE OF THE WINTER MOTH, OPEBOPHTERA BBUMATA (L.) (LEPIDOPTERA, GEOMETRIDAE) IN NOVA SCOTIA.  
F G Cnning  
Can Entomol 93(2):135-142, TABS.  
Feb 1961 421 C16  
Insect behavior, Insect dissemination, Insect morphology, Insect pests, Moths, Nova Scotia.
- 14812-68  
STUDIES OF THE GYPONIDAE' A NEW GENUS- CHLOBONANA (HOMOPTERA' CICADELLIDAE).  
D M DeLong P H Freytag  
Entomol Soc Amer Ann 57(4):503-511, 3 REFS., 73 FIGS.  
Jul 1964 420 EN82  
Chloronana, Gyponinae, Insect taxonomy.
- 14813-68  
SAMPLING STUDIES WITH AEDES VEXANS AND SOME OTHER WISCONSIN AEDES (DIPTERA: CULICIDAE).  
R J Dicke  
Entomol Soc Amer Ann 58(6):927-930, 8 BEFS., 3 TABS.  
Nov 1965 420 EN82  
Aedes, Culicidae, Insect biology.
- 14814-68  
PARASITES AND PREDATORS ASSOCIATED WITH FIVE SPECIES OF LEAF-MINING INSECTS IN BLACK LOCUST.  
C K Dorsey  
Entomol Soc Amer Ann 58(6):933-934, 5 BEFS.  
Nov 1965 420 EN82  
Agromyzidae, Parasites, Robinia pseudoacacia.
- 14815-68  
SPIDERS OF THE ARKANSAS COTTON FIELD.  
H Exline R C Hunter  
Entomol Soc Amer Ann 56(5):653-659, 8 REFS., 1 TAB.  
Sep 1963 420 EN82  
Cotton, Spiders.
- 14816-68  
A STUDY OF THE CAPABILITY OF THE RICE WEEVILS SITOPHILUS SASAKII AND S. ORYZAE TO REPRODUCE PARTHENOGENETICALLY.  
E H Floyd  
Entomol Soc Amer Ann 58(4):565-567, 6 BEFS.  
Jul 1965 420 EN82  
Parthenogenesis, Reproduction, Sitophilus.
- 14817-68  
EFFECT OF TEMPERATURE, AERATION, PH, AND THE PRESENCE OF SOIL ON THE TOXICITY OF VARIOUS INSECTICIDES TO MOSQUITO LARVAE.  
J E Gahan H E Ford  
Fla Entomol 42(3):105-108, 4 REFS., 4 TABS.  
Sep 1959 420 P662  
Culicidae, Diazinon, Larvae, Malathion, Parathion.
- 14818-68  
CORRELATION OF EUROPEAN CHAPEL DEVELOPMENT WITH THE FLOWERING PERIOD OF COMMON PLANTS.  
F L Gambrell  
Entomol Soc Amer Ann 56(2):239-243, 1 BEP.  
Mar 1963 420 EN82  
Amphisallon, Insect morphology.
- 14819-68  
SUMMER MIGRATION OF THE ALFALFA WEEVIL, HYPEBA POSTICA (COLEOPTERA: CURCULIONIDAE).  
G G Gyrisco  
Entomol Soc Amer Ann 56(2):239-243, 1 BEP.  
Sep 1965 420 EN82  
Curculionidae, Insect migration.
- 14820-68  
ON THE LIFE HISTORY AND HABITS OF THE PALM WEEVIL, RHYNCHOPHOBUS PALMABIIUM.  
E A C Hagley



## BIBLIOGRAPHY

10 14821-68

- Entomol Soc Amer Ann 58(1):22-28, 16 REFS., 3 TARS.  
Jan 1965 42D ENR2  
Insect biology, Palmae, Rhynchophorus.
- 14821-68  
A CLARIFICATION OF CERTAIN STRUCTURES IN THE THORACIC REGION OF OXYRHACHIS (HOMOPTERA:MEMBRACIDAE).  
S G Hasenoechrl P P Cook Jr  
Entomol Soc Amer Ann 58(2):219-221, 4 REFS., 4 FIGS.  
Mar 1965 42D ENR2  
Insect taxonomy, Oxyrhachis, Stictocephala, Thorax.
- 14822-68  
SOIL FAUNA RESEARCH IN THE FOREST OF MAURES (VAR). THE DALE CF FOURNEL (COLEOPTERA). (FR )  
P Herve  
Entomops 8:249-254  
28 Apr 1967 QL461.E53  
Amauropidius, Coleoptera, Forest insects,  
Leptotyphlus dujardini, Soil insects.
- 14823-68  
THE TRIVIAL NAME OF THE POTATO TUBERWORM (LEPIDOPTERA: GELECHIIDAE).  
R W Hodges  
Entomol Soc Wash Proc 69(1):52  
Mar 1967 420 W27  
Nomenclature, Phthorimaea operculella.
- 14824-68  
NUTRITIONAL FEED CONTROL: THE 'SELF-PROTECTION' OF FOODSTUFFS AGAINST TRIBOLIUM CONFUSUM (COLEOPTERA: TENEBRIONIDAE) OFTEN PRESUMABLY THROUGH NDTRITIONAL FACTORS.  
H L House A R Graham  
Can Entomol 99(10):1082-1087  
Oct 1967 421 C16  
Biological control (insects), Insect nutrition, Tenebrionidae.
- 14825-68  
AEDES (VEHALLINA) OF THE PAPDAN SUBREGION (DIPTERA: CULICIDAE).  
Y M Huang  
Diss Abstr Sect B 28(3):930B  
Sep 1967 Z5055.U49D53  
aedes, Culicidae.
- 14826-68  
THE GENUS LAELASPIS, WITH DESCRIPTIONS OF THREE NEW SPECIES (ACARINA: LAELAPTIDAE).  
P E Hunter  
Entomol Soc Amer Ann 54(5):672-683  
Sep 1961 420 ENR2  
Insect identification, Laelaptidae, Laelaspis.
- 14827-68  
SQUASH AND GOURD BEES OF THE GENUS XENOGLOSA \_HYMENOPTERA, APOIDEA).  
P D Hurd E G Linsley  
Entomol Soc Amer Ann 60 \_5), 988-1007,MAP REF  
Sep 1967 420 ENR2  
Xenoglosa.  
Abstract included.
- 14828-68  
THE SURGENUS PERSICARGAS, NEW SURGENUS (IXODOIDEA, ARGASIDAE, ARGAS). I. A. (P.) ARBOREUS, AN EGYPTIAN PERSICUS-LIKE PARASITE OF WILD BEES, WITH A REDEFINITION OF THE SURGENUS ARGAS.  
M N Kaiser H Roogstraal G M Kohls  
Entomol Soc Amer Ann 57(1):60-69, 8 REFS., 40 FIGS.  
Jan 1964 42D ENR2  
Argas, Birds, Persicargas.
- 14829-68  
VIABILITY OF THE CHALCID PARASITE TETRSTICHUS PYRILLAE CHAWFORD FROM THE HOST PYRILLA PERPUSILLA WALKER EGG.  
K Lal  
Indian J Entomol 28 (3), 398-401  
Sep 1966 420 IN23  
Chalcidae, Parasitic insects, Pyrilla perpusilla, Tetrastichus pyrillae.
- 14830-68  
THE HYMENOPTEROUS PARASITES (HYMENOPTERA: APHIDIIDAE ET APHELINIDAE) OF THE PEA APHID IN EASTERN NORTH AMERICA.  
M Mackauer T Finlayson  
Can Entomol 99(10):1051-1082  
Oct 1967 421 C16  
Aphididae, Hymenoptera, North America, Parasitism.
- 14831-68  
GUIDE TO THE GEOMETRIDAE OF CANADA (LEPIDOPTERA). I. SUBFAMILY STERRHINAE.  
W C McGuffin  
Entomol Soc Can Mem 50:5-67 REP  
1967 420 ENR24  
Geometridae, Sterrhinae.
- 14832-68  
LIFE-HISTORY STUDIES OF AMRLYSEIUS LIMONICUS, WITR COMPARTIVE OBSERVATIONS ON AMRLYSEIDS HIRISCI (ACARINA' PRYTOSEIIDAE).  
J A McMurtry G T Scriven  
Entomol Soc Amer Ann 58(1):106-111, 8 REFS., 4 TARS.  
Nov 1965 42D ENR2  
Acarina, Amlyseius, Insect biology, Insect morphology.
- 14833-68  
A NOTE ON HOPLITIS PRODUCTA (CRESS.) IN WISCONSIN (HYMENOPTERA: MEGACHILIDAE).  
J T Medler  
Can Entomol 93(7):571-573  
Jul 1961 421 C16  
Rees, Insect behavior, Insect rearing, Wisconsin.
- 14834-68  
A NEW GENUS AND A NEW SPECIES OF PYRADSTINAE (LEPIDOPTERA: PYRALIDAE).  
E Munroe  
Can Entomol 99(10):1104-1110  
Oct 1967 421 C16  
Insect identification, Pyralidae, Pyraustinae.
- 14835-68  
MIGRATION OF THE ARMY CDTWORM, CHORIZAGROTIS ADXILIARIS \_LEPIDOPTERA, NOCTUIDAE). I. EVIDENCE FOR A MIGRATION.  
K P Friess  
Entomol Soc Amer Ann 6D \_5), 910-920 REP  
Sep 1967 420 ENR2  
Chorizagrotis auxiliaris, Insect migration.  
Abstract included.
- 14836-68  
RADAR OBSERVATIONS OF LOCUST SWARMS.  
R C Rainey  
Science 157(3784):98-99  
07 Jul 1967 470 SC12  
Insect detection, Radar, Schistocerca gregaria.
- 14837-68  
THE WINTER BIOLOGY OF CDLEX TARSALIS (DIPTERA: CULICIDAE) IN KERN COUNTY, CALIFORNIA.  
W C Reeves  
Entomol Soc Amer Ann 56(3):314-323, 25 REFS., 4 TARS.  
May 1963 420 ENR2  
Culex, Culicidae, Insect biology.
- 14838-68  
CHARACTERS FOR SPECIFIC IDENTIFICATION OF FEMALES IN THE LEAFHOPPER GENUS EMPOASCA (HEMIPTERA:CICADELLIDAE).  
H H Ross  
Entomol Soc Amer Ann 58(5):620-623, 10 REFS., 7 FIGS.  
Sep 1965 420 ENR2  
Cicadellidae, Insect identification.
- 14839-68  
STUDIES ON ODONTOLOXOZUS LONGICORNIS (DIPTERA: NERIIDAE.) PART I. LIFE HISTORY AND DESCRIPTIONS OF IMMATURE STAGES.  
R E Ryckman  
Entomol Soc Amer Ann 56(4):454-469, 14 REFS., 4 TARS.  
Jul 1963 42D ENR2  
Insect cultures, Insect morphology, Neriidae.
- 14840-68  
THE MORPHOLOGY AND HIGHER CLASSIFICATION OF THE COREOIDEA (HEMIPTERA-HETEROPTERA). I-II.  
C W Schaeffer  
Entomol Soc Amer Ann 57(6):67D-684, 38 REFS., 12 FIGS.  
Nov 1964 42D ENR2  
Coreoidea, Insect morphology.
- 14841-68  
DANISH MYRMELEONTIDAE AND THEIR DISTRIBUTION. (DA )  
K Secher  
Flora Fauna 73(2):55-60, MAP, REF.  
Jun 1967 410 P662  
Myrmeleontidae, Zoogeography.  
English abstract.



- 14842-68  
DISPERSAL AND MIGRATION OF TEPA-STERILIZED MEXICAN FRUIT FLIES.  
J G Shaw M Sanchez-Riviello L M Spishakoff P Trujillo  
J Econ Entomol 60 (4):992-994  
15 Aug 1967 421 J822  
Anastrepha ludens, Biological control (insects),  
Chemosterilants, Insect dissemination, Insect migration,  
Insect traps, Sterility, Tapa.  
Abstract
- 14843-68  
JAIFYGIOAE OF SOUTH AMERICA. 4. THE GENUS AUSTRJAPYX AND  
DESCRIPTIONS OF NEW SPECIES.  
L M Smith R H Gonzalez  
Entomol Soc Amer Ann 57(2):159-164, 3 REFS., 13 FIGS.  
Mar 1964 420 EN82  
Austrjapyx, New species, South America.
- 14844-68  
PARASITES OF THE RED-PINE SAWFLY, NEODIPRION NANULUS  
NANULUS (HYMENOPTERA: DIPRIONIDAE), IN NEW BRUNSWICK.  
G R Underwood  
Can Entomol 99(10):1114-1116  
Oct 1967 421 C16  
Canada, Diprionidae, Parasitism.
- 14845-68  
SOME NOTES ON THE LIFE HISTORY OF PLEGA BANKSI (NEUROPTERA  
MANTISPIDAE).  
F G Werner G D Butler Jr  
Entomol Soc Amer Ann 58(1):66-68, 4 REFS.  
Jan 1965 420 EN82  
Insect biology, Mantispidae, Plega.
- 14846-68  
A NEW SPECIES OF LUTZOMYIA FROM SURINAM (DIPTERA,  
PSYCHODIOAE).  
O J B Wijers J Huisenga  
Bull Entomol Res 57(3):395-397  
Nov 1967 421 B87
- 14847-68  
LABORATORY TESTS WITH SIXTY-FIVE COMPOUNDS AS REPELLENTS  
AGAINST HOUSEFLIES.  
H G Wilson  
Fla Entomol 42(4):175-177, 1 TAB.  
Oec 1959 420 F662  
Insect repellents, Musca domestica.
- 14848-68  
THE IXODID TICKS OF TANZANIA. A STUDY OF THE ZOOGEOGRAPHY  
OF THE IXODIDAE OF AN EAST AFRICAN COUNTRY. QL458.A2Y2.  
G H Yeoman J B Walker J P J Boss T M Docker  
215 P. COMMONWEALTH INSTITUTE OF ENTOMOLOGY, LONDON  
1967  
Acarina, Ixodidae, Zoogeography.
- 14849-68  
FINE STRUCTURE OF THE INTEGUMENT OF THE TWO-SPOTTED SPIDER  
MITE, TETRANYCHUS TELARIUS (ACARINA:TETRANYCHIDAE).  
J R Adams G E Cantwell  
Entomol Soc Amer Ann 58(4):532-535, 10 REFS., 4 FIGS.  
Jul 1965 420 EN82  
Insect anatomy, Tetranychidae.
- 14850-68  
NUCLEIC ACIDS EXTRACTED FROM THE VIRUS POLYHEORA OF THE  
SILKWORM, BOMBYX MORI (LINNAEUS).  
K Aizawa S Iida  
J Invertebrate Pathol 5(3):344-348  
Sep 1963 421 J826  
Bombyx mori, Nucleic acids, Polyhedroses.
- 14851-68  
FEEDING BEHAVIOR AND HOST PREFERENCES OF SOME BLACK FLIES  
(DIPTERA: SIMULIIDAE) IN WISCONSIN.  
J R Anderson G R DePoliart  
Entomol Soc Amer Ann 54(5):716-729  
Sep 1961 420 EN82  
Insect behavior, Simuliidae, Wisconsin.
- 14852-68  
INTERFERENCE BETWEEN CYTOPLASMIC-POLYHEOROSIS VIRUSES OF THE  
SILKWORM, BOMBYX MORI (LINNAEUS), AND OF THE PINE CATER-  
PILLER, OENOROLIMUS SPECTABILIS (BUTLER).  
H Aruga T Hukuhara S Fukuda Y Hashimoto  
J Invertebrate Pathol 5(4):415-421  
Oec 1963 421 J826  
Bombyx mori, Dendrolimus spectabilis, Polyhedroses.
- 14853-68  
A STUDY OF THE FLIGHT OF THE DOUGLAS-FIR BEETLE  
DENDROCTONUS PSEUDOTSUGAE HOPK. (COLEOPTERA: SCOLITIOAE)  
III. FLIGHT CAPACITY.  
M D Atkins  
Can Entomol 93(6):467-474, TABS.  
Jun 1961 421 C16  
Insect behavior, Insect flight, Pseudotsuga menziesii.
- 14854-68  
SEASONAL CHANGES IN THE ABUNDANCE OF CERTAIN APHIDS AND  
THEIR PREDATORS IN GIZA..  
A K Azab M F S Tawfik I I Ismail  
Soc Entomol Egypte Bull 49:11-24  
1966 420 EG9  
Aphididae, Insect populations, Predaceous insects.
- 14855-68  
THE PATHOGENICITY FOR HONEY-BEE LARVAE OF MICROORGANISMS  
ASSOCIATED WITH EUROPEAN FOULBROOD.  
L Bailey  
J Invertebrate Pathol 5(2):198-205  
Jun 1963 421 J826  
Apis mellifera, European foulbrood, Microorganisms.
- 14856-68  
CRITICAL APPLICATION OF LOGISTIC PRINCIPLE ON THE LABORATORY  
POPULATION OF ANTHRENUUS FLAVIPES LEC.  
B Banerjee  
Indian J Entomol 28 (3), 359-364 REF  
Sep 1966 420 IN23  
Anthrenus flavipes, Insects, Laboratories, Population.
- 14857-68  
PLASTIC POTS COMPARED WITH CLAY POTS FOR REARING WHITE-  
FRINGED BEETLE LARVAE.  
F J Bartlett J A Mitchell Z A Shaw  
J Econ Entomol 60(6):1767-1768  
Oec 1967 421 J822  
Insect cages, Insect rearing, Larvae, Plastics.
- 14858-68  
FEEDING BEHAVIOR OF THE LARGE MILKWEED BUG, ONCOPELTUS  
FASCIATUS.  
S D Beck  
Entomol Soc Amer Ann  
Mar 1963 420 EN82  
Asclepias, Insect behavior, Oncopeltus.
- 14859-68  
STIMULI PROVIDED BY COURTSHIP OF MALE DROSOPHILA  
MELANOGASTER.  
H C Bennet-Clark A W Ewing  
Nature 215(5101), 669-671 REF  
05 Aug 1967 472 N21  
Drosophila melanogaster, Insect physiology, Sex behavior.
- 14860-68  
FINE STRUCTURE OF SOME INSECT VIRUSES.  
G H Bergold  
J Invertebrate Pathol 5(1):111-128  
Mar 1963 421 J826  
Insect diseases, Polyhedroses.
- 14861-68  
EFFECTS OF HORMONES AND INJURY ON RNA SYNTHESIS IN  
SATURNIID MOTHS.  
S J Berry H Oberlander H A Schneiderman  
J Insect Physiol 13(10):1511-1537 REF  
Oct 1967 421 J825  
Diapause, Hormones, Injuries, Larvae, Moths, Ribonucleic acid,  
Saturniidae.  
Abstract
- 14862-68  
TRANSMISSION OF SOME INSECT VIRUSES WITH PARTICULAR  
REFERENCE TO OVARIAL TRANSMISSION AND ITS IMPORTANCE IN THE  
DEVELOPMENT OF EPIZOOTICS.  
F T Bird

## Physiology and Biochemistry

## BIBLIOGRAPHY

10 14863-68

- J Invertebrate Pathol 3(4):352-380, 15 REFS., 11 TABS.  
Dec 1961 421 J826  
Disease transmission, Epizootic diseases, Insect diseases,  
Virus diseases (insects).
- 14863-68  
REACTION THRESHOLDS AND SPECIFICITY OF AN ODOR RECEPTOR ON  
THE ANTENNA OF LOCUSTA. (GE )  
J Hoekkh  
Z Vergleichende Physiol 55(4)0378-406, BEP.  
1967 444-8 23  
Antennae, Locusta migratoria, Olfactometers.  
English summary.
- 14864-68  
THE EFFECTIVENESS OF COMMERCIAL FORMULATIONS OF BACILLUS  
THURINGIENSIS BERLINF ON HOUSE-FLY LARVAE.  
A L Borgatti G E Guyer  
J Invertebrate Pathol 5(3):377-384, TABS.  
Sep 1963 421 J826  
Bacillus, Bacteria, Musca domestica.
- 14865-68  
NOTES: ELECTRON MICROSCOPIC INVESTIGATION OF SACRHOOD OF  
THE HONEY BEE.  
J Brcaj J Svohoda O Kralik  
J Invertebrate Pathol 5(3):385-386  
Sep 1963 421 J826  
Apis mellifera, Electron microscopy, Sacrood.
- 14866-68  
STUDIES ON THE GONADS OF SOME IMMATURE MOSQUITOES.  
O P Breland  
Entomol Soc Amer Ann 56(5):619-624, 13 BEFS.  
Sep 1963 420 EN82  
Culicidae, Gonads, Insect morphology.
- 14867-68  
TRANSMISSION OF BACTERIAL PATHOGENS BY THE OVIPOSITOR OF A  
HYMENOPTEROUS PARASITE.  
G E Hucher  
J Invertebrate Pathol 5(3):277-283  
Sep 1963 421 J826  
Hymenoptera, Microorganisms, Parasitism.
- 14868-68  
MOSQUITOES FEEDING ON A PBOG.  
L Burgess G H Hammond  
Can Entomol 93(8):670-671  
Aug 1961 421 C16  
Feeding, Progs, Insect behavior, Insect nutrition.
- 14869-68  
RELATIONSHIP OF THE CROP CAPACITY TO THE DEPLETION OF THE  
FAT BODY AND EGG DEVELOPMENT IN THE CORN EARWORM, HELIOTHIS  
ZEA, AND THE FALL ARMYWORM, LAPHYGMA FRUGIPERDA  
(LEPIDOPTERA: NOCTUIDAE).  
P S Callahan  
Entomol Soc Amer Ann 54(6):819-827  
Nov 1961 420 EN82  
Heliiothis zea, Insect physiology, Laphygma.
- 14870-68  
INDUCTION OF SCINTILLATION IN THE FIREFLY.  
A D Carlson  
J Insect Physiol 13(7):1031-1038  
Jul 1967 421 J825  
Eserine, Insect behavior, Lampyridae.
- 14871-68  
HISTOLOGY OF THE REPRODUCTIVE TRACTS AND TRANSMISSION OF  
SPERM IN THE CORN EARWORM, HELIOTHIS ZEA.  
T Cascio  
Entomol Soc Amer Ann 56(4):535-556, 22 BEFS., 1 TAB.  
Jul 1963 420 EN82  
Heliiothis zea, Insect histology, Reproduction.
- 14872-68  
CONSTITUENTS OF DUFOUR'S GLAND IN MYRMECIA GULOSA.  
G W K Cavill P J Williams  
J Insect Physiol 13(7):1097-1103  
Jul 1967 421 J825  
Formicidae, Insect behavior, Myrmecia gulosa, Poison glands.
- 14873-68  
SOME HISTOLOGICAL ASPECTS OF THE ROLL WEEVIL.  
D S Chadbourne  
Entomol Soc Amer Ann 54(6):788-792  
Nov 1961 420 EN82  
Anthonomus grandis, Insect histology.
- 14874-68  
THE OCCURRENCE OF ACETYLCHOLINE IN THE NERVOUS TISSUES OF  
AMERICAN COCKROACHES.  
S C Chang C W Kearns  
Entomol Soc Amer Ann 54(5):711-715  
Sep 1961 420 EN82  
Acetylcholine, Blattidae, Insect physiology.
- 14875-68  
REARING AND BIOLOGY OF WOHLFAHRTIA VIGIL (DIPTERA: SABCO-  
PHAGIDAE).  
G R DePoliart  
Entomol Soc Amer Ann 58(6):849-855, 9 BEFS., 4 TABS., 4 FIGS.  
Nov 1965 420 EN82  
Insect biology, Insect rearing, Myiasis, Sarcophagidae,  
Wohlfahrtia.
- 14876-68  
AN EVALUATION OF THE RATE OF REPRODUCTION OF THE TWO-SPOTTED  
SPIDER MITE REARED ON GIBBERELLIN-TREATED BEAN PLANTS.  
J Eichmeier G Guyer  
J Econ Entomol 53(4):661-664, TABS.  
Aug 1960 421 J822  
Beans, Gibberellins, Insect rearing, Reproduction,  
Tetranychus.
- 14877-68  
A PHOTOPEBIODIC EFFECT ON THE DAILY SENSITIVITY OF THE  
HOUSE FLY TO TRICHLORFON.  
A T Fernandez M M Randolph  
J Econ Entomol 60(6):1633-1636 BEP  
Dec 1967 421 J822  
Insecticide resistant insects, Musca domestica,  
Photoperiodism, Trichlorfon.  
Abstract
- 14878-68  
REARING OF THREE SPOTTED ALFALFA APHID HYMENOPTEROS PARA-  
SITES FOR MASS RELEASE.  
G L Finney B Puttler L Dawson  
J Econ Entomol 53(4):655-659  
Aug 1960 421 J822  
Alfalfa, Insect rearing, Therioaphis.
- 14879-68  
GAMETOGENESIS IN THE HOUSE FLY, MUSCA DOMESTICA.  
A French  
Entomol Soc Amer Ann 58(5):650-657, 22 BEFS., 13 FIGS.  
Sep 1965 420 EN82  
Gametogenesis, Musca domestica, Reproductive organs.
- 14880-68  
MATING STUDIES OF THE PINK BOLLWORM, PECTINOPHORA GOSSY-  
PIELLA (LEPIDOPTERA: GELECHIIDAE), BASED ON PRESENCE OF  
SPERMATOPHORES.  
B S Garcia H M Graham D P Martin  
Entomol Soc Amer Ann 58(6):880-882, 7 BEFS., 4 TABS.  
Nov 1965 420 EN82  
Pectinophora gossypiella, Reproduction, Spermatophores.
- 14881-68  
SEX PHEROMONES OF NOCTUID MOTHS. VIII. ORIENTATION TO  
LIGHT BY PHEROMONE-STIMULATED MALES OF TRICHOPLUSIA NI  
(LEPIDOPTERA: NOCTUIDAE).  
L K Gaston  
Entomol Soc Amer Ann 58(6):833-836, 9 BEFS., 3 FIGS.  
Nov 1965 420 EN82  
Light, Noctuidae, Pheromones, Sex attractants, Trichoplusia.
- 14882-68  
SEX PHEROMONES OF NOCTUID MOTHS. VII. QUANTITATIVE ASPECTS  
OF THE PRODUCTION AND RELEASE OF PHEROMONE BY FEMALES OF  
TRICHOPLUSIA NI (LEPIDOPTERA: NOCTUIDAE).  
L K Gaston  
Entomol Soc Amer Ann 58(5):604-608, 10 BEFS., 6 FIGS.  
Sep 1965 420 EN82  
Chromatography, Insect physiology, Noctuidae, Pheromones.
- 14883-68  
PECUNDITY, LONGEVITY, AND TRANSMISSIBILITY OF CITRUS RED  
MITES (PANONYCHUS CITRI) INFECTED WITH A NONINCLUSION VI-  
BUS.  
J E Gilmore H Tashiro  
J Invertebrate Pathol 8(3):334-339, 7 BEFS., 5 TABS.  
Sep 1966 421 J826  
Fertility, Insect diseases, Panonychus, Viruses.

- 14884-68  
MATING FREQUENCY OF FEMALE PINK BOLLWORMS COLLECTED FROM LIGHT TRAPS.  
P A Glick M T Ouye D F Martin  
Entomol Soc Amer Ann 58(4):595-596, 4 REFS.  
Jul 1965 420 EN82  
Light traps, Pectinophora gossypiella, H reproduction.
- 14885-68  
THE EFFECTIVENESS OF FORMALIN IN CONTROLLING JAUNDICE (NUCLEAR POLYHEDROSIS) OF THE SILKWORM IN POLAND.  
K Golanski  
J Invertebrate Pathol 3(1):11-14, 14 REFS.  
Mar 1961 421 J826  
Bombyx mori, Formaldehyde.
- 14886-68  
LARVAL FEEDING BEHAVIOR OF THE CABBAGE LOOPER, TRICHOPLUSIA NI.  
S Gotthilf S D Beck  
J Insect Physiol 13(7):1039-1053  
Jul 1967 421 J825  
Insect behavior, Insect nutrition, Trichoplusia.
- 14887-68  
PROPAGATION OF BRACONID PARASITES OF THE PEA APHID.  
J E Balfhill P E Featherston  
J Econ Entomol 60(6):1756  
Dec 1967 421 J822  
Acyrthosiphon pisum, Alfalfa, Aphidius smithi, Greenhouses, Parasitism.
- 14888-68  
FUMIGANT TOXICITY OF 1,2,3-TRIBROMOPROPENE, ETHYLENIMINE, CROTYL BROMIDE AND CARBON TETRACHLORIDE TO STORED-PRODUCT INSECTS.  
P K Harein B L Soles  
J Sci Food Agr 15(10):220-25  
Oct 1964 382 S012  
Attapenus, Carbon tetrachloride, Crotyl bromide, Ethylenimine, Lasiopterma, Oryzaephilus, Tribolium, Tribromopropene, 1,2,3-.
- 14889-68  
A NONINCLUSION VIRUS OF GONOMETA PODOCARPI (LEPIDOPTERA' LASIOCAMPIDAE).  
K A Barrap J P Longworth T W Tinsley K W Brown  
J Invertebrate Pathol 8(2):270-272  
421 JB26  
Gonometa, Insect diseases.
- 14890-68  
ATTRACTION OF MELON FLIES TO LURES ON FOLIAGE OR CANE FIBERS AT VARIOUS HEIGHTS.  
W G Hart M S Fujimoto D Kawakahi E J Barris  
J Econ Entomol 60(4):1139-1142  
15 Aug 1967 421 J822  
Aerial dusting, Attractants, Biological control (insects), Cue-lure, Dacus cucurbitae, Fenthion, Guavas, Insect traps. Abstract
- 14891-68  
INHIBITION OF HOUSEFLY ACETYLCHOLINESTERASE BY CARBAMATES.  
K Hellenbrand  
J Agr Food Chem 15(5):825-829  
Sep 1967 381 JB223  
Acetylcholinesterases, Carbamates, Insect metabolism, Insecticides, Musca domestica.  
Abstract
- 14892-68  
ALKALINE PHOSPHOMONOESTERASE ACTIVITY IN INSECTS. 2. ACTIVITY IN VARIOUS CELL FRACTIONS FROM THE BLOW FLY PHORMIA REGINA.  
E Hodgeson S S Kumar  
Entomol Soc Amer Ann 57(5):613-617, 29 REFS.  
Sep 1964 420 EN82  
Alkaline phosphomonoesterase, Phormia.
- 14893-68  
AN INVESTIGATION OF THE HOUSEFLY HEARTBEAT THROUGH TRANSECTION EXPERIMENTS.  
B Holcomb  
Entomol Soc Amer Ann 58(5):608-611, 7 REFS., 4 TABS.  
Sep 1965 420 ENB2  
Heart rate, Musca domestica.
- 14894-68  
METHODS FOR STAINING CAPSULAR VIRUS INCLUSION BODIES TYPICAL OF GRANULOSSES OF INSECTS.  
A Huger  
J Invertebrate Pathol 3(3):338-341  
Sep 1961 421 J826  
Granuloses, Inclusion bodies, Staining, Viruses.
- 14895-68  
SENSITIVITY SPECTRUM OF BACILLOS THURINGIENSIS VAR. THURINGIENSIS BERLINER TO ANTIBIOTICS, SULFONAMIDES, AND OTHER SUBSTANCES.  
C M Ignoffo  
J Invertebrate Pathol 5(3):395-397  
Sep 1963 421 JB26  
Antibiotics, Microorganisms, Sulfonamides.
- 14896-68  
DISTRIBUTION AND FATE OF 4-C<sup>14</sup> CHOLESTEROL IN THE ADULT MALE AMERICAN COCKROACH.  
S Ishii J N Kaplanis W E Robbins  
Entomol Soc Amer Ann 56(1):115-119, 14 REFS., 5 TABS.  
Jan 1963 420 EN82  
Cholesterol, Periplaneta, Radioactive tracers.
- 14897-68  
THE SKELETOMUSCULAR MECHANISM OF THE SO-CALLED ANAL LEGS IN THE CENTIPEDE SCOLOPENDRA AMAZONICA (SCOLOPENDRIDAE).  
B S Jangi  
Entomol Soc Amer Ann 54(6):861-869  
Nov 1961 420 EN82  
Chilopoda, Insect anatomy, Scolopendra amazonica.
- 14898-68  
LIFE HISTORY OF THE MONTEREY PINE NEEDLE MINER, ARGYRESTHIA PILATELLA (LEPIDOPTERA' YPONOMOEUTIDAE).  
E Jessen  
Entomol Soc Amer Ann 57(3):332-341, 14 REFS., 3 TABS., 19 FIGS.  
May 1964 420 EN82  
Argyresthia, Insect biology, Monterey-pine needle miner.
- 14899-68  
THE REARING OF PHLEBOTOMUS SANDFLIES (DIPTERA: PSYCHODIDAE) II. DEVELOPMENT AND BEHAVIOR OF PANAMANIAN SANDFLIES IN LABORATORY CULTURE.  
P T Johnson M Bertig  
Entomol Soc Amer Ann 54(6):764-776  
Nov 1961 420 EN82  
Insect behavior, Insect morphology, Insect rearing, Phlebotomus.
- 14900-68  
THE EFFECTS OF PHOTOPERIOD AND TEMPERATURE ON THE INDUCTION OF DIAPAUSE IN AEDES TRISERIATUS (SAY).  
K D Kappus C E Venard  
J Insect Physiol 13(7):1007-1019  
Jul 1967 421 J825  
Aedes, Culicidae, Insect morphology.
- 14901-68  
LONGEVITY OF THE FIRE BLIGHT ORGANISM, ERWINIA AMYLOVORA ON PEAR TREES IN THE GREENHOUSE AS DEMONSTRATED BY INFECTION AFTER SANDBLAST INJURY.  
H L Keil B C Smale R A Wilson  
Phytopathology 54(7):747  
Jul 1964 464.8 P56  
Fire blight (pears), Insect pests, Pears, Phytopathology, Plant diseases, Tree diseases.
- 14902-68  
CANDLING AND SIGHTING TECHNIQUES USED IN LASER INVESTIGATIONS OF THE EUROPEAN PINE SAWFLY, NEODIPRION SERTIFER (HYMENOPTERA: DIPRIONIDAE).  
R W Kobllynyk  
Can Entomol 99(6):670-672  
Jun 1967 421 C16  
Diprionidae, Lasers, Neodiprion.
- 14903-68  
DEMONSTRATION OF NUCLEAR POLYHEDROSIS IN BOMBYX MORI (LINNAEUS) BY FLUORESCENT ANTIBODY TECHNIQUE.  
J Krywienczyk  
J Invertebrate Pathol 5(3):309-317, BIBL. 316-317.  
Sep 1963 421 J826  
Bombyx mori, Fluorescent antibody technic, Polyhedroses.
- 14904-68  
THE EFFECTS OF SAMPLING SITES ON NOSEMA DETERMINATION.  
J C M L'Arrivee  
J Invertebrate Pathol 5(3):349-355  
Sep 1963 421 J826  
Apis mellifera, Nosema disease.



## BIBLIOGRAPHY

1D 14905-6B

- 14905-68  
THE SUSCEPTIBILITY OF HONEY BEES OF DIFFERENT AGES TO INFESTATION BY ACARAPIS WOODII (LENNIE).  
D C Lee  
J Invertebrate Pathol 5(1):11-15  
Mar 1963 421 JB26  
Acarapis, Apis mellifera, Mites, Parasitism.
- 14906-68  
LA LUTTE CHIMIQUE CONTRE LES INSECTS NUISIBLES. (CHEMICAL CONTROL OF INSECT PESTS). ED. 3. SB951.L5. (FR )  
J Lhoste  
399 P. IMPRIMERIES RULLIERE-LIBRECCIO, AVIGNON, FRANCE  
1967  
Attractants, Chemosterilants, Humans, Insect pests, Insect repellents, Insecticides, Integrated control (insects), Livestock, Medical entomology, Plant pest control, Toxicology, Wildlife.
- 14907-68  
THE NERVOUS SYSTEM OF CERTAIN ABDOMINAL SEGMENTS AND THE INNERVATION OF THE MALE REPRODUCTIVE SYSTEM AND GENITALIA OF HYALOHCHEA CECROPIA. (LEPIDOPTERA: SATURNIIDAE).  
J L Libby  
Entomol Soc Amer Ann 54(6):BB7-B96  
Nov 1961 420 ENB2  
Insect anatomy, Nervous system, Reproduction.
- 14908-68  
NEW TECHNIQUE FOR PREPARATION AND STUDY OF MOTH FLIES. (POR )  
M C De Linero M  
Rev Brasil Biol 27(1):47-4B  
May 1967 442.B R326  
Diptera, Insect taxonomy, Psychodidae.  
Abstract
- 14909-68  
THE IMPORTANCE OF LOCOMOTOR ACTIVITY IN CIRCADIAN SYSTEMS.  
(GE )  
H Lohmann  
Z Vergleichende Physiol 55(4):3D7-332, REF.  
1967 444.8 Z3  
Diurnal rhythm, Leucophaea, Locomotion.  
English summary.
- 14910-68  
METHODS FOR STUDYING AGGREGATION AND FEEDING BEHAVIOR OF THE CONFUSED FLOUR BEETLE, TRIOLIUM CONFUSUM (COLEOPTERA' TENERIONIDAE).  
S R Loschiavo  
Entomol Soc Amer Ann 58(3):3B3-3BB, 20 REFS., 5 FIGS.  
May 1965 420 ENB2  
Insect nutrition, Sucrose, Triolium.
- 14911-68  
THE MECHANISMS OF PATHOGENICITY OF PSEUDOMONAS AERUGINOSA (SCHREIBER) MIGULA. I. THE PATHOGENICITY OF STRAIN N-06 FOR LARVAE OF THE GREATER WAX MOTH, GALLERIA MELLONELLA (LINNAEUS).  
O Lysenko  
J Invertebrate Pathol 5(1):7B-B2  
Mar 1963 421 JB26  
Galleria, Insect diseases, Pseudomonas aeruginosa.
- 14912-68  
THE INFLUENCE OF SPRAY PROGRAMS ON THE FAUNA OF APPLE ORCHARDS IN NOVA SCOTIA. XII. SECOND SUPPLEMENT TO VII. EFFECTS ON BENEFICIAL ARTHROPODS.  
A W MacFhee K H Sanford  
Can Entomol 93(8):671-673  
Aug 1961 421 C16  
Apples, Beneficial insects, Insecticidal aerosols, Spraying.
- 14913-68  
PHOTOPERIOD EFFECTS IN PIERIS RAPAE.  
A Mayer C F Cohen  
Entomol Soc Amer Ann 56(3):292-294, 10 REFS., 5 TABS.  
May 1963 42D ENB2  
Insect rearing, Photoperiodism, Pieris.
- 14914-68  
CHANGES IN HAEMOLYMPH LIPOPROTEINS DURING LOCUST FLIGHT.  
B J Mayer D J Candy  
Nature 215(5104), 9B7  
26 Aug 1967 472 H21  
Acrididae, Blood, Cicadidae, Insect flight, Lipids, Proteins.
- 14915-68  
CHEMICALS TESTED AS SPACE REPELLENTS FOR YELLOW-FEVER MOSQUITOES. II. CARRANILATES, BENZAMIDES, ALIPHATIC AMIDES, AND IMIDES.  
T P McGovern M Beroza H Gouck  
J Econ Entomol 60(6):1591-1594  
Dec 1967 421 JB22  
Aedes aegypti, Carhanilates, Chemical control (insects), Chemicals, Imides, Insect repellents.  
Abstract:  
of 293 compounds tested, 4 carhanilates, 2 benzamides, and 1 acetamide gave more than 100 days of protection. n, N-Dipropyl 2-(p-methoxybenzyl) oxy)acetamide is the most effective space repellent against yellow-fever mosquitoes. it gave 266 days protection.
- 14916-68  
THE EFFECTS OF PHOTOPERIOD, TEMPERATURE, AND FOOD SUPPLY ON RATE OF DEVELOPMENT AND DIAPAUSE IN COCCINELLA NOVENNOTATA.  
R D McMillen  
Can Entomol 99(6):57B-5B6  
Jun 1967 421 C16  
Aphididae, Coccinella, Insect morphology.
- 14917-68  
TIME MEMORY OF BEES UNDER THE INFLUENCE OF NARCOSIS AND OF SOCIAL PACEMAKING SIGNALS (ZEITGERER). (GE )  
I Medugorac M Lindauer  
Z Vergleichende Physiol 55(4):45D-47A, REF.  
1967 444.B Z3  
Bees, Memory, Narcosis.  
English summary.
- 14918-68  
METABOLISM OF MALATHION IN DESERT LOCUST. I. ACTIVATION OF MALATHION INTO AN ANTICHOLINESTERASE.  
K N Mehrotra S Lal  
Indian J Entomol 29(1):44-47 REF  
Mar 1967 420 IN23  
Cholinesterases, Insect metabolism, Malathion, Schistocerca gregaria.  
Abstract
- 14919-68  
INSECTICIDAL AND NATURALISTIC CONTROL CHIRONOMID LARVAE IN LAKE DALWIGK, VALLEJO, CALIFORNIA.  
E G Mezger  
Calif Mosquito Contr Ass Proc Pap 35:125-12B REF  
1967 42B C763  
Aquatic plants, Chemical control (insects), Chironomidae, Fenthion, Fish, Insecticides, Malathion, Natural control (insects), Saline water.  
Abstract:  
application of malathion and fenthion granules for midge suppression gave effective control. when malathion was used considerable mortality was observed on mosquito fish notonectids, corixids and mosquito fish. no appreciable mortality was observed on the fish populations when fenthion was used. carp were very efficient in suppressing midge larvae.
- 14920-68  
SUSCEPTIBILITY OF MOSQUITOES TO SILICA GEL INSECTICIDES.  
D W Micks  
J Econ Entomol 53(5):915-91B, 2 REFS.  
Oct 1960 421 JB22  
Aedes aegypti, Anopheles, Culex, DDT, Insecticide resistant insects.
- 14921-68  
SIMPLE SCREENING TEST FOR SYSTEMIC APHICIDES.  
T E Mittler J T Pennell  
J Sci Food Agr 15(10):11-1B7-B  
Oct 1964 3B2 S012  
Aphididae, Biological assay, Insecticides, Toxicology.
- 14922-68  
STEROL STORAGE AND REPRODUCTION IN THE HOUSE FLY.  
R E Monroe J N Kaplanis W E Robbins  
Entomol Soc Amer Ann 54(4):537-539  
Jul 1961 420 ENB2  
Insect physiology, Musca domestica, Reproduction, Sterols.
- 14923-68  
THE FATE OF DIETARY H3-RETA-SITOSTEROL IN THE ADULT HOUSE FLY.  
R E Monroe W E Robbins S J Louloudes  
Entomol Soc Amer Ann 56(2):19B-2D1, 18 REFS., 7 TABS.  
Mar 1963 420 ENB2



- Beta-sitosterol, Insect physiology, *Musca domestica*.
- 14924-68  
MICROORGANISMS FROM THE MID-GUT OF THE LARVA OF *TENEbrio OBSCURUS FARRICIUS*.  
J Moore G A Wistreich  
J Invertebrate Pathol 3(4):399-402  
Dec 1961 421 J826  
*Corynebacterium*, Gastrointestinal system, *Streptococcus*, *Tenebrio obscurus*.
- 14925-68  
TEGMAL AMPLIFIERS AND SPECTRUM CONSISTENCIES IN *CONOCEPHALUS NIGROPLEURUM* (BRUNER), TETTIGONIIDAE.  
G K Morris R E Pipher  
J Insect Physiol 13(7):1075-1085  
Jul 1967 421 J825  
*Conocephalus nigropleurum*, Insect biology, Tettigoniidae.
- 14926-68  
EFFECT ON ADULT EMERGENCE OF WHOLE AND PARTIAL X-IRRADIATION OF PUPAE OF THE HOUSEFLY, *MUSCA DOMESTICA* MERULC.  
K K Nair G Bhaskaran P Sivasubramanian  
Can Entomol 99(6):597-598  
Jun 1967 421 C16  
*Musca domestica*, Pupae, X-rays.
- 14927-68  
LARVAL DESCRIPTIONS OF TWO SPECIES OF PANORPA (MECOPTERA: PANORPIDAE), WITH NOTES ON THEIR BIOLOGY.  
H H Neunzig  
Entomol Soc Amer Ann 58(6):843-849, 10 REFS., 16 FIGS.  
Nov 1965 420 ENR2  
Insect biology, Larvae, Panorpa.
- 14928-68  
OBSERVATIONS ON THE EFFECT OF NEMATODES ON *IPS CONFUSUS* (LECOMTE) AND OTHER DARK BEETLES.  
W E Nickle  
J Invertebrate Pathol 5(3):386-389  
Sep 1963 421 J826  
*Ips*, Nematodes, Scolytidae.
- 14929-68  
ESTERASES OF CRYSTALLIFEROUS BACTERIA PATHOGENIC FOR INSECTS: EPIZOOTIOLOGICAL APPLICATIONS.  
J R Norris H D Rurges  
J Invertebrate Pathol 5(4):460-472  
Dec 1963 421 J826  
Bacteria, Biological control (insects), Esterases, Lepidoptera.
- 14930-68  
THE EFFECT OF APHOLATE AND THIOTEPA ON NUCLEIC ACID SYNTHESIS AND NUCLEOTIDE RATIOS IN HOUSEFLY EGGS.  
R R Painter W W Kilgore  
J Insect Physiol 13(7):1105-1118  
Jul 1967 421 J825  
Apholate, Insect eggs, *Musca domestica*, Nucleic acids.
- 14931-68  
BEHAVIOUR AND RANDOM MATING.  
F A Parsons  
Experientia 23\_7, 585-586. REF.  
15 Jul 1967 475 EX7  
Genetics, Sex behavior.
- 14932-68  
EFFECTS OF CARBON DIOXIDE ANESTHESIA ON THE HOUSE CRICKET, *ACHETA DOMESTICUS* (ORTHOPTERA: GRYLLOIDAE).  
R L Patton  
Entomol Soc Amer Ann 58(6):828-832, 14 REFS., 3 FIGS.  
Nov 1965 420 ENR2  
*Acheta*, Anesthesia, Carbon dioxide, Gryllidae.
- 14933-68  
PRELIMINARY OBSERVATIONS ON THE INCIDENCE AND BIOLOGY OF A NEMATODE ON *Aedes SOLLICITANS* IN LOUISIANA. (ABSTRACT).  
J J Petersen H C Chapman D R Woodard  
Calif Mosquito Contr Ass Proc Pap 35:95  
1967 428 C763  
*Aedes sollicitans*, Insect biology, Insect eggs, Insect mortality, Nematodes, Parasitism.
- 14934-68  
LYSOZYME-LIKE ACTION OF ENZYMES FROM THE COCKROACH *PERIPLANETA AMERICANA* AND FROM SOME OTHER SOURCES. (GE)  
R P Powning H Irzykiewicz  
J Insect Physiol 13(9):1293-1299 REF  
Sep 1967 421 J825  
Reans, Cell wall, Enzymes, Insect physiology, Muramidase, *Periplaneta americana*.  
Abstract
- 14935-68  
PATHOGENICITY OF DIFFERENT STRAINS OF ENTOMOPHTHORA CORONATA (COSTANTINI) KEVORKIAN FOR LARVAE OF THE GREATER WAX MOTH.  
S Prasertphon  
J Invertebrate Pathol 5(2):174-181  
Jun 1963 421 J826  
Entomogenous fungi, *Entomophthora coronata*, Galleria.
- 14936-68  
LIFE HISTORIES AND RARITIES OF TWO SPECIES OF PHILODROMUS (ARANEIDA: THOMISIDAE) IN ONTARIO.  
W L Putman  
Can Entomol 99(6):622-631  
Jun 1967 421 C16  
Araneidas, Insect behavior, *Philodromus*, Spiders, Thomisidae.
- 14937-68  
NECTAR OF PEACH LEAF GLANDS AS INSECT FOOD.  
W L Putman  
Can Entomol 95(1):108-109  
Jan 1963 421 C16  
Insect nutrition, Nectar, Peaches.
- 14938-68  
ENERGY SOURCES DURING EMBRYOGENESIS OF THE YELLOW MEALWORM, *TENEbrio MOLITOR*.  
L J Ramazzotto  
Entomol Soc Amer Ann 58(4):543-546, 20 REFS.  
Jul 1965 420 ENR2  
Embryology, Glycogen, Insect morphology, *Tenebrio*.
- 14939-68  
NOTE: ELIMINATION OF MICROSPORIDIOSIS IN LABORATORY-REARED EUROPEAN CORN BORERS BY THE USE OF REAT.  
E S Raun  
J Invertebrate Pathol 3(4):446-448  
Dec 1961 421 J826  
Biological control (insects), Reat, Insect eggs, Parasitism, *Pyrausta nubilalis*.
- 14940-68  
BACTERIAL PATHOGENS IN IOWA CORN INSECTS.  
E S Raun D L Brooks  
J Invertebrate Pathol 5(1):66-71  
Mar 1963 421 J826  
Bacteria, *Reliothis zea*, Insect diseases.
- 14941-68  
THE EFFECT OF CIRCADIAN RHYTHM ON THE DEVELOPMENT OF DROSOPHILA. (GE)  
L Bensing R Hardeland  
J Insect Physiol 13(10):1547-1568  
Oct 1967 421 J825  
Benzamide, Diurnal rhythm, *Drosophila*, Insect eggs, Insect morphology, Larvae.  
Abstract
- 14942-68  
THE SUBMAGINAL CUTICLE OF THE MAYFLY *CALLIBAETIS* SP. (EPHEMEROPTERA).  
A G Richards  
Entomol Soc Amer Ann 56(4):418-426, 21 REFS., 1 TAR.  
Jul 1963 420 ENR2  
*Callibaetis*, Ephemeroptera, Metamorphosis.
- 14943-68  
SOME PROBLEMS ASSOCIATED WITH WEIGHING APHIDS THAT HAVE FED AFTER STARVING, AS A METHOD OF MEASURING INTAKE OF PLANT SAP.  
A G Robinson  
Can Entomol 93(2):156-160, RIEL. 160  
Feb 1961 421 C16  
Feeding, Insect nutrition, Sap, Starvation.
- 14944-68  
A TERGAL ABNORMALITY IN THE GERMAN COCKROACH, *PERIPLANETA GERMANICA* (L.).  
M H Ross D G Cochran  
Entomol Soc Amer Ann 54(5):749-750  
Sep 1961 420 ENR2  
*Periplaneta germanica*, Insect abnormalities.

## BIBLIOGRAPHY

10 14945-68

- 14945-68  
DESCRIPTIONS OF LARVAL AND PUPAL STAGES OF FOUR LEPIDOPTER-  
GUS RICE BOMBS IN MALAYSIAN BORNEO (SARAWAK).  
G H L Rothschild  
Bull Entomol Res 57(3):343-352 REF.  
Nov 1967 421 B87  
Chilo suppressalis, Rice, Sesamia interens,  
Tryporyza incertulas.
- 14946-68  
SEXING OF MEXICAN FRUIT FLIES.  
M Sanchez-riviello J G Shaw  
J Econ Entomol 60(6):1759-1760  
Dec 1967 421 J822  
Anastrepha ludens, Insect control, Sex determination.
- 14947-68  
NEMATODE PARASITES AND ASSOCIATES OF THE SMALLER EUROPEAN  
ELM BARK BEETLE, SCOLYTUS MULTISTRIATUS (MARSHAM).  
J L Saunders D M Norris Jr  
Entomol Soc Amer Ann 54(6):792-798  
Nov 1961 420 EN82  
Insect rearing, Nematodes, Parasitism, Scolytus.
- 14948-68  
STUDIES ON FINE-PARTICLE, COARSE-PARTICLE, AND CONCENTRATED  
AEROSOLS.  
M S Schechter W N Sullivan A H Yeomans  
J Econ Entomol 53(5):908-914, 19 REFS., 6 TABS.  
Oct 1960 421 J822  
Allethrin, DDT, Insecticidal aerosols, Musca domestica,  
Particle size determination, Pyrethrum.
- 14949-68  
TRANSMISSION OF VIRUS Y BY INSTARS OF MYZUS PERSICAE  
(HOMOPTERA: AFIDAE).  
J T Schulz  
Entomol Soc Amer Ann 56(3):334-336, 3 REFS., 2 TABS.  
May 1963 420 EN82  
Myzus, Virus y (potatoes).
- 14950-68  
BIOTIC POTENTIAL OF PHYTOSEIID MITES FED ON VIRUS-INFECTED  
CYLIFUS RED MITES.  
J G Shaw C Moffitt G T Scriven  
J Econ Entomol 60(6):1751-1752  
Dec 1967 421 J822  
Amblyseius hibisci, Amblyseius limonicus, Insect mortality,  
Panonychus citri, Predaceous insects,  
Virus diseases (insects).
- 14951-68  
A COMPARISON OF THE DEVELOPMENTAL RATES OF ONE- AND TWO-YEAR  
CYCLE SPRUCE BUDWORM.  
R F Shepherd  
Can Entomol 93(9):764-771  
Sep 1961 421 C16  
Insect adaptation, Insect genetics, Insect morphology,  
Insect temperature, Natural control (insects), Picea.
- 14952-68  
NOTES: EFFECT OF CERTAIN CARCINOGENIC 2-FLUORENAMINE  
DERIVATIVES ON LARVAE OF THE HOUSE FLY, MUSCA DOMESTICA  
LINNAEUS.  
T J Shortino G E Cantwell W E Robbins  
J Invertebrate Pathol 5(4):489-492  
Dec 1963 421 J826  
Fluorenamine, Larvae, Musca domestica.
- 14953-68  
PIGMENT-PRODUCING VARIANTS OF BACILLUS THURINGIENSIS BER-  
LINER FROM THE SILKWORM.  
O I Shvetsova E R Zurahova  
Microbiology 35\_4, 613-617  
Jul 1966 448.3 H562AE  
Bacillus thuringiensis, Bombyx mori, Galleria mellonella,  
Pigmentation, Tutovyi-3.
- 14954-68  
SEX ATTRACTANTS OF THE BLACK CARPET BEETLE.  
A M Silverstein J O Rodin W E Burkholder J E Gorman  
Science 157(3784):85-87  
D7 Jul 1967 470 SC12  
Attageus negatoma, Sex attractants,  
Tetradecadienoic acid, trans-3,cis-5-.
- 14955-68  
OBSERVATIONS ON ODIOPORUS LONGICOLLIS (COLEOPTERA, CUR-  
CULIONIDAE) IN KATHMANDU VALLEY AND ITS SUBURBS.  
S Singh  
Indian J Entomol 28 (3), 410  
Sep 1966 420 IN23  
Insect biology, Musa paradisica, Odioporus longicollis.
- 14956-68  
ADAPTION OF A NUCLEAR-POLYHEDROSIS VIRUS OF TRICHIOCAMPUS  
VIMINALIS (PALLER) TO LARVAE OF TRICHIOCAMPUS IRREGULARIS  
(DIAR).  
W A Smirnoff  
J Invertebrate Pathol 5(1):104-110  
Mar 1963 421 J826  
Cimicidae, Polyhedroses, Trichiocampns irregularis.
- 14957-68  
EFFECT OF UREA ON THE FORMATION OF PARASPORAL INCLUSIONS IN  
SPECIES AND VARIETIES OF BACILLUS CEREBUS GROUP.  
W A Smirnoff  
J Invertebrate Pathol 5(3):389-392  
Sep 1963 421 J826  
Inclusion bodies, Urea.
- 14958-68  
SOUND PRODUCTION BY THE CEREAL LEAF BEETLE.  
M E Smith  
Entomol Soc Amer Ann 58(6):936, 2 REFS.  
Nov 1965 42D EN82  
Chrysomelidae, Stridulation.
- 14959-68  
INHIBITION OF METAMORPHOSIS AND OF ECDYSIS IN MOSQUITOES.  
A Spielman V Skaff  
J Insect Physiol 13(7):1087-1095  
Jul 1967 421 J825  
Culicidae, DFA, Farnesoic acid, Metamorphosis,  
Molting (insects).
- 14960-68  
A BIOASSAY TECHNIQUE FOR DETERMINING THE INSECTICIDAL  
ACTIVITY OF PREPARATIONS CONTAINING BACILLUS THURINGIENSIS  
BERLINER.  
C M Splittstoesser F L McEwen  
J Invertebrate Pathol 3(4):391-398, 11 REFS.  
Dec 1961 421 J826  
Bacillus thuringiensis, Biological assay,  
Biological control (insects), Musca domestica, Pieris rapae,  
Plutella maculipennis.
- 14961-68  
EDITORIAL: A CALL TO INVERTEBRATE PATROLOGISTS.  
E A Steinhaus  
J Invertebrate Pathol 3(1):I-III  
Mar 1961 421 J826  
Insect diseases.
- 14962-68  
EXPOSURE OF HOUSE FLIES AND ORIENTAL RAT FLEAS ON A HIGH-  
ALTITUDE BALLOON FLIGHT.  
W N Sullivan C N Smith  
J Econ Entomol 53(2):247-248, BIRL.  
Apr 1960 421 J822  
Cosmic rays, Insect biology, Insects, Musca domestica,  
Radiation, Temperature.
- 14963-68  
A CYTOPLASMIC POLYHEDROSIS OF CACTOBLASTIS CACTORUM  
(BERG).  
M Tamashiro S S Huang  
J Invertebrate Pathol 5(3):397-399  
Sep 1963 421 J826  
Cactoblastis cactorum, Polyhedroses.
- 14964-68  
THE EPIZOOTIOLOGY OF VIRUS DISEASES IN FIELD POPULATIONS OF  
THE ARMYWORM, PSEUDALETIA NIPUNCTA (HAWORTH).  
Y Tanada  
J Invertebrate Pathol 3(3):310-323, 18 REFS.  
Sep 1961 421 J826  
Epizootic diseases, Granuloses, Insect diseases,  
Pseudaletia nipuncta, Virus diseases (insects).
- 14965-68  
PARASITISM OF SIREX NOCTILIO F BY SCHLETTERERIDS  
CINCTIPES (CRESSON) (HYMENOPTERA: STEPHANIDAE).  
K L Taylor  
Entomol Soc Queensland J 6(1):13-19  
30 Jun 1967 42D EN823  
Insect biology, Parasitic insects, Pinus radiata,  
Rhyssa persuasoria, Sirex noctilio.

- 14966-68  
QUANTITATIVE STUDIES ON PURINE EXCRETION IN THE GREATER WAX MOTH, GALLERIA MELLOWELLA.  
K K Thomas  
Entomol Soc Amer Ann 58(6):883-885, 17 REFS.  
Nov 1965 420 EN82  
Galleria, Insect physiology, Nitrogen, Purines.
- 14967-68  
RELATIVE SUSCEPTIBILITY OF SALT-MARSH MOSQUITOES FROM GEORGIA AND FLORIDA TO INSECTICIDES.  
D E Weidhaas R R Ford  
Fla Entomol 42(3):109-111, 4 REFS., 2 TABS.  
Sep 1959 420 F662  
Benzene hexachloride, Culicidae, Ddt, Georgia, Insecticide resistant insects, Florida.
- 14968-68  
FAILURE TO ISOLATE MICROORGANISMS FROM WITHIN MOSQUITO EGGS.  
G A Wistreich J Moore  
Entomol Soc Amer Ann 56(4):559-561, 12 REFS., 1 TAB.  
Jul 1963 420 EN82  
Culicidae, Culture media, Insect eggs.
- 14969-68  
SOME OBSERVATIONS ON THE FINE STRUCTURE OF THE MIDGUT OF THE MITE ANYSTIS SP.  
K A Wright I M Newell  
Entomol Soc Amer Ann 57(6):684-693, 12 REFS., 6 FIGS.  
Nov 1964 420 EN82  
Anystis, Insect physiology.
- Genetics**
- 14970-68  
DEVELOPMENT OF DDT RESISTANCE IN CERTAIN MAYFLIES IN NEW BRUNSWICK.  
C D Grant A W A Brown  
Can Entomol 99(10):1040-1050  
Oct 1967 421 C16  
Canada, Ddt, Ephemeroptera, Insecticide resistant insects.
- 14971-68  
RESISTANCE TO AMERICAN FOOL BROOD IN HONEYBEES. III. DIFFERENTIAL SURVIVAL OF THE TWO KINDS OF LARVAE FROM TWO-DRONE MATINGS.  
L F Lewis W C Rothenbuhler  
J Invertebrate Pathol 3(2):197-215, 9 REFS.  
Jun 1961 421 J826  
American foulbrood, Insect mating.
- 14972-68  
SPERM DEPLETION IN CHEMOSTERILIZED AND NORMAL MALES OF THE YELLOW FEVER MOSQUITO, Aedes Aegypti.  
V P Sharma K S Rai  
Can Entomol 99(10):1116-1118  
Oct 1967 421 C16  
Aedes aegypti, Reproduction, Spermatozoa.
- Medical Entomology**
- 14973-68  
CROSS-TOLERANCE OF CALIFORNIA Aedes nigromaculis (LUDLOW) LARVAE TO EPN, AETATE, AND DURSBRAN. (ABSTRACT).  
P A Gillies D J Womeldorf K E White  
Calif Mosquito Contr Ass Proc Pap 35:111  
1967 428 C763  
Aedes nigromaculis, Chemical control (insects), Dursban, Epn, Insecticide resistant insects.
- 14974-68  
NEW METHODS OF INTRODUCING VISUAL AND AUDITORY CUES. (ABSTRACT).  
J S Haeger  
Calif Mosquito Contr Ass Proc Pap 35:106  
1967 428 C763  
Aedes taeniorhynchus, Attractants, Insect cages, Insect flight.
- 14975-68  
MOSQUITO CONTROL ACTIVITIES OF THE U.S. ARMED FORCES IN THE REPUBLIC OF VIETNAM.  
R T Holway A W Morrill F J Santana  
Calif Mosquito Contr Ass Proc Pap 35:23-29  
1967 428 C763  
Armed forces, Culicidae, Insect control, Insect repellents, Insect vectors, Malaria.
- 14976-68  
LABORATORY OBSERVATIONS OF AEDINE MOSQUITO OVIPOSITION (DIPTHERA, COLICIDAE, AEDES).  
K L Knight D Sulzback  
Calif Mosquito Contr Ass Proc Pap 35:100-103 REP  
1967 428 C763  
Aedes, Culicidae, Insect behavior, Ovipositors.
- 14977-68  
SOIL TREATMENTS WITH INSECTICIDES FOR CONTROL OF THE EYE GNATS HIPPELATES COLLOSOR AND H. HERMSI.  
M S Mulla M M Barnes M J Garber  
J Econ Entomol 53(3):362-365, 8 ILL., TABS.  
Jun 1960 421 J822  
Aldrin, DDT, Heptachlor, Hippelates, Insecticides.
- 14978-68  
EFFICIENCY OF GRANULATED INSECTICIDES INFLUENCED BY SOLVENTS USED FOR IMPREGNATION.  
M S Mulla H Axelrod  
J Econ Entomol 53(5):938-949, 13 REFS., 10 FIGS.  
Oct 1960 421 J822  
Aquatic insects, Benzene hexachloride, Culicidae, EPN, Parathion.
- 14979-68  
BIOLOGICAL ACTIVITY OF SURFACTANTS AND SOME CHEMICAL INTERMEDIATES AGAINST PRE-IMAGINAL MOSQUITOES.  
M S Mulla  
Calif Mosquito Contr Ass Proc Pap 35:111-117  
1967 428 C763  
Aedes nigromaculis, Biological assay, Culex pipiens quinquefasciatus, Detergents, Insecticide resistant insects, Larvicides, Surface-active agents, Toxicity.
- 14980-68  
PANEL: OPPOSING PHILOSOPHIES IN MOSQUITO CONTROL TECHNOLOGY: EMPHASIS ON CONTROL OF ADULT MOSQUITOES IN FLORIDA.  
J A Mulrennan A J Rogers  
Calif Mosquito Contr Ass Proc Pap 35:29-31  
1967 428 C763  
Aedes, Culicidae, Insect control, Larvicides, Psorophora confinnis, Florida.
- 14981-68  
INFESTATION OF THE IMPORTED FIRE ANT, SOLENOPSIS SAEVISSIMA V. RICHTERI, AT FORT RENNING, GEORGIA.  
A T Olive  
J Econ Entomol 53(4):646-648  
Aug 1960 421 J822  
Chemical control (insects), Georgia, Heptachlor, Solenopsis.
- 14982-68  
A PRELIMINARY REPORT ON A POTENTIAL NEW MOSQUITO CONTROL WEAPON.  
G M Stokes  
Calif Mosquito Contr Ass Proc Pap 35:122  
1967 428 C763  
Ammonia, Culicidae, Diesel fuels, Insect control, Insecticides, Reports.  
Abstract:  
the United States' solution to laying down a smokescreen for the protection of naval vessels was to heat diesel fuel to a high temperature. the Argentine Navy's answer to the production of a smokescreen was to combine SiCl4 and ammonia water forming a very dense and heavy fog.
- 14983-68  
ST. LOUIS ENCEPHALITIS VECTOR STUDIES IN HOUSTON, TEXAS.  
W D Sudia P H Coleman R W Chamberlain J S Wiseman T H Woke  
J Med Entomol 4(1):32-36, REP.  
25 Apr 1967 421 J828  
Anopheles quadrimaculatus, Arboviruses, California encephalitis virus, Culex pipiens quinquefasciatus, Culicidae, Human diseases, Saint Louis encephalitis.



10 14984-68

14984-68

THE EFFECTIVENESS OF LIQUEFIED-GAS-PROPELLED CONCENTRATED ALLETHRIN AEROSOLS AND AIR-ATOMIZED DIBROM AEROSOLS AGAINST NORMAL AND RESISTANT HOUSE FLIES.

W N Sullivan A H Yeomans M S Schecter  
J Econ Entomol 53(5) '956, 1 REF., 1 TAB.  
Oct 1960 421 JR22

Aerosols, Allethrin, Musca domestica, Naled.

14985-68

SOURCE REDUCTION THROUGH WATER MANAGEMENT.

D J Sutherland D M Jobbins L E Hagmann  
Calif Mosquito Contr Ass Proc Pap 35:31-33  
1967 428 C763  
Culicidae, Insect control, Water.

14986-68

THE INFLUENCE OF SUPPLETHAL DOSAGES OF INSECTICIDES ON THE BASAL PULVICLES OF AEDES AEGYPTI (L.). (ABSTRACT).

D J Sutherland P D Beame A F Gupta  
Calif Mosquito Contr Ass Proc Pap 35:110-111  
1967 428 C763

Aedes aegypti, Ddt, Dieldrin, Insect mortality,  
Insect rearing, Malathion.

Abstract:

it appears highly probable that at least some insecticides, while controlling mosquito populations, induce survivors to rebuild populations more rapidly than expected.

14987-68

EVALUATION OF THERMAL AND NONTHERMAL FOGS AGAINST FOUR SPECIES OF MOSQUITOES. (ABSTRACT).

R T Taylor H F Schoof  
Calif Mosquito Contr Ass Proc Pap 35:109  
1967 428 C763

Aedes aegypti, Aedes taeniorhynchus, Anopheles albimanus, Dursban, Malathion.

14988-68

PRELIMINARY REPORT ON THE FEEDING PATTERN OF TWO SPECIES OF FISH IN A RICE FIELD HABITAT.

R K Washino Y Hokama  
Calif Mosquito Contr Ass Proc Pap 35:84-87  
1967 428 C763

Culicidae, Fish, Gambusia, Habitats, Predatory animals, Rice. Includes Gambusia affinis and Cyprinus carpio predatory activity on mosquito larvae.

## 20 CROP PROTECTION

14989-68

MAMMALIAN DETOXIFICATION OF INSECTICIDES.

A A deYakimac B A Akin  
Agr Chem 19(9) '42,167, 3 TABS.  
Sep 1964 381 AG8  
Bayer 25141, Nite, Parathion, Pesticides, Poisoning.

14990-68

COLONIZATION OF SHORLEAF PINE STUMPS.

F H Berry  
Agr Chem 20(9) '117  
Sep 1965 381 AG8  
Ammonium flouride, Ammonium sulfamate, Borateem, Borax, Conifers, Fungi, Urea.

14991-68

SEVERAL INSECTS CAUSE CONCERN.

K Dorward  
Agr Chem 20(9) '67,172-174  
Sep 1965 381 AG8  
Anthonomus grandis, Diabrotica, Fleahoppers, Mites, Pest control.

14992-68

UPTAKE OF RADIOACTIVE ETHYL NN-DI-N-PROPYLTHIOCARBAMATE (EPTC-35 S) AND TRANSLOCATION OF SLDPHOR-35 IN VARIOUS CROPS.

S C Fang P Theisen  
J Sci Food Agr 12(2) 'I-74-5  
Feb 1961 382 S012  
EPTC, Ethyl NN -ki-n-propylthiocarbamate, Radioactive tracers, Sulfur isotopes, Vegetables.

14993-68

POPULATION ECOLOGY AND PEST CONTROL.

P W Geier  
J Sci Food Agr 15(11) 'II-238-1  
Nov 1964 382 S012  
Ecology, Pest control.

## Diseases

14994-68

A NEW STRAIN OF SDGARCANE MOSAIC VIRDS.

E V Abbott  
Phytopathology 51(9):642  
Sep 1961 464.R P56  
Mosaic (sugarcane).

14995-68

STERIOD ALKALOIDS IN THE DISEASE RESISTANCE OF WHITE POTATO TUBERS.

E H Allen J Kuc  
Phytopathology 54(8):886  
Aug 1964 464.8 P56  
Alkaloids, Chemical control (plant diseases), Potatoes, Steroids.

14996-68

TRISTEZA VIRUS IN ARIZONA CITRUS.

R M Allen H H McDonald W R Oden  
Phytopathology 54(12):1431  
Dec 1964 464.H P56  
Arizona, Arizona, Citrus, Tristeza (citrus).

14997-68

VARIABILITY OF SEEDLING CLONES OF CITRUS AS INDICATORS OF EXOCORTIS VIRUS OF CITRUS.

R M Allen W R Oden  
Phytopathology 54(12):1431  
Dec 1964 464.8 P56



- Citron, Indicator plants, Seedlings.
- 14998-68  
DBY BCOI BOT OF CITBUS INDUCED BY AMMONIA EXCESSES.  
R M Allen  
Phytopathology 52(8):721  
Aug 1962 464.8 P56  
Ammonia, Citrus, Foot rot (citrus).
- 14999-68  
IMMUNE RESPONSE TO A PLANT VIRUS BOUND OR SEROLOGICALLY PRECIPITATED IN AGAR.  
W B Allen J H Tremaine  
Phytopathology 52(8):721  
Aug 1962 464.8 P56  
Agar, Immunity, Ringspot (carnation).
- 15000-68  
THE EFFECT OF CHLORINATED C3 HYDROCARBONS ON GROWTH AND AMINO ACID PRODUCTION OF INDIGENOUS SOIL BACTERIA.  
J Altman S Lawlor  
Phytopathology 54(8):886  
Aug 1964 464.8 P56  
Amino acids, Plant regulators, Soil bacteria.
- 15001-68  
STUDIES ON A VIRUS CAUSING STEM GROWING AND GAFT-UNION ABNORMALITIES IN VIRGINIA CRAB APPLE.  
O Amaro de Sequeira  
Ann Appl Biol 60(1):59-66, BEP.  
Aug 1967 442.8 AN72  
Apples, Plant abnormalities.
- 15002-68  
METHODS OF MECHANICAL TRANSMISSION OF BEAN YELLOW MOSAIC VIRUS INTO WHITE CLOVER.  
L P Anderson J E Halpin  
Phytopathology 51(9):642  
Sep 1961 464.8 P56  
Plant disease transmission, White clover, Yellow mosaic (beans).
- 15003-68  
CONTROL OF TOBACCO FLECK BY DUSTING WITH ZINEB.  
P J Anderson  
Phytopathology 51(8):574  
Aug 1961 464.8 P56  
Tobacco, Zineb.
- 15004-68  
EFFECT OF DUTCH ELM DISEASE ON SEEDLING ELMS.  
T Arisumi D J Biggins  
Phytopathology 51(12):847-850  
Dec 1961 464.8 P56  
Dieback (elms), Ulmus.
- 15005-68  
SOME CLOVERS SUSCEPTIBLE TO THE CASSIA, COTTON, AND OTHER WILT FUSARIA.  
G M Armstrong J K Armstrong  
Phytopathology 51(9):642  
Sep 1961 464.8 P56  
Clover, Cotton.
- 15006-68  
PATHOGENICITY OF ISOLATES OF THE BEAN WILT FUSARIUM FROM ENGLAND AND THE UNITED STATES.  
G M Armstrong J K Armstrong  
Plant Dis Rep 48(11):846-847  
15 Nov 1964 1.9 P69P  
Beans, England, Fusarium, United States.
- 15007-68  
CROWN AND FOOT BOTS OF ALFALFA AND BED CLOVER AND THE RELATIVE PREVALENCE OF ASSOCIATED FUNGI.  
C Aube J Deschenes  
Plant Dis Rep 51(7):573-577  
Jul 1967 1.9 P69P  
Alfalfa, Crown rot, Bed clover, Foot rot.
- 15008-68  
PRINCIPAL DISEASES AFFECTING PINUS RADIATA IN CHILE.  
S H Autter  
Pao Plant Protect Bull 15(1):17-18  
Feb 1967 421 P692  
Pinus radiata, Tree diseases.
- 15009-68  
SEROLOGY OF THE POTATO SPINDLE TUBER VIRUS.  
B H Bagnall  
Phytopathology 57(5):533-534  
May 1967 464.8 P56  
Potatoes, Serological tests, Spindle tuber (potatoes).
- 15010-68  
CROSS-INOCULATION STUDIES WITH FOUR SPECIES OF ANTHRACNOSE FUNGI.  
J F Baniecki D F Crossan  
Phytopathology 53(7):745  
Jul 1963 464.8 P56  
Anthracnose (apples), Anthracnose (piper nigrum), Anthracnose (tomatoes).
- 15011-68  
COMPARISON OF ASTER YELLOWS AND BARLEY DWARF VIRUSES IN TWO BARLEY VARIETIES.  
E E Bantari  
Phytopathology 54(8):887  
Aug 1964 464.8 P56  
Aster yellows (barley), Barley.
- 15012-68  
AN EVALUATION OF CERTAIN FUNGICIDE - ADJUVANT COMBINATIONS FOR CONTROL OF PECAN SCAB.  
G L Barnes  
46(4):236-239, TABS  
15 Apr 1962  
Fungicides, Scab (pecan).
- 15013-68  
ORGANIC FUNGICIDES FOR CONTROL OF PECAN SCAB.  
G L Barnes  
Agr Chem 17(11):121  
Nov 1962 381 AG8  
Dyrene, Scab (pecans), Zineb.
- 15014-68  
EFFECTS OF PLANT-BED APPLICATIONS OF 2,6-DICHLORO-4-NITROANILINE ON CONTROL OF SCLEROTIAL BLIGHT AND ON PLANT PRODUCTION IN SWEET POTATOES.  
J B Barry W J Martin  
Plant Dis Rep 51(3):191-194  
Mar 1967 1.9 P69P  
Crop varieties, Dichloro-4-nitroaniline, 2,6-, Dosage, Fungicides, Sclerotium rolfsii, Sweetpotatoes.
- 15015-68  
OCCURRENCE AND AMOUNT OF STEM CAVITY BUSHY ON GOLDEN DELICIOUS APPLES.  
E C Blodgett  
Plant Dis Rep 51(4):302-306  
Apr 1967 1.9 P69P  
Apples, Stem end russet (apples).
- 15016-68  
STORAGE AND GERMINATION OF CUTTINGS AND SOIL MICROORGANISMS AS THEY RELATE TO THE PINEAPPLE DISEASE OF SUGAR CANE.  
A W Boyd  
Diss Abstr Sect B 27(11):03743B-3744B  
May 1967 Z5055.U49D53  
Endoconidiophora paradoxa, Pineapple disease (sugarcane), Rhizoctonia, Soil microorganisms, Sugarcane.
- 15017-68  
THE RIBONUCLEIC ACIDS OF LEAVES AND PODS OF PEAS INFECTED WITH PEA ENATION MOSAIC VIRUS.  
B F Bozarth L H Weinstein  
Phytopathology 54(7):746  
Jul 1964 464.8 P56  
Enation mosaic (peas), Peas, Phytopathology, Virus diseases (plants).
- 15018-68  
PATHOGEN VARIABILITY AND BREEDING VERTICILLIUM WILT RESISTANT STRAWBERRIES.  
B S Bringham S Wilhelm V Voth  
Phytopathology 51(11):786-794  
Nov 1961 464.8 P56  
Plant breeding, Plant disease resistance, Strawberries, Verticillium wilt.
- 15019-68  
EFFECT OF VARIATIONS IN TEMPERATURE ON THE REACTION OF TEMPERATURE-SENSITIVE WHEAT VARIETIES TO WHEAT STEM RUST.  
K R Bromfield  
Phytopathology 51(11):794-797  
Nov 1961 464.8 P56

## BIBLIOGRAPHY

2D 15020-68

- Stem rust (wheat), Temperature, Wheat.  
Feb 1967 464.8 P56  
Citrus, Plant disease control, Psorosis (oranges), Tristeza (citrus).
- 15020-68  
SOME ENVIRONMENTAL FACTORS INFLUENCING PENETRATION FROM AP-  
PHESSORIA OF FUCCINIA GRAMINIS F. SP. TRITICI ON SEEDLING  
WHEAT LEAVES.  
J F Brown & A Shipton  
Phytopathology 54(8):949-951, TARS.  
Aug 1964 464.8 P56  
Leaves, wheat.
- 15021-68  
RAPID INDEXING OF EXOCORTIS IN CITRUS.  
E C Calavan E F Frolich J R Carpenter C N Roistacher  
Phytopathology 54(11):1359-1362  
Nov 1964 464.8 P56  
Citrus, Exocortis (citrus).
- 15022-68  
DEPOSIT RATE AND SPRAY OIL COMPOSITION IN RELATION TO PHYTO-  
TOXICITY AND SIGATOKA DISEASE CONTROL ON BANANA LEAVES.  
L Calpouzos C Colberg T Theis N E Delfel  
Phytopathology 51(8):582-584  
Aug 1961 464.8 P56  
Phytotoxicity, Sigatoka (bananas).
- 15023-68  
VISCOSITY OF NAPHTHENIC AND PARAFFINIC SPRAY OILS IN RELA-  
TION TO PHYTOXICITY AND SIGATOKA DISEASE CONTROL ON BA-  
NANA LEAVES.  
L Calpouzos N E Delfel C Colberg T Theis  
Phytopathology 51(8):528-531  
Aug 1961 464.8 P56  
Paraffin oils, Toxicology, Viscosity.
- 15024-68  
TRANSMISSION OF RADISH MOSAIC VIRUS.  
R N Campbell W M Colt  
Phytopathology 57(5):502-504  
May 1967 464.8 P56  
Mosaic (radishes), Plant disease transmission.
- 15025-68  
THE EFFECT OF STORAGE MOLDS ON GERMINATION AND VIGOR OF CAN-  
NING PEAS.  
L E Carlson T H King  
52(8):727  
Aug 1966  
Peas, Plant hardiness, Seed germination, Storage diseases.
- 15026-68  
MAINTAINING VIRUS-FREE CULTIVARS OF PEACH IN MICHIGAN.  
D Cation  
Plant Dis Rep 51(4):261-263 REP  
Apr 1967 1.9 P69P  
Crop varieties, Peaches, Plant disease transmission,  
Seed-borne plant diseases, Virus diseases (plants).  
Prunus ring spot virus (PRSV) is perpetuated in Michigan  
peach only through rootstocks infected from seed or by  
indiscriminate bud selection from latently infected trees in  
nursery practice. Cherry yellows virus (CYV) from its ready  
recognition and minimal seed production is not a factor in  
peach. neither of these viruses is spread naturally in  
Michigan orchards or nurseries. green ring mottle virus  
(GRMV) was not transmitted through seed. with the exception  
of GRMV which seems universally present in a few desirable  
cultivars it seems feasible to establish peach plantings  
free from known viruses. in many locations, according to  
these studies and observations, such plantings would con-  
tinue virus free for the life of the orchard. GRMV must be  
tolerated as it has no apparent effect on peach quality,  
growth or yield. valuable and necessary varieties infected  
with GRMV could be grown separately. no data are known for  
the amount and distance of GRMV spread but sample indexings  
from old orchards indicate that spread in peach is not oc-  
curring in some areas.
- 15027-68  
A REPORT OF THE OCCURRENCE OF CAMELLIA FLOWER BRIGHT IN  
MISSISSIPPI.  
J H Ccchran  
Plant Dis Rep 46(8):617  
15 Aug 1962 1.9 P69P  
Blight (camellia), Mississippi.
- 15028-68  
FAILURE OF PSOROSIS VIRUS TO PROTECT AGAINST CITRUS  
VARIATION VIRUS.  
M K Corbett W C Price  
Phytopathology 57(2):151-153
- 15029-68  
AN EVALUATION OF TWO FUNGICIDES AS SOIL TREATMENTS WITH AND  
WITHOUT HERBICIDE FOR TOMATO FRUIT CONTROL.  
D F Crossan A L Morehart  
Plant Dis Rep 46(4):227-229  
15 Apr 1962 1.9 P69P  
Fungicides, Soil fumigation, Soil treatment.
- 15030-68  
CONTROL OF BACTERIAL SPOT OF PEACH.  
R H Daines  
Agr Chem 19(12):60  
Dec 1964 381 AG8  
Bacterial spot (peaches), Captan, Copper, Zinc chromate.
- 15031-68  
SPRAY PROGRAMS AND THE CONTROL OF SOOTY BLOTCH OF APPLES.  
R H Daines  
Plant Dis Rep 46(7):513-515  
15 Jul 1962 1.9 P69P  
Chemical control (plant diseases), Sooty blotch (apples).
- 15032-68  
DODINE (CYPREX) EFFECTIVE AGAINST BACTERIAL SPOT OF PEACH.  
R H Daines  
Phytopathology 51(8):576  
Aug 1961 464.8 P56  
Bacterial spot (peaches), Chemical control (plant diseases),  
Dodine.
- 15033-68  
EVIDENCE FOR FUNCTIONAL CYTOCHROME OXIDASE IN TISSUES IN-  
FECTED BY OBLIGATE PARASITES.  
J M Daly S G Jensen  
Phytopathology 51(11):759-765, BURL. 764-765  
Nov 1961 464.8 P56  
Cytochrome oxidase, Parasitism, Tissues.
- 15034-68  
RESPIRATORY CHANGES DURING DEVELOPMENT OF RUST DISEASES.  
J M Daly A A Rell L R Kempka  
Phytopathology 51(7):461-471, BURL. 471, TARS.  
Jul 1961 464.8 P56  
Metabolism, Uredinales.
- 15035-68  
PLANT-TO-PLANT TRANSFER OF STONE FRUIT RINGSPOT VIRUS IN  
SQUASH BY POLLINATION.  
C R Das J A Milbrath  
Phytopathology 51(7):489-49D  
Jul 1961 464.8 P56  
Fruit, Plant disease transmission, Pollination,  
Ring spot (fruit), Squash.
- 15036-68  
MOSAIC SUSCEPTIBILITY OF SUGARCANE SEEDLINGS AS DETERMINED  
BY MECHANICAL INOCULATION AND NATURAL INFECTION.  
J L Dean O R Coleman D M Broadhead  
Phytopathology 51(9):643  
Sep 1961 464.8 P56  
Mosaic (sugarcane), Plant disease resistance.
- 15037-68  
CERATOCYSTIS CANKER OF STONE FRUIT TREES.  
J E DeVay P L Lukezic W H English E E Tinjillo  
Phytopathology 53(8):873  
Aug 1963 464.8 P56  
Canker (fruit), Ceratocystis canker, Fruit.
- 15038-68  
BEAN YELLOW MOSAIC VIRUS IN DETACHED LEAVES OF RED CLOVER  
PLANTS.  
S Diachan L Henson  
Phytopathology 53(8):873-874  
Aug 1963 464.8 P56  
Leaves, Red clover, Yellow mosaic (beans).
- 15039-68  
SUSCEPTIBILITY OF EASTERN WHITE PINE TO CHLOROTIC DWARF.  
L S Dochinger C E Seliskar  
Phytopathology 53(8):874  
Aug 1963 464.8 P56  
Chlorotic dwarf (pinus strobus), Pinus.

- 15040-68  
A DRY ROT OF ACORN SQUASH, CUCURBITA PEPO. L.  
S T Doening G F Weber  
Phytopathology 53(8):874  
Aug 1963 464.8 P56  
Dry rot (winter squash), Glomerella, Physalospora,  
winter squash.
- 15041-68  
ACTION OF SOIL FUNGICIDES. IV. CHANGES IN THE SPECTRUM OF  
SOIL FUNGI. V. SENSITIVITY OF SOIL ORGANISM IN VITRO.  
K H Domsch  
J Sci Food Agr 12(1)'I-16-4  
Jan 1961 382 SO12  
Captan, Nahan, Soil fungi, Thiram, Vapam.
- 15042-68  
TIME OF PRUNING AND INFECTION OF PEACH TREES BY PSEUDOMONAS  
SYRINGAE.  
W M Dewler D R Petersen  
Phytopathology 53(8):874  
Aug 1963 464.8 P56  
Peaches, Pruning, Pseudomonas.
- 15043-68  
BEET YELLOW STUNT VIRUS.  
J E Duffus  
Phytopathology 54(12):1432  
Dec 1964 464.8 P56  
Beets, Virus diseases (plants).
- 15044-68  
EFFECT OF LIGHT ON THE RATE OF DECAY OF THREE WOOD  
DESTROYING FUNGI.  
C G Duncan  
Phytopathology 57(10):1121-1125  
Oct 1967 464.6 P56  
Light, Finns, Wood destroying fungi.
- 15045-68  
CONTROL OF BROWN STEM ROT OF SOYBEANS WITH CORN-SOYBEAN  
ROTATIONS.  
J M Dunleavy C B Weber  
Phytopathology 57(2):114-117  
Feb 1967 464.8 P56  
Brown stem rot (soybeans), Crop rotation, Soybeans.
- 15046-68  
CECOSPORELLA LEAF SPOT-RESISTANT RADISH GREENS.  
E L Felix  
Phytopathology 54(8):892  
Aug 1964 464.8 P56  
Plant disease resistance, Radishes.
- 15047-68  
EFFECTS OF LIGHT, TEMPERATURE, AND FERTILIZER ON INFECTION  
OF WHEAT LEAVES BY SEPTORIA TRITICI.  
R Fellows  
Plant Dis Rep 46(12):846-848, TABS.  
15 Dec 1962 1.9 P69P  
Fertilizers, Light, Temperature.
- 15048-68  
SOME OBSERVATIONS ON THE NUMBER OF ROOT LESION NEMATODES  
NECESSARY TO CAUSE INJURY TO SEEDLING ONIONS.  
J H Ferris  
Plant Dis Rep 46(7):484-485  
15 Jul 1962 1.9 P69P  
Onions, Plant nematodes, Seedlings.
- 15049-68  
RHIZOCTONIA TIP BLIGHT AND STEM ROT OF PEA.  
N T Plentje D J Hagedorn  
Phytopathology 54(7):788-791  
Jul 1964 464.8 P56  
Peas, Stem rot (peas), Tip blight (peas).
- 15050-68  
ANTIBIOTIC TREATMENT OF YOUNG LOBLOLLY PINES INFECTED WITH  
FUSIFORM RUST.  
R R Foil G G Merrifield T Ranshrough  
Plant Dis Rep 51(3):223-224  
Mar 1967 1.9 P69P  
Antibiotics, Cronartium fusiforme, Cycloheximide, Fungicides,  
Fungus diseases (plants), Pinus taeda, Rust (pinus taeda),  
Tree diseases.  
Abstract:  
application of cycloheximide derivatives to loblolly pines  
infected with fusiform rust resulted in death of diseased  
tissue, but also caused the eventual death of the host trees
- by restriction of translocation. satisfactory results were  
attained only in cases where infected tissues occupied less  
than half the hole surface.
- 15051-68  
THE INTERACTION OF POTATO VIRUSES X AND Y IN INOCULATED  
TOBACCO LEAVES AT VARIOUS TEMPERATURES.  
R E Ford A F Ross  
Phytopathology 51(8):576  
Aug 1961 464.8 P56  
Immunization, Tobacco.
- 15052-68  
PURIFICATION OF VIRUSES FROM PEA ROOTS.  
R E Ford  
Phytopathology 54(12):1433  
Dec 1964 464.8 P56  
Peas, Roots, Viruses.
- 15053-68  
REDUCTION OF ASTER YELLOWS.  
R A Fredericksen  
Agr Chem 18(9)'147,181-182  
Sep 1963 381 AG8  
Aster yellows (flax), Disulfoton, Macrosteles, Phorate.
- 15054-68  
EFFECTS OF TIME AND TEMPERATURE ON RATE OF GRAFT  
TRANSMISSION OF THE PRUNUS RINGSPOT VIRUS.  
P B Fridlund  
Phytopathology 57(2):230-231  
Feb 1967 464.8 P56  
Plant disease transmission, Plant temperature,  
Ring spot (prunus).
- 15055-68  
ALFALFA MOSAIC VIRUS TRANSMITTED THROUGH ALFALFA SEED.  
F I Froeseiser  
Phytopathology 54(8):893  
Aug 1964 464.8 P56  
Alfalfa, Mosaic (alfalfa), Plant disease transmission.
- 15056-68  
INCLUSION BODIES ASSOCIATED WITH SUGAR BEET MOSAIC.  
I Fujisawa C Matsui A Yabaguchi  
Phytopathology 57(2):210-213  
Feb 1967 464.8 P56  
Inclusion bodies, Mosaic (sugar beets).
- 15057-68  
A NEW FUNGUS LEAF SPOT DISEASE OF CUCUMBER IN WESTERN WASH-  
INGTON.  
R L Gabrielson L Campbell  
Phytopathology 54(12):1433  
Dec 1964 464.8 P56  
Cucumbers, Washington.
- 15058-68  
AN ANOMALOUS EFFECT OF PENTACHLORONITROBENZENE ON THE INCI-  
DENCE OF DAMPING-OFF CAUSED BY A PHYTHIUM SP.  
I A Gibson M Ledger E Boehm  
Phytopathology 51(8):531-533, TABS.  
Aug 1961 464.8 P56  
Pentachloronitrobenzene.
- 15059-68  
HEAT ACTIVATION OF VIRUS INOCULUM.  
C C Gill C E Yarwood  
Phytopathology 54(12):1433  
Dec 1964 464.8 P56  
Heat, Virology.
- 15060-68  
EVIDENCE AGAINST SEED TRANSMISSION OF GREEN RING MOTTLE  
VIRUS IN MAZZARD CHERRY SEEDLINGS.  
R M Gilmer K D Brase  
Plant Dis Rep 46(5):356  
15 May 1962 1.9 P69P  
Green ring mottle (cherries), Plant disease transmission.
- 15061-68  
ALTERNARIA OF COTTON IN SOMALIA. (IT )  
C Golato  
8iv Agr Subtrop Trop 61(1/3) 11-14. REP.  
Jan 1967 26 AG82  
Alternaria macrospora, Cotton, Fungus diseases (plants).



## BIBLIOGRAPHY

20 15062-68

- 15062-68  
ANTIHCST SERUM IMPROVES PLANT VIRUS PURIFICATION.  
A H Gold  
Phytopathology 51(8):561-565  
Aug 1961 464.8 P58  
Serum, Virus diseases (plants).
- 15063-68  
SPECIES OF LEPTOSPHERULINA ON FORAGE PLANTS.  
J H Graham E S Lattrell  
Phytopathology 51(1D):68D-693, BIRL. 692-693, TABS.  
Oct 1961 464.8 P56  
Forage plants, Leptosphaerulina.
- 15064-68  
BRUISING AS A PREDISPOSING FACTOR IN THE DECAY OF STORED CRANBERRIES.  
S O Graham M E Patterson B Allen  
Phytopathology 57(5):497-501  
May 1967 464.8 P56  
Cranberries, Storage injuries.
- 15065-68  
CONTROL OF VERTICILLIUM WILT OF PEPPERMINT BY SOIL FUMIGATION IN MUCK SOIL.  
R J Green Jr  
Plant Dis Rep 48(12):960-963, TABS.  
15 Dec 1964 1.9 P69P  
Fungicides, Muck soils, Verticillium.
- 15066-68  
PHYSIOLOGICAL BASIS OF GALL FORMATION IN BLACK-KNOT DISEASE OF PRUNUS.  
G L Greene  
Phytopathology 52(9):880-884, BIBL. 883-884  
Sep 1962 464.8 P56  
Plant galls, Plant physiology, Prunus.
- 15067-68  
PURIFICATION OF PEA ENATION MOSAIC VIRUS.  
S Gross  
Phytopathology 55(2):127  
Feb 1965 464.8 P56  
Enation mosaic (peas), Peas, Purification.
- 15068-68  
EFFECT OF INCUBATION TEMPERATURE ON LENGTH AND INFECTIVITY OF POTATO VIRUS X PARTICLES IN FOUR HOST SPECIES.  
J W Guthrie  
Phytopathology 55(6):607-611, BIBL., TABS.  
Jun 1965 464.8 P56  
Incubation, Infectious diseases, Potatoes, Temperature, Virus x (potatoes).
- 15069-68  
A NEW METHOD OF APPLYING BIPHENYL FOR THE CONTROL OF CITRUS FRUIT ROTS.  
Y Gutter  
Plant Dis Rep 51(1):58-61  
Jan 1967 1.9 P69P  
Biphenyl, Rot (lemons), Rot (oranges).
- 1507D-68  
SEVERITY AND DISTRIBUTION OF COTTON ROLL ROT AS RELATED TO TEMPERATURE.  
P M Halisky W C Schnathorst M A Shagrun  
Phytopathology 51(R):501-505  
Aug 1961 464.8 P56  
Fungi, Temperature.
- 15071-68  
UNDESCRIBED PLANT DISEASES AND NEW HOSTS RECORDED IN OREGON DURING 1960-1961.  
R S Halliwell I C MacSwan  
Plant Dis Rep 46(1):30  
15 Jan 1962 1.9 P69P  
Plant diseases.
- 15072-68  
ACCUMULATION OF FLUORESCENT COMPOUNDS IN TOBACCO ASSOCIATED WITH TOBACCO MOSAIC VIRUS HYPERSENSITIVITY.  
B E Hampton R Suseno D M Brumagen  
Phytopathology 54(9):1062-1064  
Sep 1964 464.8 P56  
Fluorescent substances, Hypersensitivity, Mosaic (tobacco).
- 15073-68  
INDEX TO GENERA OF PATHOGENS LISTED IN THE "INDEX OF PLANT DISEASES IN THE UNITED STATES. 1.  
R T Hanlin J R Chalkley  
Plant Dis Rep 51(3):235-240  
Mar 1967 1.9 P69P  
Indexes, Microorganisms, Plant diseases, United States.
- 15074-68  
EFFECT OF BORDEAUX SPRAY AND PLASTIC COVERING IN PREVENTING INVASION OF LOW-TEMPERATURE-INJURED STEMS OF PRUNE TREES BY CYTOSPORA FUNGI.  
A W Belton  
Plant Dis Rep 46(2):77-79  
15 Feb 1962 1.9 P69P  
Bordeaux mixture.
- 15075-68  
BEHAVIOR OF WESTERN X VIRUS IN WELTROGUED PEACH AND CHERRY ORCHARDS.  
A W Helton  
Phytopathology 51(7):488-489  
Jul 1961 464.8 P56  
Cherries, Peaches.
- 15076-68  
ADDITIONAL EVIDENCE ON SOIL TRANSMISSION OF TOBACCO RINGSPOT VIRUS.  
J W Hendrix J P Fulton J L Dale  
Phytopathology 51(9):643  
Sep 1961 464.8 P56  
Plant disease transmission, Ring spot (tobacco).
- 15077-68  
THE POSSIBLE USE OF PINE NEEDLES AS SPORE TRAPS.  
J W Hendrix  
Phytopathology 53(8):878  
Aug 1963 464.8 P56  
Pine needles, Puccinia, Traps.
- 15078-68  
A PINE DISEASE IN NEW ZEALAND RESEMBLING LITTLELEAF.  
G H Repting F J Newhook  
Plant Dis Rep 46(R):57D-57I  
15 Aug 1962 1.9 P69P  
Little leaf (pinus).
- 15079-68  
INOCULATION OF ETIOLATED RUT LIGHT-TREATED LEAVES OF GRAPE WITH PANLEAF VIRUS.  
W R Hewitt L Cory  
54(8):895  
Aug 1964  
Panleaf (grapes), Grapes, Light.
- 15080-68  
EFFECT OF VIRUS YELLOWS ON YIELD AND QUALITY OF SUGAR BEET SEED.  
O A Hills C W Bennett H K Jewell D L Coudriet R W Rrnbacker  
J Econ Entomol 53(1):162-164, BIRL., PL.  
Feb 1960 421 JR22  
Curly top (sugar beets), Germination reduction, Seed germination, Sugar beets, Yellows (sugar beets).
- 15D81-68  
FIELD OBSERVATIONS ON ROOT ROT OF TEAK IN TANZANIA.  
D Hocking A A Jaffer  
Pao Plant Protect Bull 15(1):10-14  
Feb 1967 421 P692  
Tectona grandis, Tree diseases.
- 15082-68  
COMPARISON OF HEAT AND QUICK FREEZING FOR RELAXING NEMATODES PRIOR TO PERMANENT MOUNTING.  
J K Hoff W F Mai  
Phytopathology 54(7):869  
Jul 1964 464.8 P56  
Animal anatomy, Heat, Nematodes, Nematology.
- 15083-68  
RESISTANCE TO SEVERAL VIRAL DISEASES INHERITED AS A DNIT.  
F O Holmes  
Phytopathology 51(8):577  
Aug 1961 464.8 P56  
Plant disease resistance, Virus diseases (plants).
- 15D84-68  
RADISH MOSAIC VIRUSES.  
J C Horton G S Pound T P Pirone  
Phytopathology 51(7):434-440  
Jul 1961 464.8 P56  
Mosaic (radishes), Virus diseases (plants).



- 15085-68  
CONTROL OF ALTERNARIA BLIGHT OF RAPE AND MUSTARD BY GBISECPULVIN.  
A Hnsain R N Thakur  
Plant Dis Rep 46(9):672-673  
15 Sep 1962 1.9 P69P  
Blight (rape), Griseofulvin.
- 15086-68  
SPORULATION OF PHYTOPHTHORA PHASEOLI.  
R A Hyre G Ettinger  
Plant Dis Rep 51(4):0253-256  
Apr 1967 1.9 P69P  
Downy mildew (lima beans), Lima beans, Sporulation.  
Pennsylvania Agricultural Experiment Station cooperating.  
The optimum temperature range for sporulation of Phytophthora phaseoli on young "Fordhook" lima bean stems was 18-22 degrees C. about 50 percent as many sporangia occurred at 15 degrees and 25 degrees. very few occurred at 5 degrees and 30 degrees. at 20 degrees about 300 sporangia per cm<sup>2</sup> were present in 3 hours, 6,000 in 6 hours, 100,000 in 12 hours, and 225,000 in 24 hours. on the same lesion over 80 percent of the total number were present the first day, 12 percent the second day, and 4 percent the third day. on young infections many sporangia were formed after 2 days' colonization at 20-25 degree C: the maximum number (about 4 million per lesion). were formed after 4 days; and then the numbers rapidly declined the next 3 days. significantly (p=0.05) more sporangia occurred with a 16-hour day, 8-hour night, than with a 12-hour day, 12-hour night during the colonization period.
- 15087-68  
POBECASING DOWNY MILDEW OF LIMA BEAN IN CAPE MAY COUNTY, NEW JERSEY.  
B A Byre J MacLeod S B Davis Jr  
Plant Dis Rep 46(6):393-395  
15 Jun 1962 1.9 P69P  
Downy mildew (lima beans), New Jersey.
- 15088-68  
FUNGI ASSOCIATED WITH GLADIOLUS ROOTS UNDER CONTINUOUS CROPPING CONDITIONS.  
C B Jackson  
Plant Dis Rep 46(5):312-317  
15 May 1962 1.9 P69P  
Crop rotation, Fungus diseases (plants), Gladiolus, Roots.
- 15089-68  
PEAR DECLINE VIRUS TRANSMISSION BY PEAR PSYLLA.  
D D Jensen W G Griggs C Q Gonzales B Schneider  
Phytopathology 54(11):1346-1351, RIBL. 1351, TABS.  
Nov 1964 464.8 P56  
Decline (pears), Insect vectors, Pears,  
Plant disease transmission.
- 15090-68  
RESISTANCE TO FUSIFORM RUST IN SLASH PINE AS SHOWN BY ARTIFICIAL INOCULATION.  
P F Jewell S L Mallett  
Phytopathology 54(10):1294  
Oct 1964 464.8 P56  
Pinus elliottii, Plant disease resistance,  
Rust (pinus elliottii).
- 15091-68  
AN OUTBREAK OF BROADBEAN DISEASES IN IRAN.  
W J Kaiser K E Mueller D Danesh  
Plant Dis Rep 51(7):595-599  
Jul 1967 1.9 P69P  
Broadbeans, Chocolate spot (broadbeans), Mosaic (broadbeans), Rust (beans).
- 15092-68  
CONTROL OF CUCUMBER SCAR DUE TO CLADOSPORIUM CUCUMERINUM.  
J G Kantzes L O Weaver J M Wells  
J Sci Food Agr 15(9):1129-2  
Sep 1964 382 S012  
Cucumbers, Dicotyledon, Dithane M-45, Folpet, Maneb.
- 15093-68  
EFFECT OF S-TRIAZINE AND PHENYLUREA HERBICIDES ON SOIL FUNGI IN CORN- AND SOYBEAN-CROPPED SOIL.  
D D Kaufman  
Phytopathology 54(8):897  
Aug 1964 464.8 P56  
Chemical control (plant diseases), Corn, Herbicides, Soybeans.
- 15094-68  
SELECTIVE ISOLATION OF SOFT-ROT BACTERIA OF ONION.  
S O Kawanoto J W Lorbeer  
Phytopathology 54(8):897  
Aug 1964 464.8 P56  
Onions.
- 15095-68  
EPIDEMIOLOGY OF TEA BLISTER BLIGHT (EXORASIDIUM VEXANS). III. SPORE DEPOSITION AND DISEASE PREDICTION.  
A Kerr W B P Rodrigo  
Brit Mycol Soc Trans 50(1):49-55  
Mar 1967 451 B76  
Blister blight (tea), Exorasidium vexans, Forecasting, Plant diseases.
- 15096-68  
THE EFFECT OF FEBICARP ON COVERED SMUT INFECTION OF NAKED BARLEY VARIETIES.  
B L Kiesling  
Phytopathology 52(8):738  
Aug 1962 464.8 P56  
Barley, Covered smut (barley).
- 15097-68  
FUNGI ASSOCIATED WITH LARVAE OF SITONA SPP.  
R A Kilpatrick  
Phytopathology 51(9):640  
Sep 1961 464.8 P56  
Fungi, Larvae.
- 15098-68  
SEEDLING DISEASE OF WHEAT CAUSED BY SCLEBOTIUM ROLFSSII.  
B A Kilpatrick O G Merkle  
Phytopathology 57(6):538-540  
Jun 1967 464.8 P56  
Panogen, Sclerotium rolfsii, Seed treatment, Wheat.  
Texas A&M University cooperating.  
Abstract:  
treating seeds with Panogen improved germination of one variety but had little or no effect on controlling the disease.
- 15099-68  
PROTECTION OF CUCUMBER SEEDLINGS FROM STONE FRUIT BINGSPOT VIRUS BY 8-AZAAGUANINE.  
R C Kirkpatrick R C Linder  
Phytopathology 51(10):727-730  
Oct 1961 464.8 P56  
Cucumbers, Guanazolo, Plant protection.
- 15100-68  
STUDIES ON THE CONTROL OF BLACK BOT OF CUCURBITACEAE BY TREATING SEEDS WITH ANTIBIOTICS.  
J M Klisiewicz G S Pound  
Phytopathology 51(8):495-500, TABS.  
Aug 1961 464.8 P56  
Antibiotics, Plant disease control, Seed treatment.
- 15101-68  
THE DIPHENYLAMINE REACTION AND TRANSMISSION EXPERIMENTS WITH PHENOL EXTRACTS OF PLANTS INFECTED WITH POTATO LEAF ROLL VIRUS.  
R Koenig W C Mueller  
Phytopathology 54(10):1223-1227, RIBL. 1227  
Oct 1964 464.8 P56  
Leaf roll (potatoes), Phenols, Plant disease transmission.
- 15102-68  
PHYSIOLOGICAL FACTORS IN THE ETIOLOGY AND ALLEVIATION OF SALT-INDUCED DECLINE OF ROADSIDE MAPLES AND PINES.  
J R Kotheimer  
Diss Abstr Sect B 28(3):760R-761R  
Sep 1967 Z5U55.U49D53  
Acer, Pinus, Plant physiological diseases, Sodium chloride.
- 15103-68  
PURIFICATION, SEROLOGY, AND PROPERTIES OF A NEW COWPEA VIRUS.  
C W Kuhn  
Phytopathology 54(7):853-857, RIBL. 857  
Jul 1964 464.8 P56  
Cowpeas, Mottle (cowpeas), Serological tests, Virology, Virus diseases (plants), Viruses.
- 15104-68  
FLUORESCENT ANTIBODY TECHNIQUE FOR DETECTION OF POLYPORUS TOMENTOSUS.  
D Kumar R P Patton  
Phytopathology 54(8):898

## BIBLIOGRAPHY

20 15105-68

- Aug 1964 464.8 P56  
Polyporus tomentosus.
- 15105-68  
CANKERS OF ORNAMENTAL CRABAPPLES ASSOCIATED WITH PHYSALOSPOORA OBTUSA AND OTHER MICROORGANISMS.  
W R Landis J H Hart  
Plant Dis Rep 51(3):230-234 REP  
Mar 1967 1.9 P69P  
Canker (crabapples), Crabapples, Microorganisms.  
A trunk canker of ornamental crabapples is common on the Michigan State University campus. Physalospora obtusa (Schw.) Cke. was isolated from 42 of 59 cankered trees. three other organisms were isolated from the remaining 17 trees. attempts to inoculate 2-year-old grafted plants failed until the trees were subjected to water stress, after which P. obtusa and Phoma mali Schulz. and Sacc. produced cankers. mature trees of four different cultivars were inoculated with P. obtusa and developed typical cankers.
- 15106-68  
THE OCCURRENCE OF A PHYIOPHTHORA ROOT AND LEAF DISEASE OF BLACK PEPPER IN JAMAICA.  
B I Leather  
Pao Plant Protect Bull 15(1):15-16  
Feb 1967 421 P692  
Fungus diseases (plants), Meloidogyne, Phytophthora, Piper nigrum.
- 15107-68  
MICROORGANISMS ON CUCUMBER SEEDLINGS.  
C Leben  
Phytopathology 51(8):553-557, HIBL.  
Aug 1961 464.8 P56  
Microorganisms, Seedlings.
- 15108-68  
STEMPHYLIUM LEAF SPCT OF PARSLEY.  
G D Lewis  
Phytopathology 52(9):925  
Sep 1962 464.8 P56  
Parsley, Steampyllum.
- 15109-68  
CONTROL OF ASPARAGUS RUST WITH A MIXTURE OF MANEB AND NICKEL SULFATE.  
G D Lewis P E Shoemaker  
Agr Chem 20(5):78  
May 1965 381 AG8  
Fungicides, Maneb, Nickel snlfate, Rust (asparagus).
- 15110-68  
HEAT-INDUCED SUSCEPTIBILITY OF TOBACCO TO TROPAEOLUM MOSAIC VIRUS.  
S C Y Liu K M Silberschmidt  
Phytopathology 51(6):413-415  
Jun 1961 464.8 P56  
Plant disease control, Tobacco.
- 15111-68  
EVIDENCE OF "RUNNING OUT" IN NON-CERTIFIED POTATOES USED FOR SEED.  
C H Livingston M D Harrison K W Knutson  
Plant Dis Rep 51(4):298-299  
Apr 1967 1.9 P69P  
Crop yields, Seed potatoes.
- 15112-68  
PHOTOSYNTHESIS IN HEALTHY AND RUST-AFFECTED TISSUES.  
A Livne  
Phytopathology 52(8):739-740  
Aug 1962 464.8 P56  
Photosynthesis, Plant diseases, Rust (beans), Rust (wheat).
- 15113-68  
PEROXIDASE ACTIVITY IN VIRUS-INFECTED SWEET POTATOES.  
G Loebenstein N Linsey  
Phytopathology 51(8):533-537  
Aug 1961 464.8 P56  
Peroxidases, Sweetpotatoes.
- 15114-68  
IDENTIFICATION AND DISTRIBUTION OF OAT SMUTS OF THE SOUTH-EASTERN UNITED STATES.  
H H Luke  
Phytopathology 54(7):792-794, TAHS.  
Jul 1964 464.8 P56  
Oats, Smut (oats).
- 15115-68  
OAT SMUT RACES OF THE SOUTH ATLANTIC STATES.  
H H Luke P L Pfahler S J Radden  
Phytopathology 51(7):490-491  
Jul 1961 464.8 P56  
Ethnology, Loose smut (oats).
- 15116-68  
WILT DISEASE OF GOLF GREENS AND ITS CONTROL WITH NABAM.  
B J Lukens E B Stoddard  
Phytopathology 51(8):577  
Aug 1961 464.8 P56  
Nabam.
- 15117-68  
PEROXIDASES AND THEIR RELATION TO VASCULAR BROWNING IN BANANA ROOTS.  
M E Mace  
Phytopathology 54(8):1033-1034  
Aug 1964 464.8 P56  
Bananas, Peroxidases, Roots.
- 15118-68  
MULTIPLICATION AND MOVEMENT OF WISCONSIN PEA STREAK VIRUS IN PEA.  
J N C Maduevesi  
Phytopathology 54(8):899  
Aug 1964 464.8 P56  
Plant disease transmission, Reproduction, Streak (peas).
- 15119-68  
THE INFLUENCE OF REDUCING SUBSTANCES ON RESISTANCE TO BACTERIAL WILT OF TOBACCO.  
E C Maine A Kelman  
Phytopathology 51(7):491-492  
Jul 1961 464.8 P56  
Bacterial wilt (tobacco), Tobacco.
- 15120-68  
NUCLEOTIDE COMPOSITION OF RNA IN HEALTHY AND MILDEW-INFECTED LEAVES OF BARLEY.  
I Malca P P Zscheile Jr B Gulli  
Phytopathology 54(9):1112-1116, HIBL. 1115-1116  
Sep 1964 464.8 P56  
Barley, Mildew (barley), Nucleotides, Ribonucleic acid.
- 15121-68  
INTERNAL SPOTTING OF COCONUTS.  
K Maramorosch H Rothkirch R S Castillo  
Phytopathology 51(8):577  
Aug 1961 464.8 P56  
Coconuts.
- 15122-68  
EFFECTS OF HIGH VEIN ON THE IRRIGATED HEAD LETTUCE CROP.  
R B Marlatt R T McKittrick  
Plant Dis Rep 46(6):428-429  
15 Jun 1962 1.9 P69P  
High vein (lettuce), Lettuce.
- 15123-68  
SWEETPOTATO SOIL, ROT DEVELOPMENT IN OLIVIER SILT LOAM SOIL AS AFFECTED BY ANNUAL APPLICATIONS OF LIME OR SULFUR OVER A SEVEN-YEAR PERIOD.  
W J Martin L G Jones T P Hernandez  
Plant Dis Rep 51(4):271-275  
Apr 1967 1.9 P69P  
Lime, Loam, Silt, Streptomyces ipomoea, Sulfur, Sweetpotatoes.  
In an (olivier silt loam soil at Chase, Louisiana sweetpotato soil rot incidence in 1965 and 1966 generally was high in plots receiving annual applications of lime and ranging in pH from 6.3 to 6.8, low in plots receiving annual applications of sulfur and ranging in pH from 4.1 to 4.8, and low to high in plots receiving neither amendment and ranging in pH from 4.8 to 5.8. the data 1) emphasize the importance of not adding lime to sweetpotato soils that are, or might become, infested with soil rot, 2) confirm the effectiveness of sulfur application to the soil in controlling soil rot, and 3) give additional evidence that soil rot is not a serious problem in silt loam soils in Louisiana with pH below 5.2.
- 15124-68  
PEANUT STUNT DISEASE SURVEY IN VIRGINIA, 1966.  
W R Matheny D H Kludy  
Plant Dis Rep 51(3):169  
Mar 1967 1.9 P69P  
Peanuts, Stunt (peanuts), Virus diseases (plants).

- 15125-68  
TRE AMINO ACID AND SUGAR COMPOSITIONS OF HEALTHY AND AN-  
THRACNOSE-INFECTED WATERMELONS.  
C L McCombs M N Winstead  
Phytopathology 51(9):644  
Sep 1961 464.8 P56  
Amino acids, Sugar, Watermelons.
- 15126-68  
TRANSMISSION OF APPLE MOSAIC AND STEM-PITTING VIRUSES  
THROUGH ROOT GRAFTS.  
R C McCrum  
Phytopathology 52(9):925  
464.8 P56  
Mosaic (apples), Plant disease transmission, Plant grafting,  
Roots, Virus diseases (plants).
- 15127-68  
A STUDY OF SYMPTOMS AND CONTROL OF PHOMOPSIS JUNIPEROVORA  
ON ARIZONA CYRESS.  
A T McDaniel  
Plant Dis Rep 46(5):364-365  
15 May 1962 1.9 P65P  
Chemical control (plant diseases), Cupressus arizonica,  
Phomopsis juniperovora.
- 15128-68  
CHEMICALS FOR PLANT DISEASE CONTROL.  
R McGrath  
Agr Chem 19(7):18-22  
Jul 1964 381 AG8  
Chloramphenicol, Dehydroacetic acid, Oxytetracycline,  
Plant disease control, V-C13 nemacide.
- 15129-68  
SYMPTOMS OF TOBACCO RINGSPOOT VIRUS ON PAPAYA.  
D M McLean E O Olson  
Plant Dis Rep 46(12):882  
15 Dec 1962 1.9 P69P  
Papayas, Ring spot (tobacco).
- 15130-68  
SEED TRANSMISSION OF BEAN MOSAIC VIRUSES.  
A C Medina R G Grogan  
Phytopathology 51(7):452-456, BURL. 456, TABS.  
Jul 1961 464.8 P56  
Mosaic (beans), Seed-borne plant diseases.
- 15131-68  
ANTHRACNOSE, SCAB, AND SOIL ROT OF CUCUMBERS.  
P Miller  
Agr Chem 20(12):67  
Dec 1965 381 AG8  
Anthracnose (cucumbers), Cucumbers, Scab (cucumbers).
- 15132-68  
THE EFFECT OF CORN ROOT EXUDATE ON THE GROWTH OF FIVE FUNGI  
ASSOCIATED WITH CORN ROOTS.  
R E Miller  
Phytopathology 53(6):882-883  
Aug 1963 464.8 P56  
Corn, Exudates, Fusarium, Gibberella, Helminthosporium,  
Penicillium, Roots, Trichoderma.
- 15133-68  
USE OF POLYETHYLENE BAGS FOR CORN ROOT INFECTION STUDIES.  
R E Miller C W Boothroyd  
Phytopathology 51(8):578  
Aug 1961 464.8 P56  
Corn, Polyethylene, Roots.
- 15134-68  
INFLUENCE OF SOME REPRESENTATIVE HERBICIDAL CHEMICALS UPON  
THE GROWTH OF SOME SOIL FUNGI.  
D F Millikan M L Fields  
Phytopathology 54(8):901  
Aug 1964 464.8 P56  
Herbicides, Soil fungi.
- 15135-68  
BULL ROT DISEASE OF ALMONDS.  
C J Hirocha E E Wilson  
Phytopathology 51(12):843-847  
Dec 1961 464.8 P56  
Almonds, Bull rot (prunus amygdalus).
- 15136-68  
ROLE OF FUMARIC ACID IN THE BULL ROT DISEASE OF ALMOND.  
C J Hirocha J E DeVay E F Wilson  
Phytopathology 51(12):851-860, BURL. 860, TABS.  
Dec 1961 464.8 P56  
Fumaric acid, Bull rot (prunus amygdalus).
- 15137-68  
RELATION BETWEEN RESIDUES OF POLPET AND CONTROL OF BROWN ROT  
ON SOUR CHERRY FRUIT IN DOOR COUNTY, WISCONSIN, 1962.  
J E Mitchell A V Ravenscroft R D Berger J D Moore  
Agr Chem 19(8):70  
Aug 1964 381 AG8  
Brown rot (cherries), Polpet, Pesticide residues.
- 15138-68  
SYSTEMIC AND FUNGICIDAL ACTIVITY OF D-, L-, AND DL-  
ETHIONINE, S-ALKYL-DL-HOMOCYSTEIN DERIVATIVES, AND  
METHIONINE ANTAGONISTS.  
W Moje J R Kendrick Jr G A Zentmeyer  
Phytopathology 53(8):883  
Aug 1963 464.8 P56  
Ethionine, Homocystine, Methionine, Phytophthora.
- 15139-68  
INFLUENCE OF NUTRITION, PH, SOIL TEMPERATURE, AND SOIL  
MOISTURE ON PHYTHIUM BLIGHT OF HIGHLAND BENTGRASS.  
L D Moore H R Conch J R Bloom  
Phytopathology 51(8):578  
Aug 1961 464.8 P56  
Hydrogen-ion concentration, Plant nutrition, Soil moisture,  
Soil temperature.
- 15140-68  
FACTORS IN THE PRODUCTION AND STIMULATION  
OF SOME ANTIHISTAMICS OF FUNGAL ORIGIN  
INHIBITING THE GROWTH OF PATHOGENIC FUNGI. (FR )  
R Morgner L Lacoste G Blaha  
Acad Sci Compt Rend Ser D Sci Nat 264 \_15), 1840-1843  
10 Apr 1967 505 P21  
Antibiotics, Fungus diseases (plants),  
Plant growth inhibitors, Toxicity.
- 15141-68  
HOST RANGE AND PROPERTIES OF THE GLOBE ARTICHOKE CURLY DWARF  
VIRUS.  
D J Morton  
Phytopathology 51(10):731-734  
Oct 1961 464.8 P56  
Artichokes, Curly dwarf (artichokes), Host indexing (plants).
- 15142-68  
RESISTANCE OF BRASSICA OLERACEA VARIETIES TO DOWNY MILDEW.  
J J Matti M R Dickson J D Atkin  
Phytopathology 57(2):144-147  
Feb 1967 464.8 P56  
Cabbage, Downy mildew, Plant disease resistance.
- 15143-68  
LEAFROLL OF TOMATO CAUSED BY A STRAIN OF POTATO LEAFROLL  
VIRUS.  
J J Matti W T Schroeder  
Phytopathology 51(8):578  
Aug 1961 464.8 P56  
Leaf roll (potatoes).
- 15144-68  
A SURVEY OF CARNATION DISEASES IN SOUTH SWEDEN.  
G I Nilsson  
Plant Dis Rep 46(3):152-155  
15 Mar 1962 1.9 P69P  
Dianthus caryophyllus, Plant diseases.
- 15145-68  
FURTHER ADDITIONS TO THE LIST OF FUNGUS PATHOGENS RECORDED  
IN CHILE.  
S F Neme W J Moller D Docampo H English  
Plant Dis Rep 51(3):213-214  
Mar 1967 1.9 P69P  
Economic plants, Host specificity, Ornamental plants, Weeds.
- 15146-68  
SYMPTOMLESS HOSTS OF THE POTATO SPINDLE TUBER VIRUS.  
M J O'Brien W R Raymer  
Phytopathology 54(9):1045-1047  
Sep 1964 464.8 P56  
Plant disease resistance, Potatoes, Spindle tuber (potatoes).
- 15147-68  
EFFECT OF VOLUME AND VARIATION IN DROPLET SIZE OF SPRAY  
APPLICATIONS FROM AN AIR-CARRIER SPRAYER ON CONTROL OF  
THREE ALMOND DISEASES.  
J M Ogawa W E Yates  
Plant Dis Rep 46(8):614-615



## BIRLIOGRAPHY

20 15148-68

- 15 Aug 1962 1.9 P69P  
Aerial plant disease control, Almonds.
- 15148-68  
LEAF SPCT CF GUAR CAUSED BY PSEUDOMONAS SYRINGAE IN THE UNITED STATES.  
R G Orellana  
Plant Dis Rep 51(3):182-184  
Mar 1967 1.9 P69P  
Guar, Leaf spot (guar), *Pseudomonas syringae*.  
A leaf spot of guar caused by *Pseudomonas syringae* in Texas and in Oklahoma in 1966 is described. this is believed to be the first report of this disease in the United States. many guar plants infected by *P. syringae* were infected also by *Xanthomonas cyamopsidis*. there was no pronounced inhibition between these bacterial pathogens, when they were grown together in artificial media or when inoculated together on guar leaves.
- 15149-68  
BASE COMPOSITION OF SOLUBLE RIBONUCLEIC ACID FROM PHYTOPHTHORA INFESTANS.  
O T Page M C Clark  
Phytopathology 53(8):885  
Aug 1963 464.8 P56  
Late blight (potatoes), *Phytophthora*, Potatoes, Ribonucleic acid.
- 15150-68  
NEW MEDIUM FOR THE ISOLATION OF THIELAVIOPSIS BASICOLA ON DILUTION PLATES FROM SOIL AND RHIZOSPHERE.  
G C Papavizas  
Phytopathology 54(12):1475-1481, TABS.  
Dec 1964 464.8 P56  
Culture media, Rhizosphere, Soil fungi, *Thielaviopsis basicola*.
- 15151-68  
TREE NUTRITION AND FIRE BLIGHT DEVELOPMENT.  
K G Farker M S Luepschen E G Fisher  
Phytopathology 51(8):557-560, TABS.  
Aug 1961 464.8 P56  
Fire blight (pears), Plant nutrition.
- 15152-68  
COMPARISON PATHOGENICITY STUDIES OF FUNGI ASSOCIATED WITH CORN STALK ROT.  
J L Peterson  
Phytopathology 51(8):578  
Aug 1961 464.8 P56  
Fungi, Stalk rot (corn).
- 15153-68  
ALBINO PERIDERMIUM HARKNESSII IN PONDEROSA PINE.  
R S Peterson  
Plant Dis Rep 51(4):306-309  
Apr 1967 1.9 P69P  
Albinism, *Finus ponderosa*, Plant galls, Rust (pinus ponderosa), Tree diseases.  
A white-spore race of the western gall rust fungus is widespread on ponderosa pine in the Rocky Mountain-Intermountain Area. it is believed to be autoecious on the basis of field evidence and inoculations. orange-spore *Peridermium harknessii* occurs within the eastern half of the albino's distribution, but is not known in the western half. relatively high temperature appears to favor germination of the hyaline aeciospores. known local concentrations of the albino are several decades old, with relatively few new galls.
- 15154-68  
OLIGOMYCIN TREATMENTS OF OAK WILT IN NORTHERN PIN OAKS.  
W R Phelps J E Kuntz  
Plant Dis Rep 51(3):160-163  
Mar 1967 1.9 P69P  
*Quercus ellipsoidalis*, Tree diseases, Wilt (*quercus*).  
University of Wisconsin, Wisconsin Conservation Department, and Nekoosa Edwards Paper Company, cooperating.  
Factors influencing the effectiveness of antibiotic treatments on the oak wilt organism in vivo and subsequent disease development were studied in woodland experiments involving large oak trees. effects depended upon the method of application, time of inoculation, place of inoculation, concentration of inoculum, number of antibiotic injection points, volume of solutions introduced into the tree, concentration of antibiotic, number of treatments, and tree condition at the time of treatment.
- 15155-68  
CROSS-TRANSMISSION STUDIES WITH CITRUS AND PRUNUS VIRUSES.  
T S Pine  
Plant Dis Rep 51(1):64  
Jan 1967 1.9 P69P  
Plant disease transmission, Prunus, Virns diseases (plants).
- 15156-68  
INTRACELLULAR INCLUSIONS OBSERVED IN EPIDERMAL STRIPS FROM FOLIAGE OF CADANG-CADANG INFECTED COCONUT TREES IN THE PHILIPPINES.  
D B Protalio  
Plant Dis Rep 46(9):686-687  
15 Sep 1962 1.9 P69P  
Kadang-kadang (coconuts).
- 15157-68  
TYPICAL FIELD SYMPTOMS OF PEA VIROSES PRODUCED IN GREENHOUSE BY DEFERRING INOCULATION UNTIL FLOWERING TIME OR LATER.  
R Provvidenti W T Schroeder  
Phytopathology 52(8):748  
Aug 1962 464.8 P56  
Greenhouse culture, Peas, Virns diseases (plants).
- 15158-68  
EVALUATION OF SEED TREATMENT WITH 1,4-DICHLORO-2,5-DIMETHOXYBENZENE AS A COTTON SEEDLING DISEASE CONTROL MEASURE.  
C D Ranney E G Rurchfield  
Plant Dis Rep 51(7):558-562  
Jul 1967 1.9 P69P  
Cotton, Dichloro-2,5-dimethoxybenzene, 1,4-, Seed treatment.
- 15159-68  
PRELIMINARY NOTE ON TRANSMISSION OF A VIRUS DISEASE RESEMBLING TUNGRO OF RICE IN INDIA AND OTHER VIRUS-LIKE SYMPTOMS.  
S P Raychaudhuri M D Mishra A Ghosh  
Plant Dis Rep 51(4):300-3D1  
Apr 1967 1.9 P69P  
Cicadellidae, Plant disease transmission, Rice, Virus diseases (plants).  
A number of virus-like disorders of paddy have been observed, such as leaf yellowing, yellow dwarf, and grassy stunt, from different parts of India. leaf yellowing symptoms with marked yellowing of the leaves is accompanied by reduction in tillering and stunting. some of the gmses were empty. the disease was transmitted by the leafhopper *Nephotettix bipunctatus*. the incubation and acquisition feeding period for the vector was about 5 days. no transovarial transmission was observed, but the nymphs actively transmitted the virus. no inclusion bodies were found associated with this disorder. some grasses were also observed that showed chlorosis and probably they may act as secondary hosts for the paddy virus. the other two types of virns-like symptoms, however, were not much prevalent.
- 15160-68  
FUNGI ISOLATED FROM BLACK STEM OF ALFALFA AND THE INFLUENCE OF TEMPERATURE ON LESION FORMATION AND DISEASE SEVERITY.  
B L Renfro M P Kernkaap  
Phytopathology 53(7):774-777, TABS.  
Jul 1963 464.8 P56  
Alfalfa, Black stem (alfalfa), *Cercospora*, *Colletotrichum*, Cultural control (plant diseases), *Fusarium*, *Relainthosporium*, *Phoma*, *Phytopathology*, Plant temperature, *Pseudopeziza*, *Rhizoctonia*, *Stemphylium*, *Verticillium*.
- 15161-68  
LOSS IN OATS GROWN FOR FORAGE IN TEXAS DUE TO OCCURRENCE OF NEW RACES OF CROWN RUST.  
L Reyes M C Putrell  
Plant Dis Rep 46(12):835-837  
15 Dec 1962 1.9 P69P  
Crop losses, Crown rust (oats), Forage plants.
- 15162-68  
A BIOASSAY FOR VOLATILE TOXICANTS FROM FUNGICIDES IN SOIL.  
L. T. Richardson D E Munnecke  
Phytopathology 54(7):836-839  
Jul 1964 464.8 P56  
Biological assay, Chemical control (plant diseases), Fungicides, Volatile substances.
- 15163-68  
THE ROLE OF SEED TRANSMISSION IN THE EPIDEMIOLOGY OF BEAN MOSAICS IN CENTRAL WASHINGTON.  
R S Robertson Jr  
Plant Dis Rep 46(2):71-72  
15 Feb 1962 1.9 P69P



## BIBLIOGRAPHY

20 15185-68

- Mosaic (beans), Washington.
- 15164-68  
VECTOR SPECIFICITY OF THREE STRAINS OF BARLEY YELLOW DWARF VIRUS.  
W F Rochow  
Phytopathology 51(8):57R-57R  
Aug 1961 464.8 P56  
Yellow dwarf (barley).
- 15165-68  
THE BIOLOGY AND ECOLOGY OF DENDROCTONUS VALENS FLEC., AND THE BIOLOGY, ECOLOGY, AND CONTROL OF DENDROCTONUS FRONTALIS (MEXICANS) ZIMM IN CENTRAL MEXICO (COLEOPTERA: SCOLYTIDAE).  
W E Rose  
Diss Abstr Sect B 27(11)04181B-4182B  
May 1967 Z5055.U49D53  
Beneficial insects, Carabaryl, Dendroctonus frontalis, Dendroctonus valens, Ethylene diironide, Insect biology, Insect ecology, Insect outbreaks, Insect rearing, Ips houseal, Ips cribricollis, Lindane, Malatbion, Pinus, Temperature.
- 15166-68  
EFFECT OF IRRIGATION METHOD AND FREQUENCY ON DEVELOPMENT OF PHYTOPHTHORA INFESTANS ON POTATOES UNDER ARID CONDITIONS.  
J Roteem J Palti E Rawitz  
Plant Dis Rep 46(3):145-149  
15 Mar 1962 1.9 P69P  
Irrigation, Phytophthora infestans.
- 15167-68  
TEMPERATURE CONVESSION OF RUST RESPONSE OF BEAN.  
R D Schein  
Phytopathology 51(7):486-488  
Jul 1961 464.8 P56  
Rust (beans), Temperature.
- 15168-68  
STING NEMATODE ON GRAPPE CUTTINGS IN FLORIDA.  
N C Schenck J A Mortensen L R Stover  
Plant Dis Rep 46(6):446-447  
15 Jun 1962 1.9 P69P  
Grapes, Plant diseases, Plant nematodes.
- 15169-68  
PINE CONE BUST IN THE HIGHLANDS OF GUATEMALA.  
E Schieher  
Plant Dis Rep 51(1):44-46  
Jan 1967 1.9 P69P  
Guatemala, Pine cones, Rust (pinus).
- 15170-68  
A DIFFERENCE IN THE TRANSLOCABILITY OF TWO VIRUSES IN BEAN PLANTS.  
I R Schneider  
Phytopathology 52(8):751  
Aug 1962 464.8 P56  
Beans, Mosaic (beans), Plant translocation, Ring spot (tobacco), Virus diseases (plants).
- 15171-68  
BETA-GLUCOSIDASE ACTIVITY IN ERWINIA AMYLOVORA AND PSEUDOMONAS SYRINGAE.  
M N Schroth D C Hildebrand  
Phytopathology 54(8):906  
Aug 1964 464.8 P56  
Erwinia amylovora, Glucosidases.
- 15172-68  
POPULATION TRENDS AND MOVEMENT OF CORNYNECTERIUM FLACCUMFACIENS VAR. AUBANTIACUM IN TOLERANT AND SUSCEPTIBLE BEANS.  
M L Schuster D P Coyne Kamla Singh  
Plant Dis Rep 48(10):823-827  
15 Oct 1964 1.9 P69P  
Beans, Corynelacterium, Population.
- 15173-68  
STUDIES ON THE ISOLATION OF THE STRAWBERRY LEAF SCORCH PATHOGEN DIFLOCAEFON EARLIANA.  
D H Scott D Powell  
Phytopathology 54(8):906-907  
Aug 1964 464.8 P56  
Leaf scorch (strawberries), Strawberries.
- 15174-68  
SEROLOGICAL STUDIES OF RED NODE AND POD MOTTLE VIRUSES.  
H A Scott M Vincent W J Zaunmeyer  
Phytopathology 51(11):755-758  
Nov 1961 464.8 P56  
Pod mottle (beans), Red node (beans), Serological tests.
- 15175-68  
DETECTION OF POTATO VIRUS X IN TURERS BY THE BENTONITE FLOCCULATION TEST.  
H A Scott R P Kahn J Bozicevich M M Vincent  
Phytopathology 54(10):1292-1293  
Oct 1964 464.8 P56  
Bentonite, Flocculation.
- 15176-68  
BACTERIAL BLACK SPOT OF RADISH.  
R H Segall J J Swoot  
Phytopathology 52(10):970-973  
Oct 1962 464.8 P56  
Bacterial black spot (radishes), Radishes.
- 15177-68  
INTRACELLULAR LABELING OF TMV ANTIGEN WITH FERRITIN-ANTIBODY CONJUGATE.  
T A Shalla  
Phytopathology 54(8):907  
Aug 1964 464.8 P56  
Antibodies, Labeling, Mosaic (tobacco).
- 15178-68  
EFFECT OF PENTACHLORONITROBENZENE.  
M N Shatla  
Agr Chem 20(11):103  
Nov 1965 381 AG8  
Cotton, Pentachloronitrobenzene, Rhizoctonia solani.
- 15179-68  
THE TRANSVARIAL TRANSMISSION OF WOUND-TUMOR VIRUS.  
S Shelley  
Phytopathology 55(3):324-327, BIBL. 327  
Mar 1965 464.8 P56  
Agallia, Alfalfa, Plant disease transmission.
- 15180-68  
COMPARATIVE EFFECTIVENESS OF SOME EQUIPMENT AND METHODS OF MEASURING LOW CONCENTRATIONS OF OZONE.  
G Silber  
Plant Dis Rep 46(3):137-139  
15 Mar 1962 1.9 P69P  
Ozone.
- 15181-68  
THE EFFECT OF GROWTH SUBSTANCES ON VERTICILLIUM WILT OF.  
A K Sinha R K S Wood  
Ann Appl Biol 60 (1): 117-128 REF  
Aug 1967 442.8 AN72  
Gibberellic acid, Maleic hydrazide, Plant disease resistance, Plant regulators, Tomatoes, Verticillium albo-atrum, Wilt (tomatoes).
- 15182-68  
DISTRIBUTION OF WOUND-TUMOR VIRUS ANTIGENS IN INTERNAL ORGANS OF AN INSECT VECTOR.  
R C Sinha D V R Reddy  
Phytopathology 54(8):908  
Aug 1964 464.8 P56  
Antigens, Immunochemistry, Insect vectors.
- 15183-68  
CALCIUM NITRATE FOR FIELD CONTROL OF TOMATO SOUTHERN BLIGHT IN SOUTH CAROLINA.  
W R Sitterly  
Plant Dis Rep 46(7):492-494  
15 Jun 1962 1.9 P69P  
Calcium nitrate, Chemical control (plant diseases), Southern blight (tomatoes).
- 15184-68  
THE EFFICACY OF VARIOUS FUMIGANTS IN CONTROLLING VERTICILLIUM WILT IN SOUTH-CENTRAL WASHINGTON.  
C B Skotland  
Agr Chem 20(5):97  
May 1965 381 AG8  
Fumigants, Fungus, Soil fumigation.
- 15185-68  
A SEED-BORNE BEAN VIRUS OF WIDE HOST RANGE.  
C B Skotland D W Burke  
Phytopathology 51(8):565-568

## BIBLIOGRAPHY

20 15186-68

- Aug 1961 464.8 P56  
Beans, Seed-borne plant diseases.
- 15186-68  
A SURVEY OF GREEN PLANTS FOR ANTIMICROBIAL SUBSTANCES.  
B C Swale E A Wilson B L Keil  
Phytopathology 54 (7):748  
Jul 1964 464.8 P56  
Antibiotics, Plant biochemistry, Plant protective devices.
- 15187-68  
SEASONAL FLUCTUATIONS IN SUSCEPTIBILITY OF YOUNG ELM SEED-  
LINGS TO DUTCH ELM DISEASE.  
E B Scalley  
Phytopathology 53 (7):846-853, TABS., PL.  
Jul 1963 464.8 P56  
Crop varieties, Dieback (ulmus), Plant disease resistance,  
Seedlings, Ulmus.
- 15188-68  
REDUCTION OF PEACH DECAYS BY HYDROCOOLING WITH CHEMICAL  
SOLUTIONS AND CHEMICALLY TREATED ICE.  
L Smith Jr W H Reditt  
Plant Dis Rep 46 (4):221-226, TABS  
15 Apr 1962 1.9 P69P  
Chemical control (plant diseases), Ice, Peaches.
- 15189-68  
REPELLANCY OF REFLECTIVE ALUMINUM TO TRANSIENT APHID VIRAL  
VECTORS.  
P F Smith G V Johnson B P Kahn A Bing  
Phytopathology 54 (7):748  
Jul 1964 464.8 P56  
Aluminum, Insect repellents, Insect vectors,  
Plant protective devices, Virus diseases (plants).
- 15190-68  
URIDINE-B3 INCORPORATION IN TOBACCO INFECTED BY TOBACCO MO-  
SAIC VIRUS.  
S H Smith D E Schlegel  
Phytopathology 54 (12):1437  
Dec 1964 464.8 P56  
Mosaic (tobacco), Plant metabolism, Tobacco.
- 15191-68  
GUMMY STEM BLIGHT RESISTANCE OF INTRODUCED WATERMELONS.  
G Sowell Jr G B Painter  
Plant Dis Rep 46 (12):883-885  
15 Dec 1962 1.9 P69P  
Gummy stem blight (watermelons).
- 15192-68  
EFFECT OF REMOVING THE TERMINAL BUD OF BEAN PLANTS UPON PRO-  
TEIN CHANGES AFTER INFECTION BY THE BEAN RUST FUNGUS.  
R C Staples  
Phytopathology 54 (8):909  
Aug 1964 464.8 P56  
Beans, Rust (beans).
- 15193-68  
GENETICS OF RESISTANCE TO ERYSIPIHE POLYGONI IN TRIFOLIUM  
PRATENSE.  
J R Stavely E W Hanson  
Phytopathology 57 (2):193-197  
Feb 1967 464.8 P56  
Erysiphe, Fungus diseases (plants), Plant disease resistance,  
Red clover.
- 15194-68  
EFFECTS OF TEMPERATURE AND LIGHT ON PLANT SUSCEPTIBILITY TO  
CUCUMBER MOSAIC VIRUS BY APHID TRANSMISSION.  
M W Stimpson K G Swenson  
Phytopathology 57 (10):1072-1073  
Oct 1967 464.8 P56  
Aphididae, Mosaic (cucumbers), Plant temperature.
- 15195-68  
STEMPHYLIUM RAY SPECK OF CHRYSANTHEMUM.  
J Tammen  
Phytopathology 53 (7):749-754, BIBL., PL.  
Jul 1963 464.8 P56  
Chrysanthemum, Epidemiology, Pathogenesis,  
Ray speck (Chrysanthemum), Stemphylium.
- 15196-68  
TOBACCO FLECK CONTROLLED WITH ANTI-OZONANTS.  
G S Taylor S Rich  
Phytopathology 51 (8):579  
Aug 1961 464.8 P56  
Tobacco.
- 15197-68  
APPLE VARIETY RESISTANCE TO HELMINTHOSPORIUM LEAFSPOT.  
J Taylor  
Plant Dis Rep 48 (12):954  
15 Dec 1964 1.9 P69P  
Apples, Helminthosporium.
- 15198-68  
TRANSMISSION OF TOBACCO MOSAIC VIRUS IN TOMATO SEED.  
R H Taylor R G Grogan K A Kimble  
Phytopathology 51 (12):837-842, BIBL. 842, TABS.  
Dec 1961 464.8 P56  
Mosaic (tobacco), Plant disease transmission, Tomatoes.
- 15199-68  
A SECOND PATHOGENIC RACE OF PSEUDOMONAS SESAMI.  
C A Thomas R G Orellana M L Kinman G W Rivers  
Plant Dis Rep 46 (4):248-250  
15 Apr 1962 1.9 P69P  
Pathogenesis, Pseudomonas sesami.
- 15200-68  
STUDIES ON THE HOST RANGE OF WATERMELON MOSAIC VIRUS IN  
HAWAII.  
H H Toba  
Plant Dis Rep 46 (6):409-410  
15 Jun 1962 1.9 P69P  
Mosaic (watermelons).
- 15201-68  
FACTORS AFFECTING FIELD PERFORMANCE OF NICKEL SALT PLUS DI-  
THIOCARBAMATE FUNGICIDE MIXTURES FOR THE CONTROL OF WHEAT  
RUSTS.  
Phytopathology 54 (8):999-1008, TABS.  
Aug 1964 464.8 P56  
Chemical control (plant diseases), Fungicides,  
Nickel compounds, Rust (wheat).
- 15202-68  
LONGEVITY OF XANTHOMONAS MALVACEARUM IN DRIED COTTON PLANTS  
AND ITS SIGNIFICANCE IN DISSEMINATION OF THE PATHOGEN ON SEED.  
Phytopathology 54 (8):1009-1011  
Aug 1964 464.8 P56  
Cotton, Seeds, Xanthomonas malvacearum.
- 15203-68  
NITROGEN AS A FACTOR IN THE DEVELOPMENT OF EXOCORTIS OF CI-  
TRUS.  
Phytopathology 54 (8):968-969  
Aug 1964 464.8 P56  
Citrus, Exocortis (citrus), Nitrogen.
- 15204-68  
POTENTIAL PATHOGENICITY OF PYTHIUM ISOLATES FROM FOREST  
NURSERIES.  
O Vaartaja P J Salisbary  
Phytopathology 51 (8):505-507  
Aug 1961 464.8 P56  
Forest nurseries, Pythium.
- 15205-68  
FUNGI ASSOCIATED WITH A WOOD WASP IN DYING PINES IN TASMAN-  
IA.  
O Vaartaja J King  
Phytopathology 54 (8):1031-1032  
Aug 1964 464.8 P56  
Bymenoptera, Pines, Wood destroying fungi.
- 15206-68  
EVIDENCE FOR A CHEMICAL BASIS OF RESISTANCE OF LIMA BEAN  
PLANTS TO DOWNY MILDEW.  
J R Valenta B D Sisler  
Phytopathology 52 (10):1030-1037, BIBL. 1037  
464.8 P56  
Downy mildew (lima beans), Lima beans, Plant biochemistry,  
Plant disease resistance.
- 15207-68  
LESION MATURATION, FUNGAL DEVELOPMENT, AND DISTRIBUTION OF  
ENDOPOLYGALACTURONASE AND CELLULASE IN RHIZOCTONIA INFECTED  
BEAN HYPOCOTYL TISSUES.  
B D Van Etten D P Maxwell D P Bateman  
Phytopathology 57 (2):121-126  
Feb 1967 464.8 P56  
Beans, Cellulase, Rhizoctonia, Tissues.
- 15208-68  
FAILURE TO CONFIRM THE SYNTHESIS OF TMV IN A CELLFREE SYS-  
TEM.  
A Van Kammen W N Takahashi

- Phytopathology 54(12):1437  
Dec 1964 464.8 P56  
Extracellular substances, Mosaic (tobacco).
- 152D9-68  
OCCURRENCE OF TWO BACTERIAL DISEASES ON NEW HOSTS IN ISRAEL.  
Z Volcani  
Plant Dis Rep 46(12):893  
15 Dec 1962 1.9 P69P  
Bacterial diseases (plants), Israel.
- 15210-68  
BACTERIAL SPOI DISEASE OF TOMATOES AND PEPPERS IN ISRAEL.  
Z Volcani  
Plant Dis Rep 46(3):175  
15 Mar 1962 1.9 P69P  
Bacterial spot (peppers), Bacterial spot (tomatoes), Israel.
- 15211-68  
FILAMENT FC6M OF ERWINIA AMYLOVOBA.  
J Voros  
Phytopathology 54(8):911  
Aug 1964 464.8 P56  
Erwinia amylovora.
- 15212-68  
RESULTS OF CHEMICAL DBENCHES IN THE CONTBOL OF SPRING DEAD SPOT OF BEHMUDA GRASS.  
D F Wadsworth  
Phytopathology 51(9):646  
Sep 1961 464.8 P56  
Cynodon dactylon, Spring dead spot (cynodon dactylon).
- 15213-68  
EBADICATION OF SOIL FUNGI BY A COMBINATION OF CBOP BESIDUE, FLOODING, AND ANAEBOIC FEBMENTATION.  
B D Watson  
Phytopathology 54(12):1437-1438  
Dec 1964 464.8 P56  
Fermentation, Floods, Fungicides, Plant residues, Soil fungi.
- 15214-68  
SCOTYLID VECTOBS OF THE DUTCH ELM DISEASE IN ONTARIO.  
W Y Watson W L Sippell  
Can Entomol 93(5):403-405  
May 1961 421 C16  
Dieback (ulmus), Insect vectors, Ontario.
- 15215-68  
THE OCCURRENCE AND DECLINE OF DOWNY MILDEW ON LIMA BEANS IN THE MIDDLE ATLANTIC STATES.  
B E Wehster J MacLeod J W Beuberger  
Phytopathology 54(7):749  
Jul 1964 464.8 P56  
Downy mildew (lima beans), Fungus diseases (plants), Lima beans, Mycology.
- 15216-68  
THE OBCHABD DEVELOPMENT OF PEACH POWDEBY MILDEW.  
A B Weinhold  
Phytopathology 51(7):47H-481  
Jul 1961 464.8 P56  
Powdery mildew (peaches), Sphaerotheca pannosa.
- 15217-68  
METABOLITE CHANGES INDUCED BY CUCUMBER MOSAIC VIBUS IN RESISTANT AND SUSCEPTIBLE SIBAINS OF COWPEA.  
G W Welkie S F Yang G W Miller  
Phytopathology 57(5):472-475  
May 1967 464.8 P56  
Cowpeas, Mosaic (cucumbers), Plant metabolism.
- 15218-68  
TBANSMISSION OF DOWNY MILDEW OF LIMA BEANS BY SLUGS.  
B E Wester B W Goth B E Webb  
Phytopathology 54(7):749  
Jul 1964 464.8 P56  
Downy mildew (lima beans), Lima beans, Slugs.
- 15219-68  
EFFECT CF GROWTH-REGULATING AND OTHER COMPOUNDS ON BACTERIAL SPOT CF PEPPER.  
F J Wiebel D F Crossan D J Fieldhouse  
Plant Dis Rep 51(4):320-322  
Apr 1967 1.9 P69P  
Bacterial diseases (plants), Bacterial spot (redpeppers), Mineral oil, Oils, Plant regulators, Redpeppers (vegetable), Saccharin, Succinic acid, 2,2-dimethylhydrazide.  
Fertility levels, bactericidal and non-bactericidal chemi-
- cals, and growth-retarding compounds were evaluated in the field for control of pepper bacterial spot and effect on plant morphology and yield. no treatment significantly reduced leaf fall although certain rates of N-dimethyl-amino succinamic acid (Alar), alone or in combination with slow release nitrogen, significantly reduced the severity of leaf infection. high rates of Alar significantly reduced fruit infection.
- 1522D-68  
SEASONAL VABIATION IN THE INCIDENCE OF BADISH YELLOWS AND EFFECT OF CBOP ROTATION ON PLANT SURVIVAL AND YIELD.  
J D Wilson  
Plant Dis Rep 46(2):124-127  
15 Feb 1962 1.9 P69P  
Crop rotation, Plant disease resistance.
- 15221-68  
IN VITBO INCBEASE IN VIBUS INFECTIVITY. II.  
C E Yarwood  
Plant Dis Rep 51(3):178-182 BEP  
Mar 1967 1.9 P69P  
Adenosine triphosphates, Caffeine, Magnesium silicate, Mosaic (sugar beets), Potassium phosphate, Sucrose, Sugar beets, Virus diseases (plants).  
When young leaves of sugarbeet systemically infected with cucumber mosaic virus were ground with K2SO3 and water, diluted to D.5 percent leaf tissue and 0.1 percent K2SO3, used as inoculum immediately and after time intervals, the infectivity of this inoculum increased by an average of 6-fold in 20 minutes and as much as 132-fold in one test. the addition of caffeine, sucrose, magnesium silicate, and adenosine triphosphate (ATP) usually increased both the initial infectivity and the in vitro increase in infectivity of K2SO3-virus mixtures. the infectivity of such preparations usually began to decrease within 3 hours of preparation but the presence of ATP delayed this decrease. no claim of increase in virus is made.
- 15222-68  
INFLUENCE OF IBBIGATION AND SOIL INFESTATION WITH STBAINS OF PHYTOPHTHOBA DBESCHLEBI ON ROOT BOT RESISTANCE OF SAFFLOWER.  
D E Zimmer A L Urie  
Phytopathology 57(1D):1D56-1059  
Oct 1967 464.8 P56  
Plant disease resistance, Root rot (safflower).

## Arthropods

- 15223-68  
THREE PLANS FOB USING ACABICIDES TO CONTBOL MITES ON APPLE.  
Asquith  
J Econ Entomol 53(5):735-737  
Oct 1960 421 J822  
Acaricides, Apples, Aramite, Dicofol, Mites, Tetrarifon.
- 15224-68  
INTEBFEBENCE WITH THE BIOLOGICAL CONTBOL OF COTTONY-CUSHION SCALE BY INSECTICIDES AND ATTEMPTS TO BE-ESTABLIS A FAVOBA-BLE NATURAL BALANCE.  
B B Bartlett C F Lagace  
J Econ Entomol 53(6):1055-1058, 12 BEFS.  
Dec 1960 421 J822  
Biological control (insects), California, Citrus, DDT, Icerya, Malathion, Parathion, Rodolia.
- 15225-68  
1967 INSECTICIDE RECOMMENDATIONS; PEACH INSECT CONTBOL (COMMEBCIAL).  
M L Bohh  
Va Polytech Inst Ext Circ 1007,4 P  
Dec 1966 275.29 V81C  
Chemical control (insects), Extension work, Insecticides.
- 15226-68  
CONTROL OF THE EASTERN TENT CATERFILLAB, MALACOSOMA AMEBICANUM (FABICIIUS), BY DISTRIBUTION OF SPOBES OF TWO SPECIES OF CLOSTRIDIUM.  
G E Bucher  
J Invertebrate Pathol 3(4):439-445, 3 BEFS.  
Dec 1961 421 JH26



## BIBLIOGRAPHY

20 15227-6B

- Biological control (insects), *Clostridium malacosomae*, Pungi, *Malacosoma americanum*, Prunus.
- 15227-6B  
SOIL TREATMENTS WITH BROADCAST OR BAND APPLICATIONS OF ORGANO-  
PHOSPHORUS OF CARBAMATE INSECTICIDES FOR PREVENTION  
OF WIREWORM DAMAGE TO POTATOES.  
R H Burrage J A Menzies E Zirk  
J Econ Entomol 60(6):1489-1492  
Dec 1967 421 JB22  
Carbamates, Elateridae, Insecticide application, Insecticides,  
Plant injuries, Potatoes, Soil treatments.  
Abstract
- 15228-6B  
CONTROL OF THE PICKLEWORM ON CUCURBITS.  
T D Camerday  
J Econ Entomol 60(6):1705-1708 REF  
Dec 1967 421 JB22  
Carbaryl, Chemical control (insects), Crop yields, Cucumbers,  
*Diaphania nitidalis*, Lindane, Squash.  
Abstract
- 15229-6B  
RELATIVE EFFECTIVENESS OF RESISTANCE OF FIELD CORN TO THE  
EUROPEAN CORN BORER, *PYRAUSTA NUBILALIS*, IN CROP PROTECTION  
AND IN POPULATION CONTROL.  
B C Chiang F G Holdaway  
J Econ Entomol 53(5):918-924, 10 REFS., 9 TABS.  
Oct 1960 421 JB22  
Corn, Insect populations, Plant insect resistance, *Pyrausta*.
- 15230-6B  
DISTRIBUTION OF RIDRIN IN THE FOLIAGE OF TREATED TREES.  
D E Donley  
J Econ Entomol 60(6):1583-1585  
Dec 1967 421 JB22  
Bidrin, Forest insects, Metabolites, Systemic insecticides,  
Trees.  
Abstract:  
*daphnia pulex* was used as the bioassay organism. distribu-  
tion patterns were significantly better following root  
implants than following trunk implants.
- 15231-6B  
BOLL WEEVIL SURVIVAL IN CAROLINAS HIGHER THAN IN 1961.  
K Dorward  
Agr Chem 17(5):60, 1D0  
May 1962 3B1 AGB  
*Acyrtosiphon*, *Anthonomus grandis*, *Chorizagrotis*, *Hypera*,  
*Schizaphis*.
- 15232-6B  
VARIETY OF SOYBEAN INSECTS ARE ACTIVE IN SEVERAL STATES.  
K Dorward  
Agr Chem 17(11):119, 161  
Nov 1962 3B1 AGB  
*Heliothis zea*, Mites, *Musca*, Soybeans, *Spodoptera*.
- 15233-6B  
EFFECT OF SUGARCANE BORER INFESTATION ON THE YIELD AND GRADE  
OF CORN.  
E H Floyd D F Clower L P Mason  
J Econ Entomol 53(5):935-937, 1 REF., 4 TABS.  
Oct 1960 421 JB22  
Corn, Crop yields, *Diatraea*, Endrin, Louisiana, Rice, Sorghum,  
Sugarcane.
- 15234-6B  
PRELIMINARY LABORATORY TESTS UTILIZING *BEAUVERIA BASSIANA*  
(EALSAMO) VILLEMEN ON *CALOMYCTERUS SETARIDS* ROELOPS.  
R D Frye E S Haun  
J Invertebrate Pathol 3(3):332-333  
Sep 1961 421 JB26  
*Beauveria bassiana*, *Calomycterus setarius*, Insect pests,  
Parasitism, *Sitona cylindricollis*.
- 15235-66  
GPSY MOTH DEFOLIATION.  
J W Gentry  
Agr Chem 20(12):170  
Dec 1965 3B1 AG8  
Defoliation, Northeastern United States, *Porthetria*.
- 15236-6B  
SPOTTED ALFALFA APHID SPREADS.  
J W Gentry  
Agr Chem 20(12):68  
Dec 1965 3B1 AGB  
Alfalfa, *Therioaphis*, United States.
- 15237-6B  
SPICARIA RILEYI (FARLOW) CHARLES, AN ENTOMOGENOUS FUNGUS  
OF *TRICHOPLUSIA NI* HUEBNER.  
L W Getzlin  
J Invertebrate Pathol 3(1):2-10, 7 REFS., 5 TABS.  
Mar 1961 421 JB26  
Biological control (insects), Entomogenous fungi, Parasitism.
- 15238-6B  
BIOLOGY OF THE BLACK CHERRY APHID IN THE WILLAMETTE VAL-  
LEY, OREGON.  
J E Gilmore  
J Econ Entomol 53(4):659-661  
Aug 1960 421 JB22  
Aphididae, Aphidins, Biology, Cherries, *Cycloneda*, Ephedras,  
*Hippodamia*, Oregon, Syrphids.
- 15239-6B  
SAFETY OF WILDLIFE IS IMPORTANT TO PLANNERS OF GNAT-CONTROL  
PROGRAM.  
W Hazeltine  
Agr Chem 17(12):12-14, 76  
Dec 1962 3B1 AGB  
Diptera, DDT, Insect control, Parathion, Pesticide residues,  
Wildlife.
- 15240-6B  
THE CONTROL OF Poultry LICE AND MITES WITH SEVERAL ORGANIC  
INSECTICIDES.  
R A Hoffman  
J Econ Entomol 53(1):160-162, RIBL.  
Feb 1960 421 JB22  
Carbaryl, Coumaphos, Dicapthos, Mites, Poultry.
- 15241-6B  
INSECTICIDAL CONTROL OF PAEDOGENETIC CECID LARVAE IN MDSB-  
ROOM BEES. I. INCORPORATION OF INSECTICIDES INTO COONPOST.  
II. INCORPORATION OF INSECTICIDES IN THE CASING LAYER.  
N W Bussey I J Wyatt J T Hughes  
J Sci Food Agr 12(1):1-2D-7  
Jan 1961 3B2 S012  
Aldrin, Benzene hexachloride, *Mayetiola*, Mushrooms.
- 15242-6B  
THE INFLUENCE OF PHYSICAL STRESS ON GROWTH AND NUCLEAR POLY-  
MERIZATION OF *TRICHOPLDSIA NI* (RDERNER).  
R P Jacques  
J Invertebrate Pathol 3(1):47-54, 16 REFS.  
Mar 1961 421 JB26  
Insect physiology, Polyhedroses, Stress.
- 15243-6B  
OVERWINTERING IN PEMPHEGIDS BURSARIDS (L.).  
F D Judge  
Nature 216(5119):  
09 Dec 1967 472 N21  
Hibernation, Insect rearing, *Pemphigus bursarius*.
- 15244-6B  
A DECLINE CONDITION IN PEARS INDUCED BY PEAR PSYLLA.  
R L Lindner E C Ernts N B Benson  
Plant Dis Rep 46(1):59-6D  
15 Jan 1966 1.9 P69P  
*Psylla pyricola*.
- 15245-6B  
BARK BEETLE MORTALITY IN PRECOMMERCIAL HERRICIDE THINNINGS  
OF WESTERN HEMLOCK.  
J B McGhehey W P Nagel  
J Econ Entomol 60(6):1572-1574  
Dec 1967 421 JB22  
Caodylic acid, Chemical control (insects), Forest insects,  
Herbicides, Insect mortality, Thinning (trees), *Tsuga*.  
Abstract
- 15246-6B  
PRELIMINARY STUDY ON SOME OF THE FACTORS AFFECTING CONTROL  
OF WESTERN CORN ROOTWORM LARVAE WITH SOIL INSECTICIDES.  
G J Musick M L Fairchild  
J Econ Entomol 60(6):1522-1525  
Dec 1967 421 JB22  
Chemical control (insects), Corn, *Diabrotica virgifera*,  
Larvae, Phorate, Soils.  
Abstract
- 15247-6B  
GRASSHOPPER DAMAGE ON SHORT-GRASS RANGELAND OF THE SAN  
CARLOS APACHE INDIAN RESERVATION, ARIZONA.  
N J Nerney  
J Econ Entomol 53(4):640-646, TABS.

- Aug 1960 421 J822  
Arizona, Grasses, Melanophus, Plant injuries.
- 15248-68  
EFFECTS OF MULCHING AND NITROGEN ON CORN BORER SUSCEPTIBILITY IN CORN.  
G P Offerman A J Pappelis J P Vavra  
Phytopathology 57(10):1D31-1033  
Oct 1967 464.8 P56  
Corn, Mulching, Nitrogen, Ostrinia.
- 15249-68  
EFFECT OF SOIL TREATMENTS OF HEPTACHLOR AND PARATHION ON PREDATORS AND PARASITES OF ROOT MAGGOTS ATTACKING RUTABAGAS ON PRINCE EDWARD ISLAND.  
D C Read  
J Econ Entomol 53(5):932-935, 12 REFS.  
Oct 1960 421 J822  
Aleochara, Heptachlor, Hylemya, Parathion,  
Prince Edward Island, Rutabagas, Soil treatments.
- 15250-68  
EFFECTIVENESS OF VARIOUS FORMULATIONS OF FIVE INSECTICIDES ON INSECTS INFESTING DOUGLAS-FIR LOGS.  
J A Rudinsky L C Terriere D C Allen  
J Econ Entomol 53(5):949-953, 14 REFS., 3 TABS.  
Oct 1960 421 J822  
Carbaryl, Dendroctonus, Endosulfan, Endrin, Reptachlor, Lindane, Logs, Pseudotsuga.
- 15251-68  
LINDANE IN DIESEL OIL PREVENTS WESTERN PINE BEETLE ATTACKS FOR AT LEAST ONE YEAR.  
R R Smith  
J Econ Entomol 6D(6):1746-1747  
Dec 1967 421 J822  
Dendroctonus brevicornis, Diesel fuels, Forest insects, Lindane, Oils.  
Abstract:  
Results suggest that 2.5 per cent lindane in diesel oil will effectively prevent successful western pine beetle adult attack for at least one year on standing trees. Further testing will be needed to determine any adverse effects of an oil spray on living trees.
- 15252-68  
ESTIMATION OF MARINE-BORER ATTACK ON WOODEN SURFACES.  
C C Walden I V F Allen P C Trussell  
J Fish Res Board Can 24(2):261-272  
Feb 1967 442.9 C16J  
Marine borers, Wood.  
Abstract
- 15253-68  
A FUNGUS DISEASE OF THE SALT-MARSH CATERPILLAR IN ARIZONA.  
G P Wene L W Sheets  
J Econ Entomol 53(5):957, 2 REFS.  
Oct 1960 421 J822  
Arizona, Cotton, Estigmene, Fungus diseases (insects).
- 15254-68  
STIMULATION OF HATCHING OF THE POTATO-ROOT EELWORM HETERODERA ROSTOCHIENSIS BY ION EXCHANGE RESINS.  
C Ellenby L Smith  
Nature 215(5101), 666  
05 Aug 1967 472 N21  
Heterodera rostochiensis, Ion exchange resins,  
Plant nematodes, Potatoes.
- 15255-68  
DETERMINATION OF NEMATODE MORTALITY.  
L M Fenner  
Plant Dis Rep 46(5):383  
15 May 1962 1.9 P69P  
Mortality, Plant nematodes.
- 15256-68  
FIELD TRIALS OF NEW NEMATOCIDES IN 1960 FOR CONTROLLING ROOT-KNOT NEMATODES.  
J M Good  
Phytopathology 51(9):643  
Sep 1961 464.8 P56  
Nematocides, Plant nematodes.
- 15257-68  
CONTROL OF PLANT-NEMATODES AND WEEDS IN HOLLY NURSERIES.  
F A Haasis J N Sasser  
Plant Dis Rep 46(5):328-332, TABS  
15 May 1962 1.9 P69P  
Chemical control (plant diseases), Ilex, Plant nematodes,  
Weed control.
- 15258-68  
CHEMOTHERAPEUTIC CONTROL OF A ROOT-KNOT NEMATODE.  
A W Helton  
Agr Chem 20(8):38  
Aug 1965 381 AG8  
Dimethoate, Drug therapy, Meloidogyne, Potatoes.
- 15259-68  
PATHOGENICITY OF THE STUBBY ROOT NEMATODE TO ONION.  
J K Hoff W F Mai  
Plant Dis Rep 46(1):24-25  
15 Jan 1962 1.9 P69P  
Onions.
- 15260-68  
A METHOD FOR ASSAYING NEMATOCIDAL ACTIVITY OF EXPERIMENTAL CHEMICALS.  
D E Johnson Bert Lear  
Plant Dis Rep 46(1D):742-743  
15 Oct 1962 1.9 P69P  
Chemical control (nematodes), Nematocides.
- 15261-68  
SOIL FUMIGATION BY INJECTION AND IRRIGATION FOR THE CONTROL OF NEMATODES ON HOPS.  
A R Maggenti  
Plant Dis Rep 51(9):794-798  
Sep 1967 1.9 P69P  
Chemical control (nematodes), Dibromo-3-chloropropane, 1,2-, Hops, Injections, Irrigation, Meloidogyne, Plant nematodes, Soil fumigation, Xiphinema americanum.  
Field trials with 1,3-d and DBCP were designed to study the efficacy of preplanting fumigation, the length of time of effectiveness of preplanting fumigation, and the efficacy of a postplanting fumigation in the second year. The best results were obtained when a preplanting fumigation with 6D gallons per acre of 1,3-d was followed in 1 year by DBCP at 2 1/2 gallons per acre in the first irrigation.
- 15262-68  
ELIMINATION OF ROOT-KNOT NEMATODES FROM INFESTED SWEETPOTATO ROOTS AND PLANTS.  
W J Martin  
Plant Dis Rep 46(1):21-23  
15 Jan 1962 1.9 P69P  
Sweetpotatoes.
- 15263-68  
CONTROL OF NEMATODES ON BLUE SPRUCE.  
P Miller  
Agr Chem 20(12):67  
Dec 1965 381 AG8  
Dibromo-3-chloropropane, 1,2-, Nematodes, Picea parryana.
- 15264-68  
EFFECT OF FUNGICIDES ON THE LARVAL EMERGENCE OF THE TOBACCO CYST NEMATODE.  
P M Miller G S Taylor E M Stoddard  
Phytopathology 51(8):577-578  
Aug 1961 464.8 P56  
Fungicides, Larvae.
- 15265-68  
HOST-PARASITE RELATIONSHIPS OF GARDEN BALSAM AND SOME NEMATODES.  
R A Odibirin W R Jenkins  
Phytopathology 54(7):748  
Jul 1964 464.8 P56  
Balsams, Nematology, Parasitology, Plant nematodes,  
Tree pathology.
- 15266-68  
OBSERVATIONS ON COTTON ROOT-KNOT NEMATODE IN GRAIN SORGHUM IN WEST TEXAS.  
C C Orr  
Plant Dis Rep 51(1):29  
Jan 1967 1.9 P69P  
Root knot (cotton), Sorghum, Texas.

## Nematodes

20 15267-68

15267-68  
SPECIES OF ROOT-LESION NEMATODES COMMONLY ASSOCIATED WITH ECONOMIC CROPS IN THE DELTA OF THE U.A.R.  
B A Oteifa  
Plant Dis Rep 46(8):572-575  
15 Aug 1962 1.9 P69P  
Plant nematodes.

15268-68  
NEW NEMATOCIDES.  
V G Perry  
Agr Chem 22(10):36-37  
Oct 1967 381 AG8  
Carbamates, Chemical control (nematodes), Nematocides, Organophosphorus compounds, Pesticide application, Plant nematodes.  
Abstract:  
dasinit (Bay 25141), Sarolex (Diazinon), Zinophos, Bay 68138, Du Nema (TR 285N), Lannate, Mocap (V-C 9-104), NIA 10242, Temek, TR 336N are briefly described.

15269-68  
PLANT-PARASITIC NEMATODES ASSOCIATED WITH SHORTLEAF PINE SHOWING SYMPTOMS OF LITTLELEAF.  
J L Ruehle  
Plant Dis Rep 46(10):710-711  
15 Oct 1962 1.9 P69P  
Little leaf (pinus), Pinus, Plant nematodes.

15270-68  
PRELIMINARY STUDIES ON THE CONTROL OF NEMATODES IN OUTDOOR ROSE PLANTINGS.  
A F Schindler T J Renneberry  
Plant Dis Rep 46(8):610-613, BIEL. 612-613  
15 Aug 1962 1.9 P69P  
Chemical control (plant diseases), Plant nematodes.

15271-68  
A NEW DISEASE OF SWAMP TUPELO.  
E B Toole  
Phytopathology 51(9):646  
Sep 1961 464.8 P56  
Nyssa, Swamps.

15272-68  
INFLUENCE OF OXYGEN SUPPLY ON SURVIVAL OF PLANT PARASITIC NEMATODES IN SOIL.  
S D Van Gundy L H Stolzy T E Szuszkiewicz R L Backham  
Phytopathology 52(7):628-632, BIEL. 632, TABS.  
Jul 1962 464.8 P56  
Oxygen, Plant nematodes, Soils.

15273-68  
TRICRODORUS CHRISTIEI AS A VECTOR OF POTATO CORKY RINGSPOT (TOBACCO BATTLE) VIRUS.  
C B Walkinshaw G C Griffin R R Larson  
Phytopathology 51(11):806-808  
Nov 1961 464.8 P56  
Corky ringspot (potatoes), Battle disease (tobacco).

15274-68  
RECORD OF TWO LONGIDORUS SPECIES FROM SUDAN.  
A M Yassin  
Plant Dis Rep 51(1):30  
Jan 1967 1.9 P69P  
Malva, Mentha spicata, Sudan.

15275-68  
A NEMATODE (MELOIDODERA SP) ON DOUGLAS-FIR MYCORRHIZAE.  
E Zak  
Plant Dis Rep 51(4):264  
Apr 1967 1.9 P69P  
Mycorrhiza, Plant nematodes, Pseudotsuga menziesii.  
Abstract:  
a new nematode, Meloidodera sp., was observed infecting mycorrhizae of a 20-inch dbh Pseudotsuga menziesii in western Oregon. only two of at least six morphologically distinct mycorrhizae on the root system were infected.

## Weeds

15276-68  
FOOD-PLANT SPECIFICITY AND ELIMINATION OF DISEASE OF CINNABAR MOTH LARVAE, HYPOCRITA JACOBIAEAE (L.) (LEPIDOPTERA: ARCTIIDAE).  
G E Bucher P Harris  
Can Entomol 93(10):931-936  
Oct 1961 421 C16  
Biological control (weeds), Insect diseases, Insect nutrition, Larvae, Moths, Senecio jacobaea.

15277-68  
RIBOFLAVIN-MEDIATED PHOTODECOMPOSITION OF AMITROLE IN RELATION TO CHLOROSIS.  
P Castelfranco A Oppenheim S Yamaguchi  
Weeds 11(2):111-115  
Apr 1963 79.8 W41  
Amitrole, Riboflavin.

15278-68  
SHIFT TO CHEMICAL WEED CONTROL HASTENS CHANGE FROM MDLES TO TRACTORS.  
Dumas  
Agr Chem 20(3):30-34, 111-112  
Mar 1965 381 AG8  
Chemical control (weeds), Mules, Tractors.

15279-68  
EFFECT OF INCORPORATION AND METHOD OF IRRIGATION ON PREEMERGENCE HERBICIDE.  
L S Jordan R E Day W A Clerx  
Weeds 11(2):157-160  
Apr 1963 79.8 W41  
Herbicides, Irrigation.

15280-68  
INHIBITION OF PHOTOCHEMICAL ACTIVITY OF ISOLATED CHLOROPLASTS BY ACYLANILIDES.  
D E Moreland K L Hill  
Weeds 11(1):55-60, BIEL. 59-6D, TABS.  
Jan 1963 79.8 W41  
Chemical control (weeds), Chloroplasts, Herbicides, Photochemistry.

15281-68  
AN OBSTACLE COURSE IN BAGWEED CONTROL.  
R Shiffman  
Agr Chem 20(2):28, 100-101  
Feb 1965 381 AG8  
Ambrosia, Pesticides, Weed control.

15282-68  
HERBICIDAL CONTROL OF TALL LARKSPUR.  
P J Torell R B Raas  
Weeds 11(1):10-13, TABS., PLS.  
Jan 1967 79.8 W41  
Chemical control (weeds), Herbicides, Plant growth inhibitors.

15283-68  
APPRAISAL OF BIOLOGICAL CONTROL OF ARCEUTHORIDM CAMPYLOPODUM F. CAMPYLOPODUM BY COLLETOTRICHUM GLOEOSPORIOIDES.  
E P Wicker  
Plant Dis Rep 51(4):311-313 REP  
Apr 1967 1.9 P69P  
Arceuthobium, Biological control (weeds), Fungus diseases (plants), Parasitic plants, Pinus ponderosa, Tree diseases.  
A damage appraisal of Colletotrichum blight of Arceuthobium campylopodum f. campylopodum on ponderosa pine growing near Spangle, Washington revealed that 35 to 67 percent of the dwarf mistletoe plants sampled were injured and 23.6 percent of the dwarf mistletoe shoots sampled were killed by the disease.



## Other Pests

## 30 LIVESTOCK PROTECTION

- 15284-68  
THE RELATIVE RESISTANCE TO INSECT ATTACK OF THREE CABBAGE VARIETIES AT DIFFERENT STAGES OF PLANT MATURITY.  
R K Chapman  
Entomol Soc Amer Ann 58(6):897-902, 1 REP., 5 FIGS.  
Nov 1965 420 EN82  
Cabbage, Plant pest resistance, Plant physiology.
- 15285-68  
SEASONAL SHIFTS IN THE RELATIVE RESISTANCE TO INSECT ATTACK OF EIGHT COMMERCIAL CABBAGE VARIETIES.  
R K Chapman  
Entomol Soc Amer Ann 58(6):892-897 5 REP., 6 FIGS.  
Nov 1965 420 EN82  
Cabbage, Climate, Pieris, Plant pest resistance, Trichoplusia, Weather.
- 15286-68  
U.S.D.A'S LONG RANGE OBJECTIVES IN MEETING AGRICULTURAL PEST PROBLEMS.  
E P Knippling  
Agr Chem 18(11):53-54,120  
Nov 1963 381 AG8  
Attractants, Biological control (pests), Pest control, Pesticides.
- 15287-68  
STUDIES ON AN IMMUNOGENIC AGENT AGAINST BRUCELLA ABORTUS. II. PRELIMINARY STUDIES OF AN IMMUNOLOGICALLY ACTIVE SOLUBLE AGGLUTINOGEN.  
R C Allen  
Amer J Vet Res 22(88):558-563  
May 1961 41.8 AM3A  
Brucella abortus antigens, Immunization.
- 15288-68  
VARIATIONS IN UTERINE RESPONSE TO EXPERIMENTAL INFECTION DUE TO THE HORMONAL STATE OF THE OVARIES. II. THE MORLIZATION OF LEUKOCYTES AND THEIR IMPORTANCE IN UTERINE BACTERICIDAL ACTIVITY.  
A W Broome A J Winter S H McNutt L E Casida  
Amer J Vet Res 21(83):675-681, TARS.  
Jul 1960 41.8 AM3A  
Hormones, Leukocytes, Ovaries, Uterus.
- 15289-68  
USE OF EMULSIFIED FAT FOR INTRAPERITONEAL ALIMENTATION.  
M J Burns C H Clark  
Amer J Vet Res 22(86):147-149  
Jan 1961 41.8 AM3A  
Human nutrition.
- 15290-68  
FECAL ELIMINATION OF ESTROGENS BY CATTLE TREATED WITH DIETHYLSTILBESTROL AND HEXESTROL.  
M R Callantine M Stob P N Andrews  
Amer J Vet Res 22(88):462-465  
May 1961 41.8 AM3A  
Cattle, Diethylstilbestrol, Excreta, Feces, Bexestrol.
- 15291-68  
TRANQUILLISING HORSES WITH PROMAZINE HYDROCHLORIDE.  
J S M Cosgrove S M Collins J P Kavenagh J S Cosgrove  
Brit Vet J 116(1):31-33  
Jan 1960 41.8 V643  
Horses, Phenothiazine, Promazine hydrochloride.
- 15292-68  
A SEMI-QUANTITATIVE DETERMINATION OF AFLATOXIN B IN GROUND-NUT MEAL, GROUNDNUTS AND PEANUT BUTTER.  
H De Jongh  
Vet Rec 76(34):901-903, 5 REPS., 2 TARS.  
22 Aug 1964 41.8 V641  
Aflatoxin, Chromatography, Peanut butter, Peanut meal, Peanuts.
- 15293-68  
POTENCY TESTING OF LOW EGG PASSAGE MODIFIED LIVE-VIRUS RABIES VACCINES.  
D J Dean I Sherman  
22(89):644-649, TARS.  
Jul 1961  
Rabies virus, Vaccines, Viruses.
- 15294-68  
THE POSITION OF THE CANINE PROSTATE GLAND.  
N Gordon  
Amer J Vet Res 22(86):142-146, RIRL. 146  
Jan 1961 41.8 AM3A  
Dogs, Glands (animals).
- 15295-68  
THE AGES AT WHICH THE CENTERS OF OSSIFICATION APPEAR ROENT-GENOGRAPHICALLY IN THE LIMB BONES OF THE DOG.  
W C D Hare  
Amer J Vet Res 22(90):825-835, RIRL. B35  
Sep 1961 41.8 AM3A  
Bones, Dogs, Extremities.
- 15296-68  
VARIATION IN THE INFLAMMATORY RESPONSE AND BACTERICIDAL ACTIVITY OF THE SHEEP UTERUS DURING THE ESTROUS CYCLE.  
H W Hawk G D Turner J P Sykes  
Amer J Vet Res 22(89):689-692  
Jul 1961 41.8 AM3A

30 15297-68

Bactericides, Leukocytes.

15297-68

THE MEASUREMENT OF BOVINE THYROID ACTIVITY USING LOW DOSAGES OF RADIOACTIVE IODINE I131.  
J R Howes W A Higginbotham J F Gennaro J P Feaster  
Amer J Vet Res 22(90):887-892, BIBL. 891-892  
Sep 1961 41.8 AM3A  
Cattle, Radioelements, Thyroid gland.

15298-68

INOCULATION OF MICROBES INTO THE INTESTINAL TRACTS OF SMALL ANIMALS.  
R E Johnson D A Peterson  
Amer J Vet Res 22(87):330-332  
Mar 1961 41.8 AM3A  
Animals, Immunization, Microorganisms.

15299-68

ERYTHROCYTE SURVIVAL STUDIES IN DOMESTIC AND BIGHORN SHEEP, USING GLYCINE-2-C14.  
J J Kaneko C E Cornelius W P Heuschele  
Amer J Vet Res 22(89):683-685  
Jul 1961 41.8 AM3A  
Bighorn sheep, Erythrocytes.

15300-68

THE EFFECTS OF EXOGENOUS TESTOSTERONE ON SPERMATOGENESIS OF BULLS.  
C F Koinecke L E McDonald  
Amer J Vet Res 22(87):209-216, BIBL. 214-215  
Mar 1961 41.8 AM3A  
Bulls, Spermatogenesis.

15301-68

ANTIBIOTIC MEDIUMS FOR THE ISOLATION OF VIRIOS FROM BULL SEMEN.  
W N Flastrydge M E Koths L F Williams  
Amer J Vet Res 22(90):867-874  
Sep 1961 41.8 AM3A  
Antibiotics, Culture media, Semen.

15302-68

EFFECT OF CORTISONE ON LEPTOSPIRA POMONA INFECTION IN THE GUINEA PIG.  
B L Schrickler L E Hanson  
Amer J Vet Res 22(88):580-586, BIBL. 585, TABS.  
May 1961 41.8 AM3A  
Cortisone, Guinea pigs.

15303-68

STUDIES ON THE ERYTHROCYTE SEDIMENTATION RATE IN DOMESTIC ANIMALS. VII. BOULEAU FORMATION.  
K Sesaki  
Amer J Vet Res 22(87):319-323, BIBL. 322-323  
Mar 1961 41.8 AM3A  
Erythrocyte sedimentation reaction, Livestock.

15304-68

EFFECT OF DIET ON AORTIC RUPTURES IN TURKEYS INDUCED BY DIETHYLSTILBESTROL.  
C F Simpson B H Haras  
Poultry Sci 43(3):681-700  
May 1964 47.8 AM33P  
Aneurysms, Aorta, Diethylstilbestrol, Sex, Turkeys.

15305-68

EFFECT OF NATURALLY OCCURRING HIGHLY MINERALIZED WATER ON THE GROWTH OF LABORATORY ANIMALS.  
B H Skold E Jensen  
Amer J Vet Res 22(88):601-605, BIBL. 604, TABS.  
May 1961 41.8 AM3A  
Animal physiology, Laboratory animals, Water pollution.

15306-68

POST-TETANIC POTENTIATION IN SPINAL CORD OF NORMAL AND MYOCLONIC FIGS.  
M W Stromberg B L Kitchell R C Callstrom  
Amer J Vet Res 22(86):72-79  
Jan 1961 41.8 AM3A  
Spinal cord, Spine, Swine, Tetanus.

15307-68

THE ANTIGENIC STRUCTURE OF VIRULENT AND AVIRULENT STRAINS OF ERYSIPELOTHRIX RHUSIOPATHIAE. II. IMMUNOCHEMICAL AND SEROLOGICAL INVESTIGATIONS.  
M Trusczynski  
22(90):839-845, TABS.  
Sep 1961  
Immunology.

15308-68

A RAPID, PERMANENT WRIGHT'S STAINING METHOD FOR CHROMOSOMES AND CELL NUCLEI.  
H S Tubiasch  
Amer J Vet Res 22(89):807-810  
Jul 1961 41.8 AM3A  
Animal genetics, Cell nucleus, Chromosomes.

15309-68

DETECTION OF LEPTOSPIRES IN NATURALLY INFECTED DOGS, USING FLUORESCENT-LABELED ANTIBODIES.  
F H White R E Stollker M H Galton  
Amer J Vet Res 22(88):650-654  
Jul 1961 41.8 AM3A  
Antibodies, Dogs, Leptospirosis.

15310-68

CHARACTERIZATION OF VIBRIO PETUS ANTIGENS. IV. STUDY OF POLYSACCHARIDE-ANTIBODY REACTIONS BY A RAPID SLIDE GEL DIFFUSION TECHNIQUE.  
M Ristic D K Murty  
Amer J Vet Res 22(89):775-789, TABS  
Jul 1961 41.8 AM3A  
Antibodies, Antigens, Polysaccharides.

15311-68

LEUKOSIS - TRANSMISSION BY BEETLES.  
S C Schmittle C S Eidson J R Lal B B Goode  
Amer Vet Med Ass J 147(12):1673-1674  
15 Dec 1965 41.8 AM3  
Alphitobius, Chickens, Coleoptera, Insect vectors, Leukosis.

## Diseases

15312-68

REPORT ON THE PULLORUM DISEASE TESTING RESULTS FOR THE 32ND NORTHEASTERN CONFERENCE ON AVIAN DISEASES.  
Avian Dis 4(4):547-548  
Nov 1960 41.8 AV5  
Animal diseases, Birds, Epizootic diseases, Poultry, Pullorum disease.

15313-68

THE ISOLATION OF INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS FROM CATTLE AFFECTED WITH CONJUNCTIVITIS-OBSERVATIONS ON THE EXPERIMENTAL INFECTION.  
F R Abinanti G J Plummer  
Amer J Vet Res 22(86):13-17  
Jan 1961 41.8 AM3A  
Bovine rhinotracheitis virus, Cattle, Conjunctivitis, Livestock diseases, Respiratory diseases, Virus diseases (animals).

15314-68

CULTIVATION OF MYCOPLASMA OF AVIAN ORIGIN.  
H E Adler J Berg  
Avian Dis 4(1):3-12, BIBL. 11-12  
Feb 1960 41.8 AV5  
Birds, Culture media, Mycoplasmosis.

15315-68

A HEAT-INACTIVATION TEST FOR DIFFERENTIATING SPECIFIC AND NONSPECIFIC AGGLUTINATION REACTIONS FOR BOVINE BRUCELLOSIS.  
T E Amerault C A Hanthei E R Goode Jr G Lamhart  
Amer J Vet Res 22(88):564-569, TABS.  
May 1961 41.8 AM3A  
Brucellosis, Cattle.

15316-68

SALMONELLA AND SHIGELLA INFECTIONS IN RATS IN SELECTED AREAS OF COLOMBIA.  
A A Arata J B Vaughn K W Newell R A J Barth M Gracian

- Amer J Trop Med Hyg 17(1):92-95, MAP  
Jan 1968 448.8 AM326  
Rats, Salmonella, Zoonoses.
- 15317-68  
OBSERVATIONS ON THE COLONIAL MORPHOLOGY OF LEPTOSPIRES.  
J C Armstrong H S Goldberg  
Amer J Vet Res 21(81):311-315  
Mar 1960 41.8 AM3A  
Leptospirosis, Plant morphology.
- 15318-68  
A SLIDE SMEAR TECHNIQUE FOR THE DIAGNOSIS OF  
LARYNGOTRACHEITIS.  
W E Armstrong  
Avian Dis 3(1):80-84  
Feb 1959 41.8 AV5  
Diagnosis, Histology.
- 15319-68  
ERYTHROCYTE SURVIVAL IN EXPERIMENTAL ANAPLASMOSIS.  
M P Baker J W Osehold J P Christensen  
Amer J Vet Res 22(88):590-596  
May 1961 41.8 AM3A  
Anaplasmosis, Erythrocytes.
- 15320-68  
ISOLATION OF AN UNIDENTIFIED MYXOVIRUS FROM CRICKENS WITH A  
RESPIRATORY DISEASE.  
R A Bankowski R Corstvet W Philippo  
Avian Dis 4(3):304-305  
May 1960 41.8 AV5  
Chickens, Myxoviruses, Respiratory diseases.
- 15321-68  
TREATMENT OF CHRONIC RESPIRATORY DISEASE WITH TYLOSIN.  
L E Barnes P O Gossett  
Avian Dis 4(3):307  
May 1960 41.8 AV5  
Chronic respiratory disease, Drug therapy.
- 15322-68  
TREATMENT OF EXPERIMENTAL INFECTIONOUS SINOSITIS OF TURKEYS  
WITH ERYTHROMYCIN.  
L E Barnes E E Ose P O Gossett  
Avian Dis 4(2):176-187, BIRL. 186-187, TARS.  
May 1960 41.8 AV5  
Drug therapy, Erythromycin, Turkeys.
- 15323-68  
ISOLATION AND PROPERTIES OF BOVINE HERPESVIRUS FROM A CALF  
WITH RESPIRATORY DISEASE AND KERATOCONJUNCTIVITIS. (GE )  
A Bartha M Juhasz B Liebermann B Rantschel P Schulze  
Arch Exp Veterinarmed 21(2): 615-623 REF  
May 1967 41.8 EX7  
Cattle, Herpesviruses, Respiratory diseases.  
Abstract
- 15324-68  
THE HISTOPATHOLOGIC CHARACTERISTICS OF DISEASES PRODUCING  
INFLAMMATION OF THE AIR SACS IN TURKEYS-A COMPARATIVE STUDY.  
J N Reasley R W Moore J R Watkins  
Amer J Vet Res 32(83):85-92, BIRL. 91, TARS.  
Jan 1961 41.8 AM3A  
Air sacs, Chronic respiratory disease, Ornithosis,  
Pleuron pneumonia-like organisms, Turkeys.
- 15325-68  
THE ISOLATION AND PROPAGATION OF A NATURALLY OCCURRING TUR-  
KEY LYMEHOID TUMOR BY CELLULAR TRANSPLANTS.  
R C Redding V L Sanger  
Amer J Vet Res 28(87):271-273  
Mar 1961 41.8 AM3A  
Turkeys.
- 15326-68  
PHYSICOCHEMICAL PROPERTIES OF THE INFECTIONOUS BORSAL AGENT  
(IBA).  
W J Renton M S Cover J K Rosenherger B S Lake  
Avian Dis 11(3):438-445 REF  
Aug 1967 41.8 AV5  
Antiseptics, Gumboro disease, Poultry, Properties.  
Abstract:  
the agent was inhibited by formalin and Wecodyne, but not  
by phenol, merthiolate, Staphene, or Hyamine 2389. ether  
and chloroform treatment had no deleterious effect on the  
agent.
- 15327-68  
STUDIES ON ENTEROVIRUSES OF THE PIG-V. THE EXPERIMENTAL  
DISEASE INDUCED IN PATHOGEN-FREE, COLOSTRUM-DEPRIVED PIGS  
BY THE T80 AND T52A STRAINS OF A SWINE POLIO-  
ENCEPHALOMYELITIS VIROS.  
A O Betts A R Jennings  
Res Vet Sci 1(2):160-171, TARS.  
Apr 1960 41.8 R312  
Colostrum, Enteroviruses.
- 15328-68  
STUDIES ON ENTEROVIRUSES OF THE PIG-II.  
A O Betts  
Res Vet Sci 1(1):65-71  
Jan 1960 41.8 R312  
Baby pigs.
- 15329-68  
A PRELIMINARY NOTE ON THE USE OF AN INACTIVATED VACCINE  
AGAINST EQUINE PEST. (PR. )  
P Bourdin J Monnier-Camhon  
Acad Vet France Bull 40(4):187-191  
Apr 1967 41.9 R24  
African horse sickness, Horses, Immunization, Vaccines.
- 15330-68  
SULFUR-SELENIUM-VITAMIN E INTERRELATIONS IN OVINE  
NUTRITION.  
P A Royazoglu R M Jordan R J Meade  
J Anim Sci 26(6):1390-1396 REF  
Nov 1967 49 J82  
Selenium, Sheep, Sulfur, Vitamin e.  
Abstract
- 15331-68  
NON-SPECIFIC PLATE AGGLOTINATION REACTIONS WITH PPLO  
ANTIGEN.  
C I Royer Jr J Fabricant J A Brown  
Avian Dis 4(4):546-547  
Nov 1960 41.8 AV5  
Agglutination test, Antigens.
- 15332-68  
AVIAN ENTERIC CYTOPATHOGENIC VIRUSES. I. ISOLATION.  
C N Burke B E Luginbuhl E L Jungherr  
Avian Dis 3(4):412-418  
Nov 1959 41.8 AV5  
Viruses.
- 15333-68  
AVIAN ENTERIC CYTOPATHOGENIC VIRUSES. II. CHARACTERISTICS  
OF A PROTOTYPE.  
C N Burke B E Luginbuhl E L Jungherr  
Avian Dis 3(4):419-427  
Nov 1959 41.8 AV5  
Viruses.
- 15334-68  
STUDIES ON AVIAN ENCEPHALOMYELITIS. I THE USE OF A SERUM  
-NEUTRALIZATION TEST IN THE DETECTION OF IMMUNITY LEVELS.  
B W Calnek H Jehnich  
3(2):95-104, TARS.  
May 1959  
Immunity, Serum neutralization test.
- 15335-68  
STUDIES ON AVIAN ENCEPHALOMYELITIS. II IMMUNE RESPONSES TO  
VACCINATION PROCEDURES.  
B W Calnek B Jehnich  
Avian Dis 3(3):225-239, BIBL. 238-239, TARS.  
Aug 1959 41.8 AV5  
Avian encephalomyelitis, Immunity.
- 15336-68  
STUDIES ON AVIAN ENCEPHALOMYELITIS. III IMMUNE RESPONSE TO  
BETA-PROPIOLACTONE INACTIVATED VIRUS.  
B W Calnek P J Taylor  
Avian Dis 4(2):116-122, BIBL. 121-122, TARS.  
May 1960 41.8 AV5  
Avian encephalomyelitis, Hydracrylic acid beta-lactone,  
Immunity.
- 15337-68  
THE DETECTION OF ANTIBODY AGAINST LEPTOSPIRA POMONA IN COM-  
POSITE HERD MILK SAMPLES.  
E A Carhrey R A Packer  
Amer J Vet Res 22(88):573-579, TARS.  
May 1961 41.8 AM3A  
Antibodies, Milk analysis.



## BIRLIOGRAPHY

30 15338-68

- 15338-66  
SEROLOGICAL INVESTIGATION IN FRENCH CATTLE; RESEARCH ON HEMAGGLUTINATION INHIBITING ANTIBODIES DUE TO MYXOVIRUS PARAINFLUENZA-3. (PR )  
J Cherby H G Petermann G Beranger J P Soulebot  
Rec Med Vet 143(8):755-765, MAP, REP.  
Aug 1967 41.8 R24  
Antibodies, Cattle, Hemagglutination, Parainfluenza-3 virus, Serological tests.  
Abstract
- 15339-66  
TISSUE CULTURE PROPAGATION AND PATHOLOGY OF A CELO VIRUS.  
T W Chomiak B E Luginbuhl C F Helmboldt  
Avian Dis 4(4):544-545  
Nov 1960 41.8 AV5  
Chicken embryo lethal orphan virus, Tissue culture, Virus diseases (animals).
- 15340-68  
REPORT OF THE COMMITTEE ON NOMENCLATURE AND REPORTING OF DISEASE, NORTHEASTERN CONFERENCE ON AVIAN DISEASE, JUNE, 1962.  
H L Chute M S Cover G H Snoeybos C I Angstrom  
Avian Dis 6(4):516-521, TABS.  
Nov 1962 41.8 AV5  
Chickens, Livestock diseases, Pullorum disease.
- 15341-68  
A QUANTITATIVE MEASUREMENT OF THE BLOOD LOSS CAUSED BY ANCYLOSTOMIASIS IN DOGS.  
C H Clark J H Kling C H Woodley N Sharp  
Amer J Vet Res 22(88):370-373  
May 1961 41.8 AM3A  
Ancylostomiasis, Dogs.
- 15342-68  
ATYPICAL FASTEURIELLA INFECTIONS IN CRICKENS.  
D S Clark J F Godfrey  
Avian Dis 4(3):280-290, TABS.  
May 1960 41.8 AV5  
Chickens, Fowl cholera.
- 15343-68  
NATURAL OCCURRENCE OF LEPTOSPIROSIS IN THE MEADOW VOLE, MICROTUS PENNSYLVANICUS.  
L G Clark J I Kresse R R Marshak C J Hollister  
Amer J Vet Res 22(90):949-950  
Sep 1961 41.8 AM3A  
Field mice, Leptospirosis.
- 15344-68  
STAINING FIXED PREPARATIONS OF CHICKEN BLOOD CELLS WITH COMBINATION MAY-GREENWALD-WRIGHT-PHLOXINE B STAIN.  
F W Cook  
Avian Dis 3(3):272-290  
Aug 1959 41.8 AV5  
Animal histology, Blood cells, Chickens.
- 15345-68  
CALCIUM GOUT (KALKGICHT) AND CALCINOSIS CIRCUMSCRIPTA IN DOGS.  
E Cotchin  
Brit Vet J 116(1):3-8, BIRL., PL  
Jan 1960 41.8 V643  
Calcinosis, Dogs, Gout.
- 15346-68  
THE EFFECT OF PARENTAL IMMUNITY AND AGE ON THE RESPONSE TO INFECTIOUS LARYNGOTRACHEITIS VACCINATION.  
M S Cover W J Renton W C Krauss  
Avian Dis 4(4):467-473, TABS.  
Nov 1960 41.8 AV5  
Immunity, Immunization, Infectious laryngotracheitis.
- 15347-68  
PULMONARY ADENOMATOSIS OF SHEEP-METASTASIZING BRONCHIOLAR TUMORS.  
A Cuba-Caparo E de la Vega M Copaira  
Amer J Vet Res 22(89):673-682, BIRL. 681-682  
Jul 1961 41.8 AM3A  
Neoplasms, Pulmonary adenomatosis, Sheep.
- 15348-68  
FLUORESCIN-LABELED ANTIRODY TECHNIQUE FOR IDENTIFICATION OF LEPTOSPIRAL SEROTYPES.  
W G Dacres  
Amer J Vet Res 22(88):570-572  
May 1961 41.8 AM3A  
Antibodies.
- 15349-68  
NEWCASTLE DISEASE IMMUNITY IN BROILERS AND CAPONNETTES VACCINATED WITH KILLED-VIRUS AND LIVE-VIRUS VACCINES.  
A H Dardiri V J Yates P W Chang D E Fly  
Amer J Vet Res 22(89):93-98, TABS.  
Jan 1961 41.8 AM3A  
Immunization, Livestock diseases, Newcastle disease, Poultry, Viral vaccines.
- 15350-68  
VIRAL ENCEPHALOMYELITIS OF EQUINES AND DOMESTIC RUMINANTS IN THE NEAR EAST. I.  
R Daubney E A Mahlau  
Res Vet Sci 8(3): 375-397 REP  
Jul 1967 41.8 R312  
Equine encephalomyelitis, Horses, Ruminants.  
Abstract
- 15351-68  
STUDIES ON HEMOLYTIC ESCHERICHIA COLI ASSOCIATED WITH EDEMA DISEASE OF SWINE. I. SEPARATION AND PROPERTIES OF A TOXIN OF HEMOLYTIC ESCHERICHIA COLI.  
J W Davis R C Allen R M Smbert  
Amer J Vet Res 22(89):636-640  
Jul 1961 41.8 AM3A  
Edema disease, Swine, Toxins.
- 15352-68  
FOOT-AND-MOUTH DISEASE VIRUS- ITS BEHAVIOR IN CATTLE AFTER SERIAL PASSAGES IN CHICKEN EMBRYOS AND CHICKS.  
P D DeLay H Rozemeyer  
Amer J Vet Res 22(88):533-536  
May 1961 41.8 AM3A  
Cattle, Chicks, Foot-and-mouth disease virus.
- 15353-68  
ANTIBIOTIC RESISTANCE AND MUTATION RATES OF MYCOPLASMA.  
C H Domermuth  
Avian Dis 4(4):456-466, TABS.  
Nov 1960 41.8 AV5  
Antibiotics, Mutation, Pleuropneumonia-like organisms.
- 15354-68  
SOME OBSERVATIONS ON FIELD CASES OF FACIAL ECZEMA: LIVER PATHOLOGY AND DETERMINATION OF SERUM BILIRUBIN, CHOLESTEROL, TRANSAMINASE AND ALKALINE PHOSPHATASE.  
J Done P R Mortimer A Taylor  
Res Vet Sci 1(1):76-83  
Jan 1960 41.8 R312  
Aminotransferases, Bilirubin, Cholesterol, Facial eczema.
- 15355-68  
EXPERIMENTAL VISCERAL LARVA MIGRANS IN THE PIG.  
J T Done M D Richardson T E Gibson  
Res Vet Sci 1(2):133-151, TABS, BIRL.150-151  
Apr 1960 41.8 R312  
Baby pigs, Larvae.
- 15356-68  
EASTERN ENCEPHALITIS IN WHITE PEKIN DUCKLINGS ON LONG ISLAND.  
E Dougherty 3rd J I Price  
Avian Dis 4(3):247-258, BIRL. 255-258, PLS.  
May 1960 41.8 AV5  
Avian encephalomyelitis, Ducklings, Eastern equine encephalomyelitis, Pekin ducks.
- 15357-68  
ENZOOTIC NASAL ADENOCARCINOMA IN SHEEP.  
J R Duncan D E Tyler M J Van Der Maaten J R Andersen  
Amer Vet Med Ass J 151(6), 732-734.  
15 Sep 1967 41.8 AM3  
Adenocarcinoma, Livestock diseases, Sheep.  
Abstract
- 15358-68  
THE DETECTION OF ACUTE AVIAN LEUKOSIS AS A CONTAGIOUS DISEASE.  
W R Dunlop S D Kottaridis S C Smith R G Stront  
Poultry Sci 44(6):1537-1540  
Nov 1965 47.8 AM33P  
Avian leukosis complex, Chicks, Diagnosis.
- 15359-68  
THE RECOVERY OF BACTERIUM ANITRATUM (B5W. FROM ANIMALS.  
E M Ellis  
Amer J Vet Res 22(88):610-613  
May 1961 41.8 AM3A  
Animals.

- 15360-68  
THE PROBLEM OF SALMONELLA ORGANISMS IN ANIMAL BY-PRODUCTS AND FEEDS.  
E M Ellis E E Wedman  
Amer Vet Med Ass J 142(3):291-292  
01 Feb 1963 41.8 AM3  
Animal nutrition, Feed, Salmonella, Salmonellosis.
- 15361-68  
ELECTRON MICROSCOPY OF THE BOVINE HEART IN CONGESTIVE FAILURE OF HIGH MOUNTAIN DISEASE.  
G P Epling  
Amer J Vet Res 29(1):97-109 REF  
Jan 1968 41.8 AM3A  
Brisket disease, Cattle, Electron microscopy, Heart.  
Abstract
- 15362-68  
SEROLOGICAL STUDIES OF AVIAN PLEUROPNEUMONIA-LIKE ORGANISMS (PPLO) WITH EDWARD'S TECHNIQUE.  
J Fabricant  
Avian Dis 4(4):505-514, BIBL. 513-514, TABS.  
Nov 1960 41.8 AV5  
Pleuron pneumonia-like organisms, Serological tests.
- 15363-68  
STUDIES OF EGG TRANSMISSION OF PPLO IN CHICKENS.  
J Fabricant P P Levine R W Calnek H E Adler J B Berg  
Avian Dis 3(2):197-222, TABS.  
May 1959 41.8 AV5  
Pleuron pneumonia-like organisms.
- 15364-68  
SWINE SERUM AND CO2 IN THE ISOLATION OF AVIAN PPLO.  
J Fabricant  
Avian Dis 3(4):428-439, TABS.  
Nov 1959 41.8 AV5  
Carbon dioxide, Pleuron pneumonia-like organisms, Serum, Swine.
- 15365-68  
EXPERIMENTAL PRODUCTION OF COMPLICATED CHRONIC RESPIRATORY DISEASE INFECTION ('AIR SAC' DISEASE).  
J Fabricant P P Levine  
Avian Dis 6(1):13-23, TABS.  
Feb 1962 41.8 AV5  
Animal respiration.
- 15366-68  
RESULTS OF CONTINUOUS LOW-LEVEL INOCULATIONS WITH EIMERIA BOVIS IN CALVES.  
P R Fitzgerald  
Amer J Vet Res 28(124):659-665 REF  
May 1967 41.8 AM3A  
Animal disease resistance, Cattle, Coccidiosis.
- 15367-68  
CASE REPORT- AN OUTBREAK OF ORNITHOSIS IN NEW MEXICO.  
D W Francis  
Avian Dis 4(3):310-311  
May 1960 41.8 AV5  
Epizootic diseases, Ornithosis.
- 15368-68  
ISOLATION OF AN ANAEROBIC VIBRIO FROM A KING PENGUIN (AP-TENODYTES LONGIROSTRIS).  
G Fraser  
Avian Dis 5(3):243-250, BIBL. 249-250  
Aug 1961 41.8 AV5  
Anaerobic bacteria, Aptenodytes, King penguins.
- 15369-68  
HIGH MORTALITY IN FLORIDA SWINE HERD INFECTED WITH THE ENCEPHALITIS VIRUS. AN ACCOMPANYING EPIZOOTIOLOGIC SURVEY.  
J R Gainer J R Sandefur W J Eigler  
Cornell Vet 58(1):31-47 REF  
Jan 1968 41.8 C81  
Antibodies, Garbage (feed), Swine.  
Abstract
- 15370-68  
THE EMERGENCE OF RESISTANT STRAINS OF SALMONELLA TYPHIMURUM IN THE TISSUES AND ALIMENTARY TRACTS OF CHICKENS FOLLOWING THE FEEDING OF AN ANTIBIOTIC.  
J S Garside B F Gordon J F Tucker  
Res Vet Sci 1(2):184-199  
Apr 1960 41.8 B312  
Antibiotics, Chickens, Salmonella bacterins.
- 15371-68  
NEWCASTLE DISEASE: PRELIMINARY FIELD TESTS OF BETA-PROPIOLACTONE-KILLED VACCINE.  
E Gill H D Stone  
Avian Dis 4(4):543-544  
Nov 1960 41.8 AV5  
Hydracrylic acid beta-lactone, Newcastle disease vaccines.
- 15372-68  
GAMMA GLOBULIN LEVELS AND NEONATAL MORTALITY IN MARKET CALVES.  
P J Glantz  
Vet Rec 77(17):490  
41.8 V641  
Calves, Gamma globulins.
- 15373-68  
ESCHERICHIA COLI SEROTYPES ISOLATED FROM SALPINGITIS AND CHRONIC RESPIRATORY DISEASE OF POULTRY.  
P J Glantz S Narotsky G Barbash  
Avian Dis 6(3):322-328  
Aug 1963 41.8 AV5  
Poultry, Salpingitis.
- 15374-68  
PLAQUE CHARACTERISTICS OF FOUR CLASSES OF BOVINE VIRUSES.  
J B Gratzek R F Rosenbusch G H Bening  
Amer J Vet Res 28(124):641-646 REF  
May 1967 41.8 AM3A  
Cattle, Plaque.
- 15375-68  
BOVINE PAPULAR STOMATITIS. II. THE EXPERIMENTALLY PRODUCED DISEASE.  
R A Griesemer C R Cole  
Amer J Vet Res 22(88):473-481  
May 1961 41.8 AM3A  
Animal diseases, Bovine papular stomatitis virus.
- 15376-68  
ENTEROTOXEMIA OF SHEEP. II. DISTRIBUTION OF I131 RADIOIODINATED SERUM ALBUMIN IN BRAINS OF CLOSTRIDIUM PERFRINGENS TYPE D INTOXICATED LAMBS.  
L A Griner W D Carlson  
Amer J Vet Res 22(88):443-446  
May 1961 41.8 AM3A  
Brain, Clostridium perfringens bacterin, Enterotoxemia, Lambs, Serum albumin, Sheep.
- 15377-68  
ENTEROTOXEMIA OF SHEEP. I. EFFECTS OF CLOSTRIDIUM PERFRINGENS TYPE D TOXIN ON THE BRAINS OF SHEEP AND MICE.  
L A Griner  
Amer J Vet Res 22(88):429-442, TABS.  
May 1961 41.8 AM3A  
Brain, Clostridium perfringens bacterin, Enterotoxemia, Mice, Sheep, Toxins.
- 15378-68  
ENTEROTOXEMIA OF SHEEP. III. CLOSTRIDIUM PERFRINGENS TYPE D ANTITOXIN TITERS OF NORMAL, NONVACCINATED LAMBS.  
L A Griner  
Amer J Vet Res 22(88):447-448  
May 1961 41.8 AM3A  
Clostridium perfringens bacterin, Lambs, Sheep, Toxins.
- 15379-68  
SIZE, SCORE AND SPEED OF DEVELOPMENT OF TUMORS IN CHICKENS IN RESPONSE TO SUBCUTANEOUS INOCULATIONS WITH ROUS SARCOMA VIRUS.  
W R Gyles J L Miley C J Brown  
Poultry Sci 46(4):789-795  
Jul 1967 47.8 AM33P  
Chickens, Rous sarcoma virus.
- 15380-68  
TREATMENT OF DIARRHOEA IN DOGS.  
J D Hawkins  
Vet Rec 74(28):800  
14 Jul 1962 41.8 V641  
Attapulgit, Diarrhea, Dogs, Streptomycin.
- 15381-68  
STUDIES ON PASTEURILLOSIS. IV. KILLED FOWL CHOLERA VACCINE ADSORBED ON ALUMINUM HYDROXIDE.  
K L Heddleston R C Reisinger  
Avian Dis 4(4):429-435  
Nov 1960 41.8 AV5  
Aluminum hydroxide, Bacterial vaccines, Fowl cholera, Pasteurellosis.

## BIBLIOGRAPHY

3D 15382-68

- 15382-68  
STUDIES ON PASTEURILLOSIS. III. CONTROL OF EXPERIMENTAL FOWL CHOLERA IN CHICKENS AND TURKEYS WITH AN EMULSIFIED KILLED VACCINE.  
K L Heddleston R C Reisinger  
Avian Dis 3(4):397-404  
Nov 1955 41.8 AV5  
Bacterial vaccines, Chickens, Fowl cholera, Pasteurellosis, Turkeys.
- 15383-68  
CONTROL OF CHRONIC RESPIRATORY DISEASE. II. THE EFFECT OF LOW CALCIUM DIET, TEREPHTHALIC ACID AND CHLORTETRACYCLINE.  
J O Reishman B O Olson D C Sbelton  
Avian Dis 4(4):413-418  
Nov 1960 41.8 AV5  
Calcium, Chlortetracycline, Chronic respiratory disease, Diet.
- 15384-68  
DETECTION OF BACTERIAL CONTAMINANTS IN LIVE VIRUS POULTRY VACCINES.  
J M Hejl J E Faber  
Avian Dis 3(1):41-50, TABS.  
Feb 1959 41.8 AV5  
Immunology, Poultry.
- 15385-68  
THE DIAGNOSIS OF EQUINE INFECTIOUS ANEMIA USING THE COMPLEMENT-FIXATION TEST, SIDEROCYTE COUNTS, HEPATIC BIOPSIES, AND SERUM PROTEIN ALTERATIONS.  
J R Benson T C McGuire K Kobayashi J R Gorham  
Amer Vet Med Ass J 151(12):1830-1839 REF  
15 Dec 1967 41.8 AM3  
Biopsy, Blood proteins, Diagnosis.  
Abstract
- 15386-68  
OXYURIASIS IN LABORATORY MOUSE COLONIES.  
W G Roag  
Amer J Vet Res 22(86):150-153, TABS.  
Jan 1961 41.8 AM3A  
Laboratory animals, Mice, Oxyuriasis.
- 15387-68  
STUDIES ON SHIPPING FEVER OF CATTLE. II. PREVALENCE OF PASTEURIELLA SPECIES IN NASAL SECRETIONS FROM NORMAL CALVES AND CALVES WITH SHIPPING FEVER.  
A R Hoerlein S P Saxena M E Mansfield  
Amer J Vet Res 22(88):470-472  
May 1961 41.8 AM3A  
Calves, Cattle, Pasteurella bacterins, Shipping fever.
- 15388-68  
THE IN VIVO AND IN VITRO ISOLATION OF AVIAN ENCEPHALOMYELITIS VIRUS (AEV).  
J Hwang R E Luginbuhl C F Helmboldt  
Avian Dis 4(4):545-546  
Nov 1960 41.8 AV5  
Culture media, Virology.
- 15389-68  
HATCHERY SPREAD OF PULLORUM DISEASE THROUGH DEBEAKING.  
R E Jacobs M N Frazier M E Tourtelotte  
Avian Dis 4(2):109-115  
May 1960 41.8 AV5  
Debeaking, Poultry hatcheries, Pullorum disease.
- 15390-68  
IN VITRO DEGRADATION OF OXALATE AND OF CELLULOSE BY RUMEN INGESTA FROM SHEEP FED HALOGETON GLOMERATUS.  
L F James J C Street J E Rutchber  
J Anim Sci 26(6):1438-1444 REF  
Nov 1967 49 J82  
Cellulose, Degradation, Oxalates, Poisoning, Sheep.  
Abstract:  
The in vitro data suggests that acute oxalate poisoning may involve impaired cellulose fermentation and rumen dysfunction.
- 15391-68  
A PASTURE TRIAL USING 2 IMMUNIZING DOSES OF A PARASITIC BRONCHITIS VACCINE.  
W F H Jarrett F W Jennings W I M McIntyre W Mulligan  
Amer J Vet Res 22(86):492-495  
May 1961 41.8 AM3A  
Bronchitis vaccines, Immunity, Parasitism, Pastures.
- 15392-68  
PLACENTAL PATHOLOGY OF SHEEP WITH VIRIOSIS.  
R Jensen V A Miller J A Molello  
22(87):169-185  
Mar 1961  
Placenta, Sheep, Vibriosis.
- 15393-68  
AFRICANS INFECTION IN CHICKENS. I. EFFECT OF VITAMIN A NUTRITIONAL FACTORS INFLUENCING EXPERIMENTAL CANDIDA DEFICIENCY.  
S M S Jeoffery S G Kenzy  
Avian Dis 4(2):138-151, BIRL. 15D-15T  
May 1960 41.8 AV5  
Animal nutrition, Avitaminosis, Chickens, Deficiency diseases, Moniliasis.
- 15394-68  
EGG TRANSMISSION OF INFECTIOUS SINUSITIS IN NATURALLY INFECTED TURKEYS.  
A C Jerstad C M Hamilton V E Smith  
Avian Dis 3(1):28-40, TABS.  
Feb 1959 41.8 AV5  
Sinusitis, Turkey eggs, Turkeys.
- 15395-68  
AN UNUSUAL ASPECT OF PASTEURIELLA PSEUDOTUBERCULOSIS IN TURKEYS.  
J G Kilian R Yamamoto W E Rabcock  
Avian Dis 6(4):403-405  
Nov 1962 41.8 AV5  
Fowl cholera, Pasteurellosis, Turkeys.
- 15396-68  
EXPERIMENTAL WATER INTOXICATION IN CALVES.  
C A Kirkbride R A Frey  
Amer Vet Med Ass J 151(6), 742-746. REF.  
15 Sep 1967 41.8 AM3  
Cattle, Metabolism, Poisoning, Water, Water intoxication.  
Abstract
- 15397-68  
PHARMACOLOGY AND TOXICOLOGY OF CARBON TETRACHLORIDE IN THE SHEEP. IV. REDUCTION AND AUGMENTATION OF TOXICITY TO SHEEP.  
A C Kondos G L McClymont  
Australian J Agr Res 18(4), 667-682 REF  
Jul 1967 23 A0783  
Carbon tetrachloride, Fasciola hepatica, Pharmacology, Selenium, Sheep, Tocopherols, Toxicology.  
Includes effect of selenium on liver fluke
- 15398-68  
STUDIES IN ANAPLASMOSIS. IV. DEVELOPMENT OF THE CAUSATIVE AGENT IN DEER ERYTHROCYTES TRANSFUSED INTO CALVES.  
J P Kreier M Ristic  
Amer J Vet Res 22(89):790-794  
Jul 1961 41.8 AM3A  
Anaplasmosis, Calves, Deer, Erythrocytes.
- 15399-68  
STUDIES ON THE ENTEROVIRUSES OF THE PIG-IV.  
THE ISOLATION IN TISSUE CULTURE OF A POSSIBLE ENTERIC CYTOPATHOGENIC SWINE ORPHAN (ECRO) VIRUS (V13) FROM THE PECES OF A PIG.  
P H Lamont A O Betts  
Res Vet Sci 1(2):152-159  
Apr 1960 41.8 B312  
Enteroviruses, Swine.
- 15400-68  
STUDIES ON THE TRICHOSTRONGYLUS AXEI (CORBOLD, 1879). VII. SOME QUANTITATIVE AND PATHOLOGIC ASPECTS OF NATURAL.  
S E Leland J H Druge Z N Wyant G W Elam  
Amer J Vet Res 22(86):128-138, BIRL. 138  
Jan 1961 41.8 AM3A
- 15401-68  
EFFECT OF INTERFERON ON EARLY ENZYME AND VIRAL DNA SYNTHESIS IN VACCINIA VIRUS INFECTION.  
S Levine W E Magee B D Hamilton O V Miller  
Virology 32(1):D33-40 REF  
May 1967 448.8 V81  
Deoxyribonucleic acid, Interferon, Thymidine, Vaccinia virus.  
Abstract
- 15402-68  
THE CHEMOTHERAPY OF EXPERIMENTAL BABESIASIS IN MICE AND SPLENECTOMIZED CALVES.  
J M S Lucas  
Res Vet Sci 1(3):218-225, TABS.



- Jul 1960 41.8 R312  
Drug therapy.
- 15403-68  
A NEW METHOD FOR THE PRIMARY EVALUATION OF ANTI-COCCIDIAL ACTIVITY.  
J E Lynch  
Amer J Vet Res 22(87):324-326  
Mar 1961 41.8 AM3A  
Immunization.
- 15404-68  
PIGWEEED (AMABANTHUS BETROPLEXUS). AN OXALATE-CONTAINING PLANT.  
V L Marshall W B Euck G L Bell  
Amer J Vet Res 28(124):888-889  
May 1967 41.8 AM3A  
Edema, Oxalates, Poisoning, Swine.
- 15405-68  
THE ISOLATION OF VIRUSES FROM THE CECAL TONSILS OF CHICKENS AND TURKEYS.  
P H Matischeck M Mitrovic B B Runsey V Hobert  
Avian Dis 3(2):182-187  
May 1959 41.8 AV5  
Chickens, Tonsils, Turkeys.
- 15406-68  
DETECTION OF PRECIPITINS AGAINST BRUCELLA OVIS.  
T B Matthews M S Trueblood  
Cornell Vet 57(3):410-417  
Jul 1967 41.8 C81  
Brucella ovis, Precipitin test.  
Abstract
- 15407-68  
EXPERIMENTALLY INDUCED BOVINE PROTOPTIC ACARIASIS IN A RABBIT.  
W P Meloney  
Amer J Vet Res 28(124):892-894  
May 1967 41.8 AM3A  
Acariasis, Mites, Rabbits, Scabies.
- 15408-68  
POLYARTHRITIS IN SHEEP. I. DESCRIPTION OF THE DISEASE AND EXPERIMENTAL TRANSMISSION.  
B Mendlowski D Segre  
Amer J Vet Res 21(80):68-73  
Jan 1960 41.8 AM3A  
Arthritis, Sheep.
- 15409-68  
POLYARTHRITIS IN SHEEP. II. CHARACTERIZATION OF THE CAUSATIVE VIRUS.  
B Mendlowski W B Kraybill D Segre  
Amer J Vet Res 21(80):74-80, BIBL. 79-80, TABS.  
Jan 1960 41.8 AM3A  
Arthritis, Sheep.
- 15410-68  
CASSIA OCCIDENTALIS TOXICOSIS IN CATTLE.  
H D Mercer F C Neal J A Bines G T Edds  
Amer Vet Med Ass J 151(6), 735-741 BEP  
15 Sep 1967 41.8 AM3  
Cassia occidentalis, Cattle, Poisoning, Poisonous plants.  
Abstract
- 15411-68  
SAFETY AND TISSUE RESIDUE EVALUATIONS IN SWINE FED RATIONS CONTAINING CHLORTETRACYCLINE, SULFAMETHAZINE, AND PENICILLIN.  
B E Messersmith B Sass H Berger G O Gale  
Amer Vet Med Ass J 151(6), 719-724.  
15 Sep 1967 41.8 AM3  
Chlortetracycline, Penicillin, Residues, Sulfamethazine, Swine, Tissues.  
Abstract
- 15412-68  
VIRUS HEPATITIS IN TURKEYS.  
J D Mongeau E B Truscott A E Ferguson M C Connell  
Avian Dis 3(4):388-396, TABS.  
Nov 1959 41.8 AV5  
Turkeys, Virus hepatitis.
- 15413-68  
THE DEVELOPMENT OF A CHICKEN EMBRYO LETBAL STRAIN OF AVIAN ENCEPHALOMYELITIS VIRUS.  
B W Moore A I Flowers  
Avian Dis 3(3):239-244
- Aug 1959 41.8 AV5  
Avian encephalomyelitis, Mortality, Virology, Virus diseases (animals).
- 15414-68  
CONTRIBUTION TO THE STUDY OF OVINE LISTERIOSIS AND IMMUNOPROPHYLAXIS AGAINST THE DISEASE IN FRANCE. (FR )  
P Morallon N Yalcin  
Rec Med Vet 143(8):767-775, MAP  
Aug 1967 41.8 R24  
France, Immunization, Listeriosis, Sheep, Vaccines.  
Abstract
- 15415-68  
STUDIES OF BOVINE ENTEROVIRUSES.  
C Moscovici M LaPlaca J Maisel C H Kempe  
Amer J Vet Res 22(90):852-863, BIBL. 862-863, TABS.  
Sep 1961 41.8 AM3A  
Bovine enteroviruses.
- 15416-68  
SYNTHESIS AND CYTOPATHOGENESIS OF AFRICAN SWINE FEVER VIRUS IN PORCINE CELL CULTURES.  
J Moulton L Coggins  
Amer J Vet Res 29(2):219-232 REP  
Feb 1968 41.8 AM3A  
African swine fever virus, Culture media, Swine.  
Abstract
- 15417-68  
A MODIFIED MICROGEL DIFFUSION METHOD AND ITS APPLICATION IN THE STUDY OF THE VIRUS OF DUCK HEPATITIS.  
D K Murty L E Hanson  
Amer J Vet Res 22(87):274-278  
Mar 1961 41.8 AM3A  
Ducks, Virus hepatitis.
- 15418-68  
PERSISTENT DIARRHOEA AND VITAMIN B IN THE HORSE.  
V J Nolan  
Vet Rec 74(15):466  
14 Apr 1962 41.8 V641  
Diarrhea, Horses, Vitamin B complex.
- 15419-68  
RELATIONSHIPS BETWEEN EASTERN AND WESTERN EQUINE ENCEPHALOMYELITIS VIRUSES AS DEMONSTRATED BY THE HEMAGGLUTINATION-INHIBITION ANTIBODY RESPONSE OF EXPERIMENTALLY INFECTED CHICKENS.  
M Ogata R J Byrne  
Amer J Vet Res 22(87):266-270  
Mar 1961 41.8 AM3A  
Antibodies, Chickens, Eastern equine encephalomyelitis virus, Western equine encephalomyelitis virus.
- 15420-68  
SOME FACTORS AFFECTING ROUS SARCOMA VIRUS ACTIVITY IN THE EMBRYONATED EGG INOCULATED BY THE YOLK - SAC ROUTE.  
W Okazaki S G Kenzy  
Avian Dis 5(1):66-87, BIBL. 85-88, TABS.  
Feb 1961 41.8 AV5  
Eggs, Rous sarcoma virus, Yolk sac.
- 15421-68  
THE EFFECTS OF ANTIBIOTICS ON EXPERIMENTAL CHRONIC RESPIRATORY DISEASE IN CHICKENS.  
O M Olesniuk H Van Roekel  
Avian Dis 3(4):457-470, TABS.  
Nov 1959 41.8 AV5  
Antibiotics, Chickens, Chronic respiratory disease.
- 15422-68  
TRANSMISSION OF CHRONIC RESPIRATORY DISEASE IN CHICKENS.  
O M Olesniuk H Van Roekel  
Avian Dis 4(4):348-368, TABS.  
Nov 1960 41.8 AV5  
Chickens, Chronic respiratory disease, Epizootic diseases.
- 15423-68  
NEOPLASMS OF THE CANINE AND FELINE URINARY BLADDER: CLINICAL FINDINGS, DIAGNOSIS, AND TREATMENT.  
C A Osborne D G Low V Perman  
Amer Vet Med Ass J 152(3):247-259 REP  
01 Feb 1968 41.8 AM3  
Cats, Dogs, Neoplasms.  
Abstract

30 15424-68

- 15424-68  
EXPERIMENTAL TRANSMISSION OF AFRICAN HORSE-SICKNESS BY MEANS OF MOSQUITOES.  
Y Ozawa G Nakata  
Amer Vet Med Ass J 147(6):625  
15 Sep 1965 41.8 AM3  
African horse sickness, Anopheles, Culex, Culicidae, Insect vectors.
- 15425-68  
FACTORS AFFECTING THE PRODUCTION AND DETECTION OF ORNITHOSIS ANTIBODIES IN INFECTED TURKEYS.  
L A Page R A Rankowski  
Amer J Vet Res 21(85):971-978, BIRL. 977-978, TARS.  
Nov 1960 41.8 AM3A  
Antibodies, Immunocchemistry, Ornithosis, Turkeys.
- 15426-68  
VIRUS DISEASES IN CALVES.  
A R Paterson  
Vet Rec 74(49):1384-1389, 71 REFS.  
08 Dec 1962 41.8 V641  
Calves, Viral vaccines, Virus diseases (animals).
- 15427-68  
SPONTANEOUS ARTERIAL CARDIAC ARRHYTHMIAS AND CONDUCTION DISTURBANCES IN THE DOG. A CLINICAL AND PATHOLOGIC STUDY OF 3,000 DCGS.  
D F Patterson D K Detweiler K Rubben R P Rotts  
Amer J Vet Res 22(88):355-369, BIRL. 368-369, TARS.  
May 1961 41.8 AM3A  
Animal abnormalities, Dogs.
- 15428-68  
PRODUCTION OF FOOT-AND-MOUTH DISEASE VIRUS WITH HIGH COMPLEMENT-FIXING ANTIGENICITY.  
R E Patty M L Norcross  
Amer J Vet Res 22(89):775-778  
Jul 1961 41.8 AM3A  
Antigens, Complement fixation, Foot-and-mouth disease virus.
- 15429-68  
FURTHER STUDIES ON THE CAUSATIVE ORGANISM OF ULCERATIVE ENTERITIS.  
M C Peckham  
Avian Dis 4(4):449-456, PLS.  
Nov 1960 41.8 AV5  
Bacteriology, Ulcerative enteritis.
- 15430-68  
AN EPIZOOTIC OF HISTIOCYTIC SARCOMAS IN CHICKENS INDUCED BY A CELL-FREE AGENT.  
M Perak  
Avian Dis 4(1):85-94, PLS.  
Feb 1960 41.8 AV5  
Chickens, Epizootic diseases, Oncogenic viruses, Sarcoma.
- 15431-68  
CHEMICAL AND ELECTROPHORETIC STUDIES OF THE SERUMS OF CATTLE INFECTED NATURALLY WITH ASIA-1 TYPE FOOT-AND-MOUTH DISEASE VIRUS.  
K Perk K Lobl  
Amer J Vet Res 22(87):217-223, TARS.  
Mar 1961 41.8 AM3A  
Cattle, Electrophoresis, Foot-and-mouth disease virus.
- 15432-68  
NOCARDIA ASTEROIDES AS A MAMMARY PATROGEN OF CATTLE. II. THE SOURCES OF NOCARDIAL INFECTION AND EXPERIMENTAL REPRODUCTION OF THE DISEASE.  
A C Pier E H Willers M J Mejia  
Amer J Vet Res 22(89):698-703, TARS.  
Jul 1961 41.8 AM3A  
Cattle, Microorganisms.
- 15433-68  
NOCARDIA ASTEROIDES AS A MAMMARY PATROGEN OF CATTLE. I. THE DISEASE IN CATTLE AND THE COMPARATIVE VIRULENCE OF 5 ISOLATES.  
A C Pier M J Mejia E H Willers  
Amer J Vet Res 22(88):502-517, BIRL. 516-517, TARS.  
May 1961 41.8 AM3A  
Animal diseases, Cattle.
- 15434-68  
ANTIBODY RESPONSE TO A COMBINED LIVING ATTENUATED DISTEMPER - HEPATITIS VACCINE.  
S E Piercy R F Sellers  
Res Vet Sci 1(1):84-94, TARS.  
Jan 1960 41.8 R312
- Antibodies, Vaccines.
- 15435-68  
EXPERIMENTAL INACTIVATED-VIRUS HOG CHOLERA VACCINES' INDUCTION PERIOD OF IMMUNITY.  
E I Filcbard  
Amer J Vet Res 28(125), 915-923 REF  
Jul 1967 41.8 AM3A  
Bordetella pertussis, Hog cholera virus, Hydracrylic acid beta-lactone, Immunization, Swine, Vaccines. Abstract
- 15436-68  
EPIZOOTIC HEMORRHAGIC DISEASE IN WHITE-TAILED DEER- CHARACTERISTIC OF THE SOUTH DAKOTA STRAIN OF VIRUS.  
E C Pirtle J M Layton  
Amer J Vet Res 22(86):104-108,  
Jan 1961 41.8 AM3A  
Deer, Epizootic diseases, Livestock diseases, Red water disease.
- 15437-68  
CYTOGENETIC ALTERATIONS IN SWINE KIDNEY CELLS PERSISTENTLY INFECTED WITH HOG CHOLERA VIRUS AND PROPAGATED WITH AND WITHOUT ANTISERUM IN THE MEDIUM.  
E C Pirtle L K Woods  
Amer J Vet Res 29(1):153-164 REF  
Jan 1968 41.8 AM3A  
Antiserum, Cytogenetics, Hog cholera virus, Swine. Abstract
- 15438-68  
ISOLATION OF LISTERIA MONOCYTOGENES FROM BRAINS OF RABIES-NEGATIVE ANIMALS.  
R Pittman W R Cherry  
Amer J Vet Res 28(124):0779, MAP REF  
May 1967 41.8 AM3A  
Brain, Georgia, Listeriosis, Rabies, Wildlife.
- 15439-68  
THE GLYCEROLIPIDS OF MYCOPLASMA MYCOIDES.  
P Plackett  
Biochemistry 6(9):2746-2754 REF  
Sep 1967 381 R523  
C14, Glycolipides, Mycoplasma mycoides, Phospholipids, Virus diseases (animals). Abstract
- 15440-68  
CLINICAL EXPERIENCES WITH LINCOMYCIN--A NEW ANTIBIOTIC.  
J M Prewitt  
Vet Med/small Anim Clin 62(7):630-632  
Jul 1967 41.8 M69  
Dogs.  
In the treatment of dogs with a variety of diseases.
- 15441-68  
STUDIES ON PASTEURELLA ANATIPESTIFER INFECTION IN WHITE PEKIN DUCKS.  
J Price  
Avian Dis 3(4):486-487  
Nov 1959 41.8 AV5  
Ducks, Fowl cholera, Pekin ducks.
- 15442-68  
THE INFLUENCE OF TEREPHTHALIC ACID ON OXYTETRACYCLINE SERUM LEVELS IN CHICKENS, STUDIES ON MODE OF ACTION, I.  
K E Price Z Zolli Jr  
Avian Dis 3(2):157-169, TARS.  
May 1959 41.8 AV5  
Chickens, Oxytetracycline, Serum.
- 15443-68  
CYTOLOGIC CHANGES INDUCED BY INFECTIOUS CANINE HEPATITIS VIRUS IN TISSUE CULTURE.  
J E Prier  
Amer J Vet Res 22(88):614-617  
May 1961 41.8 AM3A  
Cytology, Infectious canine hepatitis virus, Tissue culture.
- 15444-68  
IMPROVED STAINING METHOD FOR LEUCOCYTE COUNT OF POULTRY.  
(GE)  
Z Procbazka  
Arch Exp Veterinarmed 21(2):603-607 REF  
May 1967 41.8 EX7  
Poultry, Staining. Abstract

- 15445-68  
VERTERBRAL RIPOSY IN CATTLE.  
G T Purvance L G Transtien  
Amer Vet Med Ass J 151(6), 716-718.  
15 Sep 1967 41.8 AM3  
Biopsy, Cattle, Fluorine, Poisoning, Vertebrae.  
Abstract
- 15446-68  
EFFECTS OF FLUORIDE ON MAGNESIUM DEFICIENCY IN THE GUINEA  
PIG.  
R E Pyke W G Hoekstra P R Phillips  
J Nutr 92 (3), 311-316 REF  
Jul 1967 389.6 J82  
Calcinosis, Fluorides, Guinea pigs, Magnesium.  
Abstract included.
- 15447-68  
CLINICAL MANAGEMENT OF NEONATAL DIARRHEA IN CALVES, WITH  
SPECIAL REFERENCE TO PATHOGENESIS AND DIAGNOSIS.  
O M Radostits  
Amer Vet Med Ass J 147(12):1367-1376, 44 REFS.  
15 Dec 1965 41.8 AM3  
Calves, Diarrhea, Escherichia.
- 15448-68  
A VARIANT TYPE OF INFECTIOUS BRONCHITIS VIRUS IN A  
COMMERCIAL VACCINE.  
L G Raggi  
Avian Dis 4(3):312-319  
May 1960 41.8 AV5  
Immunology, Infectious bronchitis virus.
- 15449-68  
RESPONSE OF BIRDS TO ONE INTRANASAL VACCINATION WITH R-1  
STRAIN OF NEWCASTLE DISEASE VIRUS.  
L G Raggi G G Lee  
Avian Dis 4(2):167-195, RIRL. 194-195  
May 1960 41.8 AV5  
Birds, Immunization, Immunology, Newcastle disease vaccines,  
Viruses.
- 15450-68  
CONJUNCTIVITIS IN CHICKENS CAUSED BY A TYPICAL INFECTIOUS  
LARYNGOTRACHEITIS VIRUS.  
L G Raggi W H Armstrong  
Avian Dis 4(3):272-274  
May 1960 41.8 AV5  
Chickens, Conjunctivitis, Infectious laryngotracheitis virus.
- 15451-68  
COEXISTENCE OF INFECTIOUS BRONCHITIS AND INFECTIOUS  
LARYNGOTRACHEITIS.  
L G Raggi J Asmar G G Lee  
Avian Dis 11(3):419-426 REF  
Aug 1967 41.8 AV5  
Immunization, Infectious bronchitis,  
Infectious laryngotracheitis, Mycoplasmosis, Poultry,  
Synergism.  
Abstract
- 15452-68  
PATHOGENESIS AND PREVENTION OF INFECTIOUS DIARRHEA (SCOURS)  
OF NEONATAL CALVES.  
B C Reisinger  
Amer Vet Med Ass J 147(12):1377-1386, 66 REFS.  
15 Dec 1967 41.6 AM3  
Calves, Diarrhea, Escherichia, Scours.
- 15453-68  
STUDIES IN ANAPLASMOSIS. III. AN AUTOANTIBODY AND SYMPTO-  
MATIC MACROCYTIC ANEMIA.  
M Ristic  
Amer J Vet Res 22(9U):871-876  
Sep 1961 41.8 AM3A  
Anaplasmosis, Anemia.
- 15454-68  
AN IN VITRO STUDY OF EXTRACTED ANTIGENS OF VIRBIO FETUS  
ISOLATES.  
G W Robertstad S M Morrison  
Amer J Vet Res 22(87):327-329  
Mar 1961 41.8 AM3A  
Antigens, Vibrio fetus bacterins.
- 15455-68  
EXPERIMENTAL HYPOPIUITARISM IN SWINE: A STEREOTAXIC METHOD  
OF INDUCING THE CONDITION WITH BETA IRRADIATION.  
Of Roesel G M Meher  
Amer J Vet Res 28(125)01181-1190 REF  
Jul 1967 41.8 AM3A  
Beta rays, Radiation, Stereotropism, Swine.  
Abstract
- 15456-68  
TOXOCARA LESIONS STIMULATE THOSE OF ASCARIS SUUM.  
Otto Roneus  
Amer Vet Med Ass J 147(11):1214  
01 Dec 1965 41.8 AM3  
Ascaris, Liver diseases, Swine, Toxocara.
- 15457-68  
THE ETIOLOGY OF LEGUME BLOAT-NONVOLATILE ACIDS.  
W G Rosen H Passel R E Nichols  
Amer J Vet Res 22(86):117-122, RIRL. 121  
Jan 1961 41.8 AM3A  
Acids, Bloat, Etiology, Legumes, Poisonous plants.
- 15458-68  
RUOYANT DENSITY OF AFRICAN HORSESICKNESS VIRUS.  
R Russeil  
Nature 215(5104), 983-984  
26 Aug 1967 472 M21  
African horse sickness virus, Density,  
Virus diseases (animals).
- 15459-68  
AVIAN ENCEPHALOMYELITIS IMMUNIZATION WITH INACTIVATED VIRUS.  
K Schaaf  
Avian Dis 3(3):245-256  
Aug 1959 41.8 AV5  
Avian encephalomyelitis, Immunization.
- 15460-68  
BIOLOGY OF VECTOR-ASSOCIATED DISEASES IN VIETNAM.  
R G Scott  
Amer Vet Med Ass J 151(12):1741-1750, MAP  
15 Dec 1967 41.8 AM3  
Armed forces, Arthropoda, Diseases, Humans, Insect vectors.
- 15461-68  
ELECTRON MICROSCOPY OF ANAPLASMA MARGINALE IN THE ROVINE  
ERYTHROCYTE.  
W L Scott J C Geer L E Foote  
Amer J Vet Res 22(9U):877-881  
Sep 1961 41.8 AM3A  
Cattle, Electron microscopy.
- 15462-68  
AVIAN INFECTIOUS HEPATITIS III. TREATMENT OF CHICKENS IN  
EGG PRODUCTION.  
M Sevoian R W Calnek  
Avian Dis 3(3):302-311  
Aug 1959 41.8 AV5  
Animal breeding, Chickens, Therapeutics.
- 15463-68  
A QUICK METHOD FOR THE DIAGNOSIS OF AVIAN POX AND INFECTIOUS  
LARYNGOTRACHEITIS.  
M Sevoian  
Avian Dis 4(4):474-477, PLS.  
Nov 1960 41.8 AV5  
Animal histology, Avian poxviruses, Diagnosis,  
Infectious laryngotracheitis, Virology.
- 15464-68  
A COCCIDIA-LIKE ORGANISM ASSOCIATED WITH SUBCUTANEOUS  
GRANULOMATA IN A DOG.  
G C Shelton L D Kintner D O MacKintosh  
Amer Vet Med Ass J 152(3):263-267  
01 Feb 1968 41.8 AM3  
Dogs, Granuloma.  
Abstract
- 15465-68  
IMMUNE RESPONSE TO SHEEP ERYTHROCYTES WITH CYTOXAN AND  
HYDROXYIA.  
R V Siegel  
Life Sci 6(10,PT.2)01009-1012  
15 May 1967 442.8 L62  
Cyclophosphamide, Erythrocytes, Immunization, Sheep.
- 15466-68  
AUREOMYCIN CHLORTETRACYCLINE AS A PREVENTIVE FOR  
EXPERIMENTAL SYNOVITIS IN CHICKENS.  
L M Skamsner K C Seeger  
Avian Dis 4(1):42-48, RIRL. 47-48  
Feb 1960 41.8 AV5  
Chickens, Chlortetracycline, Preventive medicine, Synovitis.



## BIBLIOGRAPHY

30 15467-68

- 15467-68  
THE EFFECT OF THE USE OF ANTIBACTERIAL DRUGS, PARTICULARLY AS FOOD ADDITIVES, ON THE EMERGENCE OF DRUG-RESISTANT STRAINS OF BACTERIA IN ANIMALS.  
H W Smith  
New Zeal Vet J 15(9):153-166, RFF.  
41.B N4B3  
Antibiotics, Bacteria, Mycoplasma gallisepticum, Oxytetracycline, Penicillin, Salmonella typhimurium, Staphylococcus aureus, Tetracycline.
- 15468-66  
THE DEVELOPMENT OF PETECHIAL HAEMORRHAGES ON THE UNDER-SURFACE OF THE TONGUE OF THE HORSE AND ITS RELATION TO INFECTION WITH THE VIRUS OF EQUINE INFECTIOUS ANAEMIA). DAS AUFTRETEN VON PUNKTBLOTUNGEN AUF DER ZUNGENUNTERFLACHE DES PFERDES UND SEINE BEZIEHUNG ZUR INFEKTION MIT DEM VIRUS DER INFEKTIOSEN ANAMIE. (GE )  
W Steck  
Zentralb Veterinarmed Reihe A 14(4):34B-365 REF  
Jun 1967 41.B 25  
Hemorrhage, Horses.
- 15469-68  
IMMUNISATION OF SHEEP WITH MULTI-COMPONENT CLOSTRIDIAL VACCINES.  
M Sterne I Ratty A Thompson J M Robertson  
Vet Rec 74(34):909-913, 10 REFS., 5 TABS.  
25 Aug 1962 41.8 V641  
Clostridium chauvei bacterins, Immunization, Sheep, Vaccines.
- 15470-68  
EXPERIENCE WITH FOWL POX VACCINATION.  
D E Stover  
Avian Dis 4(3):309  
May 1960 41.8 AV5  
Fowlpox, Immunization.
- 15471-68  
STUDY OF CHICKEN SARCOMA (STRAIN 13) BY VENT EXPOSURE.  
E L Stubbs F G Sperling A M Wallbank  
Amer J Vet Res 22(89):813-814  
Jul 1961 41.8 AM3A  
Neoplasms, Sarcoma.
- 15472-68  
STUDY OF CHICKEN SARCOMA (STRAIN 13) PLACED IN THE BURSA OF FABRICIUS.  
E L Stubbs F G Sperling  
Amer J Vet Res 22(86):154-155  
Jan 1961 41.8 AM3A  
Chickens, Sarcoma.
- 15473-68  
DEMONSTRABLE ANTIGENS AND A TOXIC FACTOR IN OEDEMA DISEASE OF SWINE.  
E J Sweeney W J Sojka M K Lloyd  
Res Vet Sci 1(3):260-268, TABS.  
Jul 1960 41.8 R312  
Antigens, Baby pigs, Edema.
- 15474-68  
SITE OF LOCALIZATION AND EFFECTS OF SWINE NASAL VIRUS IN EXPERIMENTAL PIGS.  
W P Switzer E D Roberts C L'Ecuyer  
Amer J Vet Res 22(86):67-71  
Jan 1961 41.8 AM3A  
Swine, Virus diseases (animals).
- 15475-68  
ELECTRON MICROSCOPY OF INFECTIOUS CANINE HEPATITIS VIRUS GROWN IN CULTURES OF CANINE KIDNEY CELLS.  
M Tajima T Motobashi T Samejima  
Amer J Vet Res 22(87):236-249, IRL. 24B-249  
Mar 1961 41.8 AM3A  
Electron microscopy, Infectious canine hepatitis, Tissue culture.
- 15476-68  
ELECTRON MICROSCOPY OF EQUINE ABORTION VIRUS.  
M Tajima T Shimizu R Ishizaki  
Amer J Vet Res 22(87):250-265, IRL. 264-265  
Mar 1961 41.8 AM3A  
Electron microscopy, Equine rhinopneumonitis.
- 15477-68  
CLINICAL AND HEMATOLOGIC STUDIES OF LYMPHOSARCOMA IN A HEBD OF CATTLE.  
G H Theilen O W Schalm V Gilmore  
Amer J Vet Res 22(86):23-30, IRL. 30, TABS.
- Jan 1961 41.8 AM3A  
Cattle, Lymphosarcoma, Neoplastic diseases.
- 15478-68  
INGESTION OF AMMI VISHNAGA SEEDS AND PHOTSENSITIZATION - THE CAUSE OF VESICULAR DERMATITIS IN FOWLS.  
H Trenchi  
Avian Dis 4(3):275-280, IRL. 279-280  
May 1960 41.8 AV5  
Dermatitis, Feed, Photosensitization, Poultry, Seeds.
- 15479-68  
EFFECTS OF VITAMIN-A DEFICIENCY AND HIGH-LEVEL CHLORTETRACYCLINE ON EXPERIMENTAL CANDIDIASIS OF TURKEYS.  
S B Tripathy S G Kenzy W J Mathey  
Avian Dis 11(3):327-335 REF  
Aug 1967 41.8 AV5  
Chlortetracycline, Deficiency diseases, Moniliasis, Poultry, Vitamin a.  
Abstract
- 15480-68  
A BACTERIAL AGENT CAUSING BLUECOMB DISEASE IN TURKEYS. 1. ISOLATION AND PRELIMINARY LABORATORY INVESTIGATIONS.  
R E Truscott M C Connell A E Ferguson C G Wills  
Avian Dis 4(4):391-401  
Nov 1960 41.8 AV5  
Bacteriology, Blue comb.
- 15481-68  
VIRUSES, SERUMS, TOXINS, AND ANALOGOUS PRODUCTS. NOTICE OF EXTENSION OF TIME TO SUBMIT WRITTEN DATA, VIEWS, OR ARGUMENTS.  
Fed Regist 32(114):B529  
14 Jun 1967 L1.451  
Drugs, Toxins, Viruses.  
In relation to veterinary medicine.
- 15482-68  
NOTICE OF FILING OF PETITION FOR FOOD ADDITIVES.  
Fed Regist 32(124):917B  
2B Jun 1968 L1.451  
Bacitracin methylenedisalicylic acid, Cattle, Diethylstilbestrol, Feed additives.
- 15483-68  
NOTICE OF FILING OF PETITION FOR FOOD ADDITIVE RIURET.  
Fed Regist 32(115):B626  
15 Jun 1967 L1.451  
Riuret, Feed additives, Ruminants.
- 15484-68  
FOOD ADDITIVES PERMITTED IN THE FEED AND DRINKING WATER OF ANIMALS OF FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. FOOD ADDITIVES PERMITTED IN FOOD FOR BUMAN CONSUMPTION. ERYTHROMYCIN.  
Fed Regist 32(118):B753  
20 Jun 1967 L1.451  
Cattle, Erythromycin, Feed additives, Food contamination, Mastitis.
- 15485-68  
FACTORS PRODUCING EMBRYONIC AND FETAL ABNORMALITIES, DEATH, AND ABORTION IN SWINE. EXCERPTS FROM THE SYMPOSIUM ON FACTORS PRODUCING EMBRYONIC AND FETAL ABNORMALITIES, DEATH, AND ABORTION IN SWINE, SPONSORED BY THE NATIONAL ACADEMY OF SCIENCE, U.S. LIVESTOCK SANITARY ASSOCIATION, AND AGRICULTURAL RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE. OCTOBER 2-3, 1967, CHICAGO, ILLINOIS.  
Amer Vet Med Ass J 152(1):37-40  
01 Jan 1968 41.8 AM3  
Abnormalities, Abortion, Death, Fetal death, Swine, Symposia.
- 15486-68  
CASE REPORT- BOTULISM TYPE C OUTBREAK ON A PHEASANT GAME FARM.  
S Vadlamudi V H Lee R P Hanson  
Avian Dis 3(3):344-350  
Aug 1959 41.8 AV5  
Botulism, Farms, Pheasants.
- 15487-68  
LYMPHOSARCOMA IN THE RABBIT. A CASE REPORT AND GENERAL REVIEW.  
K R Van Kaepen  
Cornell Vet 5B(1):121-128 REF  
Jan 1968 41.8 CB1  
Enteritis, Lymphosarcoma, Rabbit septicemia, Rabbits.  
Abstract

- 15488-68  
STUDIES ON INFECTION AND IMMUNITY WITH THE LUNGWORM, *DICTYOCAULUS VIVIPARUS* (BLOCH). I. ACTIVE IMMUNIZATION OF GUINEA PIGS AND RABBITS.  
A E Wade L E Swanson L E Fox  
Amer J Vet Res 22(86):123-127, TABS  
Jan 1961 41.8 AM3A  
*Dictyocaulus viviparus*, Guinea pigs, Immunization, Rabbits.
- 15489-68  
ROVINE PAPULAR STOMATITIS, PSEUDO-COW-POX AND MILKER'S NODULES.  
J Wagington I M Lauder J S Smith  
Vet Rec 81(13):306-313, REF.  
23 Sep 1967 41.8 V641  
Humans, Milkers' nodules, Pseudocowpox.  
Abstract
- 15490-68  
STUDIES ON THE TRANSMISSION AND PATHOLOGY OF A VIRAL-INDUCED AVIAN NEPHRIBLASTOMA (EMBRYONAL EPHRONA).  
W G Walter R R Rurmeister C H Cuddingha  
Avian Dis 6(4):455-477, RIRL. 475-477, PL., TABS.  
Nov 1962 41.8 AV5  
Avian leukosis complex, Nephroblastoma.
- 15491-68  
THE THERAPEUTIC VALUE OF TERRAMYCIN-TPA ON CRD.  
C R Weston R G Strout J R Reckman  
Avian Dis 3(4):486  
Nov 1959 41.8 AV5  
Chronic respiratory disease, Drug therapy, Oxytetracycline.
- 15492-68  
AN INDIRECT GEL DIFFUSION PRECIPITATION TEST FOR THE DETECTION OF BINDERPEST ANTIBODY IN CONVALESCENT CATTLE.  
G White G E Scott  
Res Vet Sci 1(3):226-229  
Jul 1960 41.8 R312  
Antibodies, Cattle, Binderpest virus.
- 15493-68  
THE CULTIVATION AND MODIFICATION OF THE AVIAN INFECTIOUS SYNOVITIS AGENT IN TISSUE CULTURE.  
R W Wichman R A Rankowski A J Da Massa  
Avian Dis 4(2):152-164, TABS.  
May 1960 41.8 AV5  
Infectious synovitis, Tissue culture.
- 15494-68  
EXPERIMENTAL PHOTSENSITIZATION BY SPRING PARSLEY (*CYMOPTERUS WATSONII*) IN CHICKS.  
M C Williams W Rinns  
Amer J Vet Res 29(1):111-115 REF  
Jan 1968 41.8 AM3A  
*Cymopterus watsonii*, Photosensitization, Poultry, Toxicity, Weeds.  
Abstract
- 15495-68  
REVACCINATION OF CRICKENS AGAINST NEWCASTLE DISEASE BY VENT, WING-WEB, AND INTRAMUSCULAR ROUTES.  
R W Winterfield S R Hitchner  
Avian Dis 5(1):18-24, TABS.  
Feb 1961 41.8 AV5  
Birds, Chickens, Intramuscular vaccination, Newcastle disease, Poultry, Vent vaccination, Viral vaccines, Virus diseases (animals), Wing-web vaccination.
- 15496-68  
HATCHERY SANITATION AS A CONTROL MEASURE FOR ASPERGILLOSIS IN FOWL.  
M L Wright G W Anderson N A Epps  
Avian Dis 4(4):369-379, TABS., PLS.  
Nov 1960 41.8 AV5  
Aspergillosis, Poultry hatcheries, Sanitation.
- 15497-68  
HATCHERY SANITATION.  
M L Wright G W Anderson N A Epps  
Avian Dis 3(4):486  
Nov 1959 41.8 AV5  
Poultry hatcheries, Sanitation.
- 15498-68  
FOOT-AND-MOUTH DISEASE VIRUS. II. PROPAGATION AND MODIFICATION OF 3 IMMUNOLOGIC TYPES OF VIRUS IN EMBRYONATING CHICKEN EGGS.  
G E D Zahran  
Amer J Vet Res 22(88):527-532, TABS.  
May 1961 41.8 AM3A  
Chick embryos, Foot-and-mouth disease virus.
- 15499-68  
FOOT-AND-MOUTH DISEASE VIRUS. I. PROPAGATION OF 3 IMMUNOLOGIC TYPES OF VIRUS IN CHICKS.  
G E D Zahran  
Amer J Vet Res 22(88):518-526, RIRL. 525-526, TABS.  
May 1961 41.8 AM3A  
Chicks, Foot-and-mouth disease virus.
- 15500-68  
ASPERGILLOSIS EXPERIMENTALLY PRODUCED IN HATCHING CHICKS.  
D C D Meara H L Chute  
Avian Dis 3(4):404-406  
Nov 1959 41.8 AV5  
Aspergillosis, Chickens.
- ## Arthropods
- 15501-68  
SEXUAL STERILIZATION OF SCREW-WORM FLIES BY N,N'-TETRAETHYLENERIS(1-AZIRIDINECARBOXYAMIDE): INFLUENCE OF ROUTE OF ADMINISTRATION.  
M M Crystal  
J Econ Entomol 61(1):134-139 REF  
Feb 1968 421 J822  
Chemosterilants, *Cochliomyia bovinivorax*, Sterilization.  
Abstract
- 15502-68  
FIELD TESTS WITH INSECTICIDES FOR CONTROL OF LONE STAR TICKS ON CATTLE.  
R O Drummond R Moore M J Wrich  
J Econ Entomol 53(5):953-955, 1 REF.  
Oct 1960 421 J822  
Amblyomma, Carbaryl, Cattle, Coumaphos, Dioxathion, Lindane, Malathion, Ronnel, Toxaphene, Trichlorfon.
- 15503-68  
FEED ADDITIVES FOR CONTROL OF HOUSE FLY LARVAE IN LIVESTOCK FECES.  
T L Harvey J R Brethour  
J Econ Entomol 53(5):774-776, TABS.  
Oct 1960 421 J822  
Bacillus thuringiensis, Disodium octoborate tetrahydrate, Feces, Feed additives, Livestock, *Musca domestica*, Polybor 3.
- 15504-68  
DUST CONTAINING BACILLUS THURINGIENSIS FOR CONTROL OF CHICKEN ROYD, SHAPT, AND WING LICE.  
R A Hoffman R E Gingrich  
J Econ Entomol 61(1):85-88  
Feb 1968 421 J822  
Bacillus thuringiensis, Chickens, Dusting, Equipment, *Lipeurus caponis*, *Menopon gallinae*, Thuricide.
- 15505-68  
COMPARATIVE EFFICIENCY OF COUMAPHOS APPLICATIONS ON VARIOUS BODY AREAS BY BRUSH-ON OR POUR-ON FOR THE CONTROL OF CATTLE GRUBS.  
A R Roth W M Rogoff  
J Econ Entomol 60(6):1754-1755  
Dec 1967 421 J822  
Cattle, Coumaphos, *Hypoderma bovis*, *Hypoderma lineatum*, Insecticide application.
- 15506-68  
ACARICIDA TESTS ON THE RIARRA STRAIN OF ORGANOPHOSPHORUS RESISTANT CATTLE TICK ROOPHILUS MICROPLUS FROM SOUTHERN QUEENSLAND.  
W J Ronlston R H Wharton  
Australian Vet J 43(4):129-134  
Apr 1967 41.8 AU72  
Acaricides, *Roophilus annulatus microplus*, Cattle, Insecticide resistant insects, Ixodides.  
Abstract
- 15507-68  
CONTROL OF THE SNAKE MITE (*OPHIONYSSUS NATRICIS*), OTHER MITES, AND CERTAIN INSECTS WITH THE SORPTIVE DUST, SG 67.  
I R Tarshis

## BIBLIOGRAPHY

30 15508-68

- J Econ Entomol 53(5):903-908, 14 REFS.  
Oct 1960 421 JB22  
Ammonium fluosilicate, SG 67, Lizards, Ophiomyssus, Snakes.
- 15508-68  
METHOD FOR TREATING ANIMALS INFESTED WITH PESTS OF THE  
PHYLUM ARTHROPODA. PATENT 3,367,831.  
S J M Walker  
US Patent Office Offic Gaz 847(1):230  
06 Feb 1968 156.65 OP2  
Arthropoda, Chemical control (insects), Livestock, Patents,  
Pesticides, Sodium bicarbonate, Sodium hexadecyl sulfate.
- 15509-68  
CELLULAR RESPONSE TO ENDOGENOUS STAGES OF COCCIDIA IN  
CATTLE, WITH OBSERVATIONS OF THE INFLUENCE OF CHEMICALS  
UPON THE HOST-PARASITE RELATIONSHIP.  
A Arakawa  
Diss Abstr Sect B 28(3):1260R  
Sep 1967 Z5055.U49D53  
Calves, Cells, Coccidiosis, Parasitism, Sulfamethazine.
- 15510-68  
SELECTIVE STAINING OF RICKETTSIA BURNINGII IN TISSUE SEC-  
TIONS.  
M L Burdin  
Vet Rec 74(48):1371-1372, 5 REFS.  
01 Dec 1962 41.8 V641  
Rickettsia.
- 15511-68  
THE SPECTROPHOTOFUOROMETRIC DETERMINATION  
OF BUQUINOLATE IN POULTRY TISSUE AND EGGS.  
P L Cox R E Bollifield J P Heotis  
Poultry Sci 46\_3, 680-686  
May 1967 47.8 AM33P  
Buquinolate, Coccidiostats, Pesticide residues, Poultry,  
Spectrophotofluorometry.
- 15512-68  
FIELD TRIALS WITH RYGRAMYCIN AS AN ANTHELMINTIC IN POULTRY.  
M N Frazier  
Avian Dis 3(4):478-484, BIBL. 483-484, TABS.  
Nov 1959 41.8 AV5  
Anthelmintics, Poultry.
- 15513-68  
CATTLE GROW CONTROL WITH BAYER 21-199 IN THE EVERGLADES.  
W G Gennig C E Haines  
Fla Entomol 42(4):155-157  
Dec 1959 420 E662  
Cattle, Coumaphos, Bypoderma, Florida.
- 15514-68  
SURVEY ON THE HELMINTHS OF DROMEDARY IN CHAD, WITH SPECIAL  
REFERENCE TO GASTRO-INTESTINAL STRONGYLOSIS AND  
HAEMONCHOSIS (HAEMONCHUS LONGISTIPES). (PB )  
M Graher R Taho J Service  
Rev Elevage Med Vet Pays Trop (N.S.)20(2):227-254, MAP REF  
1967 41.8 E3262  
Camels, Haemonchosis, Nematodes, Strongylosis.  
Abstract
- 15515-68  
ANTHELMINTIC ACTIVITY OF AN ORGANIC PHOSPHATE IN CATTLE AND  
SHEEP.  
J F Landram B J Shaver  
Amer J Vet Res 22(90):893-898, TABS.  
Sep 1961 41.8 AM3A  
Anthelmintics, Cattle, Phosphates, Sheep.
- 15516-68  
CHEMICAL OVICIDAL MEASURES AS APPLIED TO TAENIA HYDATIGENA,  
TAENIA OVIS, TAENIA PISIFORMIS, AND ECHINOCOCCUS  
GRANULOSUS.  
G F Laws  
Exp Parasitol 20\_1)027-37, REF.  
Fgh 1967 436.8 EX7  
Cestoda, Dogs, Echinococcus granulosus, Humans, Ovicides,  
Taenia hydatigena, Taenia ovis, Taenia pisiformis.
- 15517-68  
BOVINE BABESIOSIS. THE PASSIVE IMMUNIZATION OF CALVES  
AGAINST BABESIA ARGENTINA WITH SPECIAL REFERENCE TO THE  
ROLE OF COMPLEMENT FIXING ANTIBODIES.  
D F Mahoney  
Exp Parasitol 20\_1)0119-124  
Feb 1967 436.8 EX7  
Antibodies, Babesia argentina, Cattle, Complement fixation,  
Immunization, Piroplasmiasis.
- 15518-68  
THREE GASTRO-INTESTINAL NEMATODES RECENTLY RECORDED FROM  
BRITISH CATTLE.  
J H Rose  
Res Vet Sci 1(1):10-16  
Jan 1960 41.8 R312  
Cattle, Nematodes.
- 15519-68  
SURVIVAL OF INFECTIVE LARVAE OF THE CATTLE NEMATODES,  
COOPERIA PONCATA, TRICHOSTRONGYLUS AXEI, AND  
OESOPHAGOSTOMUM BADIATUM.  
J C Williams B L Mayhew  
Amer J Vet Res 28(124):629-640  
May 1967 41.8 AM3A  
Cattle, Cooperia punctata, Ecology, Larvae, Nematodes,  
Trichostrongylus axei.
- 15520-68  
TOXICITY OF TOPICALLY APPLIED PASTES AND OILS.  
W D Woods E L McCune  
Soc Exp Biol Med Proc 125 (1), 124-127  
May 1967 442.9 S01  
Pastes, Oils, Poultry, Skin, Toxicology.



## 40 COMMODITY PROTECTION

## Storage Diseases

- 15521-68  
CONTRCL OF DISEASES OF SHALLOTS.  
E Aycock J M Jenkins Jr  
J Sci Food Agr 12(6):I-281-2  
Jun 1961 382 S012  
Captan, Dovicide B, Fungus diseases (plants),  
Na<sub>2</sub>, 4,5-trichlorophenoxyde, Pentachloronitrobenzene, Shallots.
- 15522-68  
AMMONIA INJURY TO APPLES AND PEACHES IN STORAGE.  
E Brennan I Leone B B Daines  
Plant Dis Rep 46(11):792-795, TABS.  
15 Nov 1962 1.9 P69P  
Ammonia, Apples, Peaches.
- 15523-68  
REDUCTION OF POST-HARVEST DECAY IN RASPBERRIES WITH SO<sub>2</sub>.  
E A Cappellini A W Stretch G S Walton  
Phytopathology 51(8):575  
Aug 1961 464.8 P56  
Raspberries, Sulfur dioxide.
- 15524-68  
EFFECT OF MOISTURE CONTENT AND LENGTH OF STORAGE PERIOD UPON  
GERMINATION PERCENTAGE OF SEEDS OF CORN, WHEAT, AND BARLEY  
FREE OF STORAGE FUNGI.  
C M Christensen  
Phytopathology 54(12):1464-1466  
Dec 1964 464.6 P56  
Barley, Corn, Food storage, Humidity, Seed viability, Wheat.
- 15525-68  
INVASION OF AND DAMAGE TO BEAN SEED BY STORAGE FUNGI.  
L C Lopez F. C M Christensen  
Plant Dis Rep 46(11):785-789  
15 Nov 1962 1.9 P69P  
Beans.
- 15526-68  
POLYETHYLENE LINERS AND FUNGICIDES FOR PEACHES AND  
NECTARINES.  
D A Luvisi N F Scamner  
J Sci Food Agr 12(6):I-299-2  
Jun 1961 362 S012  
Dehydroacetic acid, Na o-phenylphenate, Nectarines, Peaches,  
Polyethylene, Storage diseases.
- 15527-68  
EFFECT OF STORAGE ENVIRONMENT ON QUALITY OF TABLE GRAPES AND  
ON REQUIREMENTS OF SULFUR DIOXIDE FUMIGATION PROGRAM.  
K E Nelson G A Baker  
Phytopathology 52(8):745-746  
Aug 1962 464.8 P56  
Fumigation, Grapes, Sulfur dioxide.
- 15528-68  
TEMPERATURE FACTORS IN THE CONTROL OF BLACK SPOT OF CITRUS.  
E J Smith  
Plant Dis Rep 46(7):487-491, TABS  
15 Jun 1962 1.9 P69P  
Black spot (citrus).
- 15529-68  
TIMBER PESTS AND DISEASES. 1ST ED. TA422. P5.  
W P K Pindlay  
280 P., REF.  
1967  
Insect pests, Lumber preservation, Timber,  
Wood destroying fungi, Wood staining fungi.

## Arthropods

- 15530-68  
COMPARISON OF FIELD CORN VARIETIES FOR RESISTANCE TO CORN  
EARWORM AND STORED GRAIN INSECT INJURY IN THE EVERGLADES.  
V E Green Jr  
Fla Entomol 42(1):11-16, 9 REFS., 1 TAB.  
Mar 1959 420 P662  
Corn, Crop varieties, Heliothis zea, Storage injuries.
- 15531-68  
QUINOID SECRETIONS IN GRAIN AND FLOUR BEETLES.  
E K Ladisch S K Ladisch P M Howe  
Nature 215(5104), 939-940 REF  
26 Aug 1967 472 N21  
Flour, Grain, Quinones, Tenebrionidae.
- 15532-68  
INFLUENCE OF PRE-STORAGE TREATMENTS ON THE MORTALITY OF THE  
SAN JOSE SCALE (HOMOPTERA: DIASPIDIDAE) ON APPLES HELD  
IN STORAGE.  
C V G Morgan B J Angle  
Can Entomol 99(9):975-978  
Sep 1967 421 C16  
Apples, Aspidiotus perniciosus, Chemical control (insects),  
Diphenylamine, Ethoxyquin, Methanol, Mortality, Storage.  
Abstract
- 15533-68  
MORTALITY OF THE SAN JOSE SCALE (HOMOPTERA: DIASPIDIDAE)  
ON STORED APPLES OF DIFFERENT VARIETIES AND HARVEST DATES.  
G V G Morgan B J Angle  
Can Entomol 99(9):971-974  
Sep 1967 421 C16  
Apples, Aspidiotus perniciosus, Chemical control (insects),  
Crop varieties, Harvesting date, Mortality, Storage.  
Abstract
- 15534-68  
NOTE ON STAINING AS AN AID IN COUNTING VINEGAR EELWORMS IN  
VINEGAR.  
E Stein W V Eisenberg P M Brickey  
Ass Offic Anal Chem J 50(3):519-520  
Jnn 1967 381 AS7  
Filter paper, Food contamination, Nematodes, Staining,  
Vinegar.
- 15535-68  
A SURVEY TO DETERMINE THE SALMONELLA CONTAMINATION RATE IN  
LIVESTOCK AND POULTRY FEEDS.  
J N Allred J W Walker V C Real P W Germaine  
Amer Vet Med Ass J 151(15):1857-1860 REF  
15 Dec 1967 41.8 AM3  
Feed, Food contamination, Livestock, Poultry, Salmonella,  
Surveys.  
Abstract:  
this work indicates that a reduction in salmonella  
contamination of animal by-product ingredients and the  
pelletting of finished feeds would be the logical  
approach to lower the salmonella rate in swine and  
poultry feed.
- 15536-68  
DESTRUCTION OF SALMONELLA DURING SLAUGHTERING OF SWINE;  
IMPORTANCE OF SCALDING. (PE )  
A Granville L Fievez J Van Roof P Ghene A Lokolo  
J Med Entomol 111\_2):73-83  
Mar 1967 421 J82E  
Salmonella, Sanitation, Slaughtering, Swine.  
English summary.
- 15537-68  
DETECTION AND IDENTIFICATION OF SALMONELLA FROM DRIED WHOLE  
EGG, DRIED EGG YOLK, AND DRIED EGG WHITE: REPORT OF A  
COLLABORATIVE STUDY.  
P L Poelma  
Ass Offic Anal Chem J 50(4):753-763  
Aug 1967 381 AS7  
Agar, Eggs, Food contamination, Salmonella.  
Abstract

## 50 ENVIRONMENTAL CONTAMINATION

- 15538-68  
CHARACTERIZATION OF THE PLANT DAMAGE PROBLEM BY AIR POLLUTANTS IN NEW JERSEY.  
E Brennan I A Leone R H Daines  
Plant Dis Rep 51(1D):850-854 MAP BEP  
Oct 1967 1.9 P69P  
Air pollution, Ozone, Plant injuries, Sulfites, Sulfur dioxide.  
Plant damage has been observed in New Jersey when elevated concentrations of sulfur dioxide, ozone, peroxyacetyl nitrate or bisulfite-addition product (possibly aldehyde) occur in the ambient air. certain plant species can be cited as particularly sensitive to each of the pollutants. at present ozone appears to be the principal air pollutant from the point of view of number of plant species affected and the frequency of occurrences of phytotoxic levels. the extent of damage to a plant by a particular pollutant in any given year depends not only on the presence of a source for that pollutant and of plants susceptible to it, but also on the existence of meteorological factors that lead to air stagnation.
- 15539-68  
THE BEHAVIOR OF INSECTICIDES IN FOREST SOILS.  
S P Gessel D L Cole B Biekerk  
6 P. (TYPEWRITTEN)  
1967  
Forest soils, Insecticide residues, Soil contamination.  
Not in Nat. agr. libr.
- 15540-68  
MICROCOLUMNS GAS CHROMATOGRAPHY ANALYSIS OF SELECTED HERBICIDES IN WATER.  
D F Goerlitz W L Lamar  
11 P.  
Jan 1965  
Chromatography, Colorimetry, D, 2,4-, Herbicide residues, T, 2,4,5-, Water pollution,  
2-(2,4,5-trichlorophenoxy) propionic acid.  
Not in nat. agr. libr.
- 15541-68  
PERSISTENCE OF TWO SYSTEMIC CARBAMATE INSECTICIDES IN THREE TYPES OF SOILS.  
D S Gupta W A Rawling  
Indian J Entomol 28(4):482-493 BEP  
Dec 1966 4.20 IN23  
Baygon, Carbamates, Insecticide residues,  
Isopropyl-3-methylpyrazol-5-yl dimethylcarbamate, 1-,  
Muck soils, Sand, Soil contamination, Systemic insecticides.
- 15542-68  
VARIATIONS IN TOXICITY TO BLUEGILL SUNFISH OF PHENOXY HERBICIDES.  
J S Hughes J T Davis  
Weeds 11(1):50-53  
Jan 1963 79.8 W41  
Herbicides, Toxicology.
- 15543-68  
BIOLOGICAL DECOMPOSITION OF HERBICIDES IN SOIL. I. MONO-AND DICHLOROACETATE AND DICHLOROPROPIONATE.  
H L Jensen  
J Sci Food Agr 12(1):I-22-4  
Jan 1961 382 5012  
Decomposition, Dichloropropionate, Sodium chloroacetate,  
Soil microorganisms, Trichloroacetate.
- 15544-68  
THE BEHAVIOR OF DDT AND DDTAN ON A FOREST SOIL.  
H Biekerk  
2 P. (TYPEWRITTEN)  
Jan 1968  
Carbamates, Chlorinated hydrocarbons, Ddt, Forest soils,  
Insecticide residues, Soil contamination.  
A progress report. not in Nat. agr. libr.
- 15545-68  
METHODS FOR EXTRACTING INSECTICIDES FROM SOIL.  
J I Teasley W S Cox  
J Agr Food Chem 14(5):519-520  
Sep 1966 381 JB223  
Ddt, Endrin, Insecticide residues, Soil contamination.  
Cotton field soil.
- 15546-68  
ANALYTICAL PROCEDURES. IN METHODOLOGY.  
N.P. (MIMEOGRAPHED)  
1966  
Water pollution.  
Not in Nat. agr. libr.
- 15547-68  
INSECTICIDE ANALYSIS PROCEDURES USED BY THE KLAMATH BASIN STUDY. (PAPER PRESENTED AT PACIFIC NORTH WEST POLLUTION CONTROL ASSOCIATION, VANCOUVER, B.C.).  
B E White  
N.P.  
03 Nov 1965  
Insecticide residues, Water pollution.  
Not in Nat. agr. libr.
- 15548-68  
WATER POLLUTION CONTROL AND ABATEMENT. TD420.W45.  
T L Willrich N W Hines  
194 P AMES, IOWA STATE UNIVERSITY PBESS,  
1967  
Conferences, Pesticides, Sedimentation, Water pollution.  
Proceedings of an Iowa water resources pollution control and abatement seminar held at Iowa State University,  
Ames, 1965.

## 55 RESIDUES

- 15549-68  
RACREL CARSON INFLUENCE GAINS MOMENTUM AS ROOK APPEARS.  
Agr Chem 17(11):46-50, 157-159  
Nov 1962 381 AG8  
Pesticides, Public health, Rachel Carson.
- 15550-68  
EXTRACTION OF CHLORINATED PESTICIDE RESIDUES FROM NONFATTY SAMPLES OF LOW MOISTURE CONTENT.  
P F Bertuzzi L Kamps C I Miles J A Burke  
Ass Offic Anal Chem J 50(3):623-627  
Jun 1967 381 AS7  
Acetonitrile, Chlorinated hydrocarbons, Ddt, Dieldrin, Feed, Insecticide residues, Methoxychlor.  
Mixture of 35 percent water plus acetonitrile most effective  
Abstract
- 15551-68  
NOTE ON EXTRACTION OF A POLAR INSECTICIDE (IMIDAN) FROM MILK.  
M C Bowman M Reroza  
Ass Offic Anal Chem J 50(4):940-941  
Aug 1967 381 AS7  
Imidan, Milk.
- 15552-68  
DETERMINATION OF NIAGARA HIA-10242 AND ITS PHENOL DEGRADATION PRODUCT IN CORN SILAGE AND MILK AND DETERMINATION OF OTHER CARBAMATES BY GLC OF THEIR THIOPHOSPHORYL DERIVATIVES.  
M C Bowman M Reroza  
Ass Offic Anal Chem J 50(4):926-933  
Aug 1967 381 AS7  
Carbamates, Chromatography, Corn, Degradation, Insecticide residues, Milk, Phenols, Silage.
- 15553-68  
INFRARED IDENTIFICATION OF CHLORINATED INSECTICIDES IN THE TISSUES OF POISONED FISH.  
H W Royle R H Burttshell A A Rosen  
19 P. REF. (MIMEOGRAPHED)  
0000  
Chlorinated hydrocarbons, Chromatography, Fishkill, Infrared spectra, Insecticide residues, Spectrophotometry, Water pollution.  
Not in Nat. agr. libr.
- 15554-68  
GUIDE TO THE ANALYSIS OF PESTICIDE RESIDUES. SB953.B8.  
R P Burchfield D E Johnson E E Storrs  
2 V. WASHINGTON, U. S. GOVERNMENT PRINTING OFFICE  
1965  
Handbooks, Pesticide residues.
- 15555-68  
DDT IN HUMANS AND ANIMALS; DETERMINATION OF DDA IN URINE USING AN ION EXCHANGE RESIN.  
C Cueto A G Barnes A M Mattson  
J Agr Food Chem 4(11):943-945  
Nov 1956 381 J8223  
Ddt, Humans, Insecticide residues, Ion exchange resins, Urine.
- 15556-68  
THE DETERMINATION OF CHLORINATED INSECTICIDES IN HUMAN BLOOD.  
W E Dale et. al.  
N.P. (TYPEWRITTEN)  
1966  
Blood, Chlorinated hydrocarbons, Humans, Insecticide residues.  
Not in Nat. agr. libr.
- 15557-68  
FISH, WILDLIFE UNAFFECTED BY BOLL WEEVIL PROGRAM.  
K Dorward  
Agr Chem 20(9):68  
Sep 1965 381 AG8  
Anthonomus grandis, Fish, Malathion, Pesticide residues, Wildlife.
- 15558-68  
ANALYSIS OF CHLORINATED PESTICIDE RESIDUES IN FATS AND OILS, UTILIZING DIMETHYL SULFOXIDE: A COLLABORATIVE STUDY.  
M Eidelman  
Ass Offic Anal Chem J 50(3):591-595  
Jun 1967 381 AS7  
Chlorinated hydrocarbons, Chromatography, Dimethyl sulfoxide, Fats, Oils, Pesticide residues.  
Abstract
- 15559-68  
A SENSITIVE PROCEDURE FOR URINARY P-NITROPHENOL DETERMINATION AS A MEASURE OF EXPOSURE TO PARATHION.  
J W Elliott K C Walker A E Penick W F Durham  
J Agr Food Chem 8(2):111-113  
Mar 1960 381 J8223  
Dicapthon, Dinitroresol, Humans, Insecticide residues, Parathion, Rats, Urine.
- 15560-68  
RESIDUE STUDIES OF TOMATO FOLIAGE AND FRUITS FROM PLANTS RECEIVING PERC- "14 PRE-OR POST-EMERGENCE.  
S C Fang E Fallin  
Weeds 13(2):152-155, TARS.  
Apr 1965 79.8 W41  
Fruit, Herbicide residues, Leaves, Tomatoes.
- 15561-68  
GAS CHROMATOGRAPHIC DETERMINATION OF RESIDUES OF ORGANOPHOSPHORUS PESTICIDES WITH A MODIFIED FLAME IONIZATION DETECTOR.  
J H Ford M Reroza  
Ass Offic Anal Chem J 50(3):601-604  
Jun 1967 381 AS7  
Chromatography, Ionization chambers, Organophosphorus compounds, Pesticide residues.
- 15562-68  
STUDY OF MODIFICATIONS OF THE MILLS PROCEDURE FOR CHLORINATED PESTICIDES IN DAIRY PRODUCTS.  
W B Furman N V Fehringner  
Ass Offic Anal Chem J 50(4):903-908  
Aug 1967 381 AS7  
Aldrin, Chlorinated hydrocarbons, Dairy products, Dieldrin, Heptachlor, Insecticide residues, Lindane, Milk fat.  
Abstract:
- 15563-68  
DDT REPORTEDLY DISCOVERED IN ANTARCTIC SEALS AND FISH.  
J L George  
Agr Chem 20(9):59  
Sep 1965 381 AG8  
DDT, Pesticide residues, Wildlife.
- 15564-68  
METABOLISM OF TOK HERBICIDE IN DAIRY COW.  
W H Gutenmann D J Lisk  
J Dairy Sci 50(9):1516-1518  
Sep 1967 44.8 J822  
Chromatography, Dairy cattle, Dichloro-4'-aminodiphenyl ether, 2,4-, Dichloro-4'-nitrodiphenyl ether, 2,4-, Herbicide residues, Metabolism.
- 15565-68  
METHOD FOR RESIDUES OF ZYTRON, O-2,4-DICHLOROPHENYL O-METHYL ISOPROPYLPHOSPHORAMIDOTHIOATE, IN CHICKEN TISSUES AND EGGS.  
M C Ivey H V Claborn R Brinkman  
Ass Offic Anal Chem J 50(3):634-637  
Jun 1967 381 AS7  
Chickens, Chromatography, Eggs, Herbicide residues, Zytron.  
Abstract
- 15566-68  
DETERMINATION OF LINURON AND ITS KNOWN AND/OR SUSPECTED METABOLITES IN CROP MATERIALS.  
S E Katz  
Ass Offic Anal Chem J 50(4):911-917  
Aug 1967 381 AS7  
Carrots, Chromatography, Corn, Crops, Digitaria, Herbicide residues, Linnron, Metabolism, Soybeans.  
Abstract
- 15567-68  
DEGRADATION OF CARBAMATE HERBICIDES IN SOIL.  
D D Kaufman  
J Agr Food Chem 15(4):582-591  
381 J8223  
Carbamates, Decomposition, Herbicide residues, Microorganisms, Soils.



## BIBLIOGRAPHY

55 15568-68

## Abstract

15568-68

RAPID CLEANUP OF DAIRY PRODUCTS FOR ANALYSIS OF CHLORINATED INSECTICIDE RESIDUE BY ELECTRON CAPTURE GAS CHROMATOGRAPHY.  
R E Langlois A R Steamp R J Liska  
J Agr Food Chem 12(3):243-245  
381 J8223

Chlorinated hydrocarbons, Chromatography, Dairy products, Ddt, Dieldrin, Endrin, Food contamination, Insecticide residues, Lindane.

15569-68

DETERMINATION OF DDT AND RELATED SUBSTANCES IN HUMAN FAT.  
A M Mattson J T Spillane C Baker G W Pearce  
Anal Chem 25(7):1065-1070, REP.  
15 Jul 1953 381 J825A  
Chlorinated hydrocarbons, Chromatography, Ddt, Humans, Insecticide residues, Spectroscopy.

15570-68

WACA DISCUSSIONS COVER 'SILENT SPRING'.  
E J Meier  
Agr Chem 17(11):64-67, 166  
Nov 1962 381 AG8  
Industry, Labeling, Legislation, Pesticides.

15571-68

METABOLISM OF DDT AND SOME OTHER CHLORINATED ORGANIC COMPOUNDS BY AEROBACTER AEROGENES.  
J L Mendel A K Klein J T Chen M S Walton  
Ass Offic Anal Chem J 50(4):897-903  
Aug 1967 381 AS7  
Aerobacter aerogenes, Aldrin, Chlorinated hydrocarbons, Chromatography, Ddt, Dieldrin, Insecticide residues, Metabolism, Methoxychlor, Tde.  
Abstract:  
aerobacter aerogenes can convert o,p'- and p,p'-DDT to their respective compounds. the organism is apparently not the mediator for the conversion of o,p'-DDT to p,p'-DDT in the rat. aldrin and dieldrin are not affected by this organism.

15572-68

SCREENING METHOD FOR THE DETECTION OF CHLORINATED HYDROCARBON PESTICIDE RESIDUES IN THE FAT OF MILK, CHEESE, AND BUTTER.  
R P Moubry G R Myrdal H P Jensen  
Ass Offic Anal Chem J 50(4):885-888  
Aug 1967 381 AS7  
Benzene hexachloride, Butter, Cheese, Chlorinated hydrocarbons, Chromatography, Ddt, Dieldrin, Insecticide residues, Milk fat.  
Abstract

15573-68

LOSS OF CHLORINATED HYDROCARBON INSECTICIDES FROM SOIL SURFACE IN THE FIELD.  
M S Mulla  
J Econ Entomol 53(4):650-655, TARS.  
Aug 1960 421 J822  
Aldrin, Chlorinated hydrocarbons, DDT, Endrin, Hippolates, Insecticide residues, Soils.

15574-68

CORRELATION OF THE EFFECTS OF PARATHION ON ERYTHROCYTE CHOLINESTERASE WITH SYMPTOMATOLOGY IN PIGS.  
W T Oliver R S Funnell  
Can Entomol 22(86):80-84, IRL. 83-84  
Jan 1961 421 C16  
Cholinesterases, Erythrocytes, Parathion, Swine, Toxicology.

15575-68

SIMPLE ULTRASENSITIVE TEST FOR DETECTING PENICILLIN IN MILK.  
J M A Palmer F V Kosikowski  
J Dairy Sci 50(9):1390-1394 REP  
Sep 1967 44.8 J822  
Food contamination, Milk, Penicillin.  
Abstract

15576-68

DETERMINATION OF ZECTRAN RESIDUES IN AERIAL FOREST SPRAYING.  
G W Pieper R F Miskus  
J Agr Food Chem 15(5):915-916  
Sep 1967 381 J8223  
Aerial spraying, Choristoneura fumiferana, Chromatography, Forests, Insecticide residues, Pseudotsuga menziesii, Wildlife food plants.

15577-68

ACETONITRILE DILUTION: A POSSIBLE SOURCE OF ERROR IN THE "RAPID METHOD FOR CHLORINATED PESTICIDE RESIDUES IN NONFATTY FOODS".  
M L Porter J A Burke P F Bertuzzi  
Ass Offic Anal Chem J 50(3):644-645  
Jun 1967 381 AS7  
Acetonitrile, Insecticide residues, Kale, Tde, Water.

15578-68

THE DETERMINATION OF PESTICIDES IN TISSUES WITH THE ELECTRON CAPTURE DETECTOR WITHOUT PRIOR CLEANUP.  
J L Badowski V Fiserova-Bergerova  
34(12):934-939  
Dec 1965  
Aldrin, Chromatography, Cleanup, Ddt, Dieldrin, Electron capture, Lindane.  
Not in Nat. agr. libr.  
in: Industrial Medicine and Surgery (see vol. and pp. above); at Libr. Cong., RC963 .A37.

15579-68

NOTE ON IDENTIFICATION OF AZINPHOSMETHYL IN HUMAN TISSUES AND IN FIGS.  
F Sa M E Da Silva  
Ass Offic Anal Chem J 50(6):1258-1260  
Dec 1967 381 AS7  
Azinphosmethyl, Cattle, Figs, Homicides, Humans, Pesticide residues, Poisoning, Portugal, Tissues.

15580-68

RAPID SCREENING METHOD FOR DDT IN MILK WITH GAS CHROMATOGRAPHY.  
M L Schafer K A Busch J E Campbell  
J Dairy Sci 46(10):1025-1032, REP.  
Oct 1963 44.8 J822  
Chlorinated hydrocarbons, Ddt, Food contamination, Insecticide residues, Milk.  
Abstract

15581-68

ESCAPE OF METHYL BROMIDE THROUGH WALLBOARDS.  
P Simmons  
J Sci Food Agr 12(4):I-207-R  
Apr 1961 382 S012  
Fiberboard, Methyl bromide.

15582-68

INVESTIGATIONS ON DURSARAN INSECTICIDE. METABOLISM OF O,O-DIETHYL 0-3,5,6-TRICHLORO-2-PYRIDYL PROSPHOROETHIOATE AND 3,5,6-TRICHLORO-2-PYRIDINOL IN PLANTS.  
G N Smith R S Watson F S Fischer  
J Agr Food Chem 15(5):870-877  
Sep 1967 381 J8223  
Absorption, Cranberries, Diethyl 0,3,5,6-trichloro-2-pyridyl phosphorothioate, 0,0-, Hydrogen-ion concentration, Insecticides, Plant metabolism, Radioactive tracers, Trichloro-2-pyridinol, 3,5,6-.  
Abstract

15583-68

SIMULTANEOUS ELECTRON CAPTURE - MICROCOULOMETRIC DETECTION FOR QUALITATIVE AND QUANTITATIVE PESTICIDE ANALYSIS. (IN: GULF COAST SHELLFISH SANITATION RESEARCH CENTER. TECHNICAL MEMORANDUM (GCSSRC FY) 66 -2.).  
R M Tyo  
2 P. (MICROGRAPHED)  
30 Nov 1965  
Colorimetry, Electron capture, Food contamination, Insecticide residues, Shellfish.  
Not in Nat. agr. libr.

15584-68

PPC (PLANT PEST CONTROL) MANUAL.  
N.P.  
0000  
Manuals, Pesticide residues, Plant pest control.  
Unpublished; not in Nat. agr. libr.; indexed from title only.

15585-68

NOTICE OF FILING OF PETITION FOR FOOD ADDITIVE OXYTETRACYCLINE.  
Fed Regist 32(119):8825  
21 Jun 1967 L1.451  
Fish, Food additives, Food contamination, Oxytetracycline.

- 15586-68  
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.  
Fed Regist 32(119):8824-8825  
21 Jun 1967 L1.451  
Avocados, Cottonseed, Fungicides, Pesticide residues,  
Pineapples, Sugar beets.
- 15587-68  
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.  
Fed Regist 32(119):8824  
21 Jun 1967 L1.451  
Amiben, Field crops, Herbicide residues, Vegetables.
- 15588-68  
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.  
Fed Regist 32(118):8776  
20 Jun 1967 L1.451  
Citrus, Fungicides, Pesticide residues.
- 15589-68  
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.  
Fed Regist 32(114):8539  
14 Jun 1967 L1.451  
Herbicide residues, Lettuce.
- 15590-68  
NOTICE OF WITHDRAWAL OF PETITION FOR FOOD ADDITIVES.  
Fed Regist 32(119):8825  
21 Jun 1967 L1.451  
Agricultural products, Food additives, Lumber preservatives,  
Pentachlorophenol, Pesticide residues.  
Use on wood in contact with raw agricultural products.
- 15591-68  
DICAMBA AND ITS METABOLITE. NOTICE OF ESTABLISHMENT OF  
TOLERANCE.  
Fed Regist 32(114):8539  
14 Jun 1967 L1.451  
Dicamba, Herbicide residues, Metabolites, Sorghum.
- 15592-68  
DDT. PROPOSED ESTABLISHMENT OF PESTICIDE AND FOOD ADDITIVE  
TOLERANCES.  
Fed Regist 32(112):858379  
10 Jun 1967 L1.451  
Ddt, Food additives, Rops, Insecticide residues.
- 15593-68  
FOOD AND FOOD PRODUCTS. TOLERANCES AND EXEMPTIONS FROM  
TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL  
COMMODITIES. O-CRENYLPHENOL AND ITS SODIUM SALT.  
Fed Regist 32(124):9159  
28 Jun 1967 L1.451  
Carrots, Food contamination, Peaches, Pesticide residues,  
Phenols, Plums, Sodium salts.
- 15594-68  
FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION.  
1,1-BIS(P-CHLOROPHENYL)-2,2,2-TRICHLOROETHANOL.  
Fed Regist 32(112):8359-834D  
10 Jun 1967 L1.451  
Dicofol, Food additives, Food contamination,  
Insecticide residues, Tea.
- 15595-68  
FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION.  
ETHION.  
Fed Regist 32(123):9066  
27 Jun 1967 L1.451  
Ethion, Food additives, Insecticide residues, Raisins, Tea.
- 15596-68  
FOOD ADDITIVES PERMITTED IN FEED AND DRINKING WATER OF ANI-  
MALS OR FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. FOOD  
ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION. THIABEN-  
DAZOLE.  
Fed Regist 32(115):8587  
15 Jun 1967 L1.451  
Ascariasis, Feed additives, Food additives, Swine,  
Thiabendazole, Water.
- 15597-68  
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.  
Fed Regist 32(124):9178  
28 Jun 1968 L1.451  
Food contamination, Herbicide residues, Rice, Rice straw.
- 15598-68  
TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE  
CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. PROCEDURAL  
REGULATIONS. FEES. SPECIFIC TOLERANCES. GENERAL PROVISIONS.  
Fed Regist 32(119):8815-8816  
21 Jun 1967 L1.451  
Agricultural products, Pesticide residues, Pesticides.
- 15599-68  
NOTICE OF FILING OF PETITION REGARDING PESTICIDES.  
Fed Regist 32(123):9114  
27 Jun 1967 L1.451  
Apples, Food contamination, Insecticide residues.
- 15600-68  
EXTRACTION OF THE WATER WITH HEXANE FOLLOWED BY DETECTION  
AND ASSAY USING CHROMATOGRAPHS EQUIPPED WITH ELECTRON  
CAPTURE AND MICRO-COULOMETER DETECTORS.  
N.P. (TYPEWRITTEN)  
1966  
Chromatography, Colorimetry, Electron capture, Food analysis,  
Food contamination, Hexane.  
Not in Nat. agr. libr.
- 156D1-68  
SWEEP CO-DISTILLATION CLEANUP OF MILK FOR DETERMINATION OF  
ORGANOPHOSPHATE AND CHLORINATED HYDROCARBON PESTICIDES.  
R R Watts R W Stoherr  
Ass Offic Anal Chem J 5D(3):581-585  
Jun 1967 381 A57  
Chlorinated hydrocarbons, Chromatography,  
Insecticide residues, Milk, Organophosphorus compounds.  
Abstract:  
this paper presents a rapid extraction and "sweep co-distil-  
lation" cleanup method for ten organophosphate and seven  
chlorinated pesticides in milk samples.

## 60 TOXICOLOGY

of 2 calves.

15611-68  
DDT AND RELATED COMPOUNDS IN DOG FOOD AND CSMA MEDIA USED  
IN INSECT REARING.  
G L Bolofson J L Bishop  
J Econ Entomol 60 (4):1186-1187  
15 Aug 1967 421 J822  
Blattella germanica, Ddt, Dicofol, Dog foods,  
Food contamination, Insect rearing, Tde.

15612-68  
LATE-SEASON CONTROL OF EUROPEAN ELM SCALE WITH BIDBIN TRUNK  
INJECTIONS.  
B E Thompson  
J Econ Entomol 60 (6):1745-1746  
Dec 1967 421 J822  
Bidrin, Chemical control (insects), Forest insects,  
Gossyparia spuria, Systemic insecticides.

15602-68  
MAMMALIAN DETOXIFICATION OF INSECTICIDES.  
A A deYakimac A Akin J Gabagan  
Agr Chem 19(7):45,86-87, 4 TABS.  
Jul 1964 361 AG8  
Dimethoate, Mice, Parathion, Poisoning.

15603-68  
LETHAL ENDRIN CONCENTRATION IN THE BLOOD OF GIZZARD SHAD.  
W A Brungs D I Mcunt  
J Fish Res Board Can 24 (2):429-431  
Feb 1967 442.9 C16J  
Blood, Endrin, Fish, Fishkill, Insecticide residues.

15604-68  
ACUTE LEAD POISONING IN SWINE. (FR )  
J Cristea  
Rec Med Vet 143(8):749-754, REF.  
Aug 1967 41.8 R24  
Lead, Poisoning, Swine.  
Abstract

15605-68  
CHEMICAL STRUCTURE AND STERILIZING ACTIVITY OF N,N,O-  
ALKYLENEBIS-(1-AZIRIDINECARBOXYAMIDES) IN SCREW-WORM FLIES.  
M M Crystal  
J Econ Entomol 60 (4):1005-1007  
15 Aug 1967 421 J822  
Alkylenebis-(1-aziridinecarboxamides), N,N,O-, Chemosterilants,  
Cochliomyia hominivorax, Sterilization, Toxicology.  
Abstract

15606-68  
HEXANE EXTRACTABLE CHLORINATED INSECTICIDES IN HUMAN BLOOD.  
W E Dale A Curley C Cueto  
Life Sci 5(1):47-54, REF.  
Jan 1966 442.8 L62  
Blood, Chlorinated hydrocarbons, Dieldrin, Humans.

15607-68  
EFFECTS OF ISOMERS OF DDD ON THYROID AND ADRENAL FUNCTION  
IN RATS.  
M J Fregly I W Waters J A Straw  
Can J Physiol Pharmacol 46(1):59-66, REF.  
Jan 1968 444.8 C16  
Adrenal glands, Isomerism, Tde.

15608-68  
THE TOXICITY OF AMINOTRIAZOLE TO DOMESTIC ANIMALS. (GE )  
B J Hapke  
Zentralbl Veterinarmed Reihe A 14(5):469-486, REF.  
Aug 1967 41.8 Z5  
Amitrole, Livestock, Toxicity.

15609-68  
TOXICOLOGIC EFFECTS OF A PHOSPHOROTHIOIC ACID INSECTICIDE IN  
SHEEP.  
B T McCarty M Baufiler C A McBeth  
Amer Vet Med Ass J 152(3):279-281  
01 Feb 1968 41.8 AM3  
Insecticides, Laboratory animals, Phosphorothioic acid, Sheep,  
Toxicity.  
Abstract:  
no ill effects were caused in sheep after 187 consecutive  
doses of the phosphorothioic acid organophosphate,  
o,o',o'-tetramethyl o,o'-thiodi-p-phenylene phosphoro-  
thioate.

15610-68  
TOXICOLOGIC EFFECTS OF A PHOSPHOROTHIOIC ACID INSECTICIDE IN  
CATTLE.  
J S Palmer  
Amer Vet Med Ass J 152(3):282-284  
01 Feb 1968 41.8 AM3  
Abnormalities, Cattle, Death, Insecticides,  
Phosphorothioic acid, Toxicity.  
Abstract:  
exposure to oral dosages for 12 months displayed signs  
of toxicosis in cattle and abnormalities and early deaths



## 65 PLANT PHYSIOLOGY AND BIOCHEMISTRY

- Aug 1964 464.8 P56  
Fungicides.
- 15623-68  
ISOLATION OF PHYTOPHTHORA MEGASPERMA VAR- SOJAE IN SOIL DILUTION PLATES.  
J H Haas  
Phytopathology 54(8):894  
Aug 1964 464.8 P56  
Culture media, Phytophthora megasperma.
- 15624-68  
ASSOCIATION OF POLYGALACTURONATE TRANS-ELIMINASE WITH SOUTHERN ANTHRACNOSE BUT NOT WITH SPRING BLACK STEM OR STEMPHYLIUM LEAF SPOT OF ALFALFA.  
J G Hancock R L Millar  
Phytopathology 54(8):894  
Aug 1964 464.8 P56  
Alfalfa, Leaf spot (alfalfa), Plant biochemistry, Spring black stem (alfalfa).
- 15625-68  
PYRIDINE NUCLEOTIDE-LINKED ENZYMIC REDUCTION OF TRIOSE, PENTOSE, AND HEXOSE PHOSPHATES ASSOCIATED WITH RUST INFECTION.  
J W Hendrix J M Daly A Livne  
54(8):895  
Aug 1964  
Hexoses, Pentoses, Reductases, Rust (wheat).
- 15626-68  
SALT INJURY TO TREES.  
F W Holmes  
Phytopathology 51(10):712-718, BIBL. 717-718  
Sep 1961 464.8 P56  
Sodium chloride, Tree injuries.
- 15627-68  
METABOLISM IN VITRO OF PHLORIDZIN AND OTHER COMPOUNDS BY VENTURIA INAEQUALIS.  
J Holowczak J Kuc E R Williams  
Phytopathology 52(10):1019-1023, TABS.  
Oct 1962 464.8 P56  
Chemicals, Phlorizin, Plant metabolism, Plant physiology, Venturia inaequalis.
- 15628-68  
INHIBITION OF PLANT GROWTH BY HALOGENATED BENZOIC ACIDS.  
C W Huffman E M Godar D C Torgeson  
J Agr Food Chem 15(6):976-981  
Nov 1967 381 J8223  
Beans, Plant growth inhibitors, Plant regulators, Tomatoes, Triiodo benzoic acid, 2,3,5-  
Abstract
- 15629-68  
PHENOTYPIC RESTORATION OF FERTILITY IN A MALE-STERILE MUTANT BY TREATMENT WITH GIBBERELIC ACID.  
J N R Kasemhre  
Nature 215(5101), 668  
05 Aug 1967 472 N21  
Barley, Breeding, Fertility, Gibberellic acid, Plant mutation, Sterility.
- 15630-68  
COLOR FORMATION ON PHENOL-CONTAINING MEDIA AS RELATED TO LIGNIN BREAKDOWN BY WOOD-ROTTING BASIDIOMYCETES.  
T K Kirk A Kelman  
Phytopathology 54(8):897-898  
Aug 1964 464.8 P56  
Culture media, Lignin, Phenol reaction, Wood destroying fungi.
- 15631-68  
EFFECT OF MAJOR AND MINOR GENE INTERACTION ON ADAPTIVE PARASITISM IN PHYTOPHTHORA INFESTANS.  
W A Kodgson  
Phytopathology 55(1):73-75, BIBL.  
Jan 1965 464.8 P56  
Genes, Parasitism, Phytophthora, Potatoes.
- 15632-68  
AN ADENOSINE TRIPHOSPHATE-BINDING SUBSTANCE FROM CERATOCYSTIS ULMI.  
R H Kurtzman Jr  
Phytopathology 54(11):1386-1388  
Nov 1964 464.8 P56  
Adenosine triphosphates, Dieback (ulms).
- 15613-68  
PROSPHORUS FERTILIZATION AND THE PHYTOTOXICITY OF SIMAZINE.  
R S Adams Jr  
Weeds 13(2):113-116, TABS.  
Apr 1965 79.8 W41  
Fertilizers, Fosphorus, Simazine.
- 15614-68  
VARYING THE EMS EFFECT ON BARLEY BY CHANGING THE VARIOUS TREATMENT AND POSTWASHING TEMPERATURES. (GE )  
K Bender H Gaul  
Radiat Bot 07 4), 289-301 REP  
Aug 1967 450 R11  
Barley, Ethyl methanesulfonate.  
English summary
- 15615-68  
FACTORS IN LIMA BEAN AND HEMP SEED REQUIRED FOR OOSPORE FORMATION BY SPECIES OF PHYTOPHTHORA.  
HARNISH, W H.  
L A Berg V G Lilly  
54(8):895  
Aug 1964  
Hemp, Lima beans, Oospores, Phytophthora.
- 15616-68  
TWISTED TWIG OF APPLE.  
E C Blodgett M D Aichele  
Phytopathology 54(12):1432  
Dec 1964 464.8 P56  
Apples.
- 15617-68  
VIRUS-LIKE PARTICLES OF A PBACTION OF A STATOLON, A MOULD PRODUCT.  
L P Ellis W J Kleinschmidt  
Nature 215(5101), 649-650 BEP  
05 Aug 1967 472 N21  
Molds, Penicillium stoloniferum, Statolon, Viruses.
- 15618-68  
MECHANISMS OF VARIATIONS IN VERTICILLIUM ALBO-ATRUM.  
C Fordyce Jr R J Green Jr  
54(7):795-798, BIBL. 798  
Jul 1964  
Mycology, Plant biochemistry, Verticillium albo-atrum.
- 15619-68  
METABOLISM OF 2-CHLORO-4,5-DIMETHYLPHENYL N-METHYLCARBAMATE IN BEAN PLANTS.  
A B Friedman A J Lemin  
J Agr Food Chem 15(4):642-647  
Jul 1967 381 J8223  
Beans, Carbon isotopes, Chloro-4,5-dimethylphenyl N-methylcarbamate, 2-, Metabolites.  
Abstract
- 15620-68  
PREVENTION OF PROTODYNAMIC KILLING OF FUNGAL CELLS BY CAROTENOID.  
P D Golaström  
Phytopathology 53(7):746  
Jul 1963 464.8 P56  
Carotenoids, Fungi, Mycology, Photochemistry, Plant metabolism, Plant protective devices.
- 15621-68  
INDUCED POLYGENIC MUTATIONS IN HEXAPLOID WHEATS.  
Jv Goud  
Radiat Bot 07 4), 321-331 REP  
Aug 1967 450 R11  
Ethyl methanesulfonate, Gamma rays, Mutations, Polyploidy, Wheat.  
Abstract included.
- 15622-68  
TOXIC BEHAVIOR OF TWO ITACONIMIDES.  
B K Grover  
Phytopathology 54(8):894

## BIBLIOGRAPHY

65 15633-6B

- 15633-66  
LIGHT ABSORPTION BY LIVING MYCELIA OF FUNGI BEFORE AND AFTER  
EXPOSURE TO NEAR-ULTRAVIOLET RADIATION.  
C H Leach  
Phytopathology 54 (12):1434-1435  
Dec 1964 464.6 P56  
Fungi, Radiation.
- 15634-68  
EFFECT OF CERTAIN FUNGI ON THE GROWTH OF DWARF TOMATOES IN  
GENOTOXIC CONDITIONS.  
D Lindsey  
Phytopathology 54 (8):899  
Aug 1964 464.8 P56  
Fungi, Tomatoes.
- 15635-68  
DETECTION OF COMMON ANTIGENS OF APPLE VIRUS ISOLATES BY COM-  
PLEMENT FIXATION.  
B C McCrum  
Phytopathology 54 (8):900  
Aug 1964 464.8 P56  
Antigens, Complement fixation, Virus diseases (plants).
- 15636-68  
TOLERANCES OF PICEA SPP TO A NEMATOCIDE.  
P Miller  
Agr Chem 20(12):67  
Dec 1965 381 AG8  
Dibromo-3-chloropropane, 1,2-, Picea.
- 15637-68  
CONSTITUENTS OF THE COTTON BUD. THE CARBONYL COMPOUNDS.  
J P Minyard J H Tinslinson A C Thompson P A Redin  
J Agr Food Chem 15(3):517-524  
May 1967 381 J8223  
Anthonomus grandis, Attractants, Carbonyl compounds, Cotton.  
Abstract:  
the Boll Weevil Research Laboratory is investigating  
cotton plant constituents to determine the nature of  
those which are attractants for the boll weevil,  
Anthonomus grandis.
- 15638-68  
EFFECT OF CARBON SOURCE AND CALCIUM ON GROWTH OF PYTHIUM  
ULTIMUM.  
L D Moore  
Phytopathology 54 (8):901  
Aug 1964 464.6 P56  
Calcium, Carbon, Pythium ultimum.
- 15639-68  
PATHOLOGICAL ANATOMY OF SCLEROTINIA TRIPOLIUM ON CLOVER  
AND ALFALFA.  
G D Prior J H Owen  
Phytopathology 54 (7):784-787  
Jul 1964 464.8 P56  
Alfalfa, Anatomy, Clover.
- 15640-68  
CONTROL OF PATROGENIC FUNGI, NEMATODES, AND WEEDS BY PRE-  
PLANTING CHEMICAL TREATMENTS.  
R W Rankin  
Phytopathology 51 (9):644-645  
Sep 1961 464.8 P56  
Fungi, Plant nematodes, Weeds.
- 15641-68  
ACCUMULATION OF COPPER BY SOME ZAMBIAN PLANTS.  
C Reilly  
Nature 215 (5101), 667-668  
05 Aug 1967 472 N21  
Copper, Plants.
- 15642-68  
ANALYSIS OF PROTEINS AND ENZYMES OF THE INTERACTION BETWEEN  
PHASEOLUS VULGARIS AND PSEUDOMONAS PRAEOCOLICA (HALO  
BLIGHT OF BEANS).  
K Rudolph  
Phytopathology 54 (8):904-905  
Aug 1964 464.8 P56  
Enzymes, Halo blight (beans), Plant biochemistry,  
Pseudomonas phaseolicola.
- 15643-68  
EFFECTS OF X-IRRADIATION OF SEED ON X-1 AND X-2 GENERATIONS  
IN FINUS BANKSIANA LAMBERT.  
Td Rudolph  
Radiat Bot 07\_4, 303-312 REP  
Aug 1967 450 R11  
Pinus banksiana, X-rays.  
Abstract included.
- 15644-68  
NUCLEAR CONDITION AND DIVISION IN VEGETATIVE HYPHAE OF RHIZOCTONIA SOLANI.  
M M Shatla J B Sinclair  
Phytopathology 54 (8):907  
Aug 1964 464.8 P56  
Cell nucleus, Cytology, Mitosis, Rhizoctonia solani.
- 15645-68  
PECTIN TRANS-ELIMINASE AND POLYGALACTURONASE PRODUCTION BY  
RHIZOCTONIA SOLANI AND OTHER FUNGI.  
B T Sherwood  
Phytopathology 54 (8):907  
Aug 1964 464.8 P56  
Fungi, Mycology, Pectinase, Pectins, Rhizoctonia solani.
- 15646-68  
EFFECTS OF CHLOROPHENOXY HERBICIDES ON SOYBEANS.  
B J Smith Jr  
Weeds 13(2):168-169  
Apr 1965 79.8 W41  
Herbicides, Soybeans.
- 15647-68  
EFFECTS OF SURFACTANTS ON FUNGI.  
G W Steiner  
Phytopathology 54 (8):909  
Aug 1964 464.8 P56  
Fungi, Fungicides, Surface-active agents.
- 15648-68  
FORMATION OF THE BASIDIAL STAGE OF SOME ISOLATES OF RHIZOCTONIA.  
B M Stretton A B McKenzie K P Baker N T Plentje  
Phytopathology 54 (9):1093-1095  
Sep 1964 464.8 P56  
Mycology, Rhizoctonia.
- 15649-68  
FIXATION OF HC14N BY FUNGI.  
G A Strobel  
Phytopathology 54 (8):909  
Aug 1964 464.8 P56  
Fungi, Plant biochemistry.
- 15650-68  
PROTEIN AND ISOZYME PATTERNS OF SWEET POTATOES AS RELATED TO  
ACQUIRED IMMUNITY.  
D J Weber M A Stahmann  
Phytopathology 54 (8):911-912  
Aug 1964 464.8 P56  
Immunology, Plant biochemistry, Proteins, Sweetpotatoes.
- 15651-68  
PERMEABILITY CHANGES CAUSED BY VICTORIN.  
B Wheeler  
Phytopathology 51 (9):646  
Sep 1961 464.8 P56  
Permeability, Victorin.
- 15652-68  
PROPERTIES OF PURIFIED ACID PHOSPHATASES FROM HEALTHY AND  
RUST-INFECTED BEAN LEAVES.  
P H Williams R C Staples  
Phytopathology 54 (7):749  
Jul 1964 464.8 P56  
Acid phosphatase, Beans, Fungus diseases (plants), Leaves,  
Phosphatases, Plant biochemistry, Rust (beans).
- 15653-68  
RESPIRATION, PHOTOSYNTHESIS, AND DARK FIXATION OF C14O2 BY  
HEALTHY AND RUSTED BEAN LEAVES.  
A I Zaki C J Mirocha  
Phytopathology 54 (8):913  
Aug 1964 464.8 P56  
Beans, Leaves, Photosynthesis, Plant respiration,  
Rust (beans).
- 15654-68  
RATES OF PRENOLIC SYNTHESIS IN POTATO ROOTS RESISTANT AND  
SUSCEPTIBLE TO VERTICILLUM ALBO-ATRUM.  
PATIL, S S.  
M Zucker A E Diamond  
Phytopathology 54 (8):903  
Aug 1964 464.8 P56  
Plant disease resistance, Potatoes, Roots,  
Verticillium albo-atrum.

## 70 CHEMISTRY

- 15655-68  
EFFECT OF CHLORAMPHENICOL ON THE CONCENTRATIONS OF FREE AMINO ACIDS AND AMIDES IN HEALTHY AND CUCUMBER MOSAIC VIRUS (CMV-Y) INFECTED PLANTS.  
O P Sehgal  
Phytopathology 54(8):907  
Aug 1964 464.8 P56  
Amides, Amino acids, Chloramphenicol, Mosaic (cucumbers), Plant biochemistry.
- 15656-68  
SELECTIVE RESIDUE DETERMINATION OF SULFUR-, HALOGEN-, AND PHOSPHORUS-CONTAINING PESTICIDES BY HELIUM-PLASMA EMISSION SPECTROMETRY.  
C A Rache D J Lisk  
Ass Offic Anal Chem J 50(6):1246-1250  
Dec 1967 381 AS7  
Chromatography, Drugs, Pesticide analysis, Pesticide residues, Spectrometry.  
Abstract
- 15657-68  
INFRARED ABSORPTION SPECTRA AND POLYMERIC STRUCTURES OF THREE s-TRIAZINE HERBICIDES AND THEIR METABOLITES.  
J-Y T Chen  
Ass Offic Anal Chem J 50(3):595-600  
Jun 1967 381 AS7  
Herbicides, Infrared spectra, Metabolites, Polymers, S-triazines.  
Abstract
- 15658-68  
ANALYSIS OF DURSBAN IN LIVESTOCK DIPS AND SPRAYS.  
F P Czech  
Ass Offic Anal Chem J 50(4):861-868  
Aug 1967 381 AS7  
Acaricides, Dipping, Dursban, Formulations, Infrared photography, Insecticides, Livestock, Spectrophotometry, Spraying, Ultraviolet rays.  
Abstract:
- 15659-68  
THE RELATION BETWEEN THE COMPOSITION OF PAROTID SALIVA AND MIXED SALIVA IN SHEEP DURING THE INDUCTION OF SODIUM DEFICIENCY.  
A Dobson R N R Kay I McDonald  
Res Vet Sci 1(2):103-110, TABS.  
Apr 1960 41.R R312  
Parotid gland, Saliva, Sheep, Sodium.
- 15660-68  
USE OF CHROMATOGRAPHY FOR SELECTING SYSTEMIC QUATERNARY AMMONIUM FUNGICIDES.  
L V Edgington  
Phytopathology 54(8):892  
Aug 1964 464.8 P56  
Fungicides, Quaternary ammonium compounds.
- 15661-68  
THIN LAYER CHROMATOGRAPHY OF SOME CARBAMATE AND PHENYLUREA PESTICIDES.  
J M Pinocchiaro W R Renson  
Ass Offic Anal Chem J 50(4):888-896  
Aug 1967 381 AS7  
Carbamates, Chromatography, Herbicide residues, Insecticide residues.  
Abstract
- 15662-68  
FACTORS AFFECTING THE VAPOR LOSS OF EPTC FROM SOILS.  
R A Gray A J Weierich  
Weeds 13(2):141-147, TABS.  
Apr 1965 79.8 W41  
Herbicide residues, Soil chemistry, Soils, Vapors.
- 15663-68  
PESTICIDES' UNSUNG ASSISTANTS.  
J W Hammond  
Agr Chem 22(7):22-24  
Jul 1967 381 AG8  
DDT, Formulations, Insecticides, Malathion, Mineral oil, Solvents, Toxaphene.
- 15664-68  
A MECHANISM FOR CONTINUOUS PRODUCTION OF HYDROGEN SULFIDE IN SOILS SUBMERGED IN WATER.  
R R Kabana J W Jordan  
Phytopathology 54(8):897  
Aug 1964 464.8 P56



## BIBLIOGRAPHY

70 15665-68

- Hydrogen sulfide, Soil air, Soil chemistry.
- 15665-68  
SEMI-AUTOMATIC EXTRACTION OF ORGANIC MATERIALS FROM WATER.  
PUBLIC HEALTH SERVICE WATER POLLUTION SURVEILLANCE  
SYSTEM APPLICATIONS AND DEVELOPMENT REPORT 16.  
F K Kawahara J W Eichelberger B H Beid H Stierli  
10 P. (MIMEOGRAPHED)  
Nov 1965  
Aldrin, Chlorinated hydrocarbons, Dieldrin, Endrin, Equipment,  
Insecticide residues, Water pollution.  
Not in Nat. agr. libr.
- 15666-68  
VEGETICILLATE ACTINOMYCETES, PRODUCERS OF POLYENIC ANTIBI-  
OTICS.  
Yu E Konev V A Tsyganov  
Microbiology 35 (4), 516-525 REF  
Jul 1966 448.3 M5E2AE  
Actinomycetes cinnamomeus, Actinomycetes hachijoensis,  
Antibiotics.
- 15667-68  
ACTION AND EFFECTIVENESS OF CERTAIN CLASSES OF HERBICIDES.  
O A Leonard  
10(10):6,8,10. (CONCL.)  
Oct 1967  
Amitrole, Dalapon, Dicamba, Dinitrobutylphenol, Diquat,  
Fenuron, Herbicides,  
Methyl-4-chlorophenoxybutyric acid, 4-(2-, Monuron, Paraquat,  
Pentachlorophenol, Picloram, Plant regulators,  
Sodium arsenite, Spraying, Toxicology,  
Trichlorobenzoic acid, 2,3,6-.
- 15668-68  
WANTED: AN IMAGE FOR AN INDUSTRY.  
L G Hock Jr  
Agr Chem 17(11):105-109  
Nov 1962 381 AG8  
Agricultural chemicals, Public health.
- 15669-68  
MOVEMENT OF NONVOLATILE, DIFFUSIBLE FUNGICIDES THROUGH COL-  
UMNS OF SOIL.  
D E Hunnecke  
Phytopathology 51(9):593-599, TABS.  
Sep 1961 464.8 P56  
Fungicides, Soils.
- 15670-68  
HERBICIDAL METHOD UTILIZING GLYCOL ESTERS OF  
2,3,6-TRICHLOROPHENYLACETIC ACID AS HERBICIDES.  
PATENT 3,325,273.  
J S Newcomer E D Weil E Dorfman  
US Patent Office Offic Gaz 839(2):676  
13 Jun 1967 156.65 OF2  
Herbicides, Patents,  
Trichlorophenylacetic acid, 2,3,6-, glycol esters.
- 15671-68  
ANTIBIOTIC STREPTOGAN AND PROCESS FOR PREPARATION.  
PATENT 3,334,015.  
B Schmitz  
US Patent Office Offic Gaz 841(1):238  
01 Aug 1967 156.65 OF2  
Antibiotics, Patents, Sarcoma, Streptogan,  
Streptomyces streptogansensis.
- 15672-68  
STUDIES ON BETICULO-RUMEN SODIUM AND POTASSIUM  
CONCENTRATIONS AND ELECTRICAL POTENTIALS IN SHEEP.  
A F Sellers A Dobson  
Res Vet Sci 1(2):95-102 TABS.  
Apr 1960 41.8 R312  
Potassium, Beticulum, Sheep, Sodium.
- 15673-68  
ISOLATION AND CHARACTERISATION OF MALPOMBIN.  
N Takasabi R W Curtis  
J Sci Food Agr 12(6):I-270-2  
Jun 1961 382 S012  
Aspergillus, Peptides.
- 15674-68  
ELECTRON CAPTURE GAS CHROMATOGRAPHY.  
12 P. (MIMEOGRAPHED)  
1967  
Chromatography, Humans, Pesticide residues.  
Not in Nat. agr. lib.
- 15675-68  
FUNGAL COMPOSITIONS AND METHODS FOR THEIR USE.  
PATENT 3,370,957.  
J B Wagner T W Humphreys H H Boyse  
US Patent Office Offic Gaz 847(4):1102  
27 Feb 1968 156.65 OF2  
Fungicides, Patents, Thiazolylbenzimidazoles, 2-.
- 15676-68  
SOME BIOCHEMICAL EFFECTS OF ALKYLATING AGENTS.  
G P Wheeler  
Fed Amer Soc Exp Biol Proc 26(3):885-892 REF  
May 1967 442.9 P31P  
Alkylation, Biochemistry, Cells, Culture media, Enzymes,  
Neoplasms, Nitrogen mustards, Proteins.
- 15677-68  
PLASMA ENZYME LEVELS IN CHICKENS, A MEASURE OF DRUG INDUCED  
PATHOLOGY.  
A Zarkow B L Chute Orono University Of Maine  
Avian Dis 4(4):402-413, BIBL. 411-413, TABS.  
Nov 1960 41.8 AV5  
Animal diseases, Blood plasma, Chickens, Drugs, Enzymes.
- 15678-68  
TRANSAMINASES AND DEHYDROGENASES IN CHICKEN PLASMA.  
L S McDaniel H L Chute  
Avian Dis 3(4):407-411  
Nov 1959 41.8 AV5  
Aminotransferases, Blood plasma, Chickens, Dehydrogenases.

## 80 ENGINEERING

- 15679-68  
AN INEXPENSIVE AND EFFECTIVE INDOOR INSECTARY.  
J M Brennan W A Maki  
J Econ Entomol 53(4):685-688  
Aug 1960 421 J822  
Breeding, Insect cages.
- 15680-68  
TISSUE CULTURE AND CHICKEN EMBRYO TECHNIQUES FOR INFECTIOUS LARYNGOTRACHEITIS VIRUS STUDIES.  
T W Chomiak B E Luginbuhl C F Helmboldt  
Avian Dis 4(3):235-246, PLS.  
May 1960 41.8 AV5  
Chickens, Infectious laryngotracheitis virus, Virology.
- 15681-68  
TECHNIQUE FOR GERMINATING UREDOSPORES OF PUCCINIA STRIIFORMIS.  
R G Emge  
Phytopathology 50(7):745-746  
Jul 1963 464.8 P56  
Culture media, Puccinia, Seed germination, Uredospores.
- 15682-68  
DEMONSTRATION OF ANAPLASMA MARGINALE WITH THE FLUORESCENT DYE, ACRIDINE ORANGE; COMPARISONS WITH THE COMPLEMENT-FIXATION TEST AND WRIGHT'S STAIN.  
J H Gainer  
Amer J Vet Res 22(90):882-886  
Sep 1961 41.8 AM3A  
Acridine orange.
- 15683-68  
A SMALL SELF-PROPELLED SPRAYER FOR AGRICULTURAL RESEARCH.  
W G Gehring E D Barris Jr  
Fla Entomol 42(4):169-174, 4 REFS., 2 TABS.  
Dec 1959 420 P662  
Agricultural research, Spraying equipment.
- 15684-68  
A VAPOR TRAPPING APPARATUS FOR DETERMINING THE LOSS OF EPTC AND OTHER HERBICIDES FROM SOILS.  
R A Gray  
Weeds 13(2):138-141, TABS.  
Apr 1965 79.B W41  
Equipment, Herbicide residues, Herbicides, Soils, Vapors.
- 15685-68  
THE CDC SWEEPER, A SIX VOLT MECHANICAL ASPIRATOR FOR COLLECTING ADULT MOSQUITOES. (ABSTRACT).  
B O Hayes G E Kitaguchi R M Mann  
Calif Mosquito Contr Ass Proc Pap 35:121  
1967 428 C763  
Culicidae, Insect collecting equipment.
- 15686-68  
A NEW BLEACHING TECHNIQUE WITH POSSIBLE GENERAL USE IN ENTOMOLOGY.  
C L Judson  
Entomol Soc Amer Ann 56(3):407-408, 5 REFS.  
May 1963 420 EN82  
Decolorizing, Insect eggs.
- 15687-68  
THE USE OF AGAR PLATES AS AN AID FOR THE ISOLATION OF LEPTOSPIRES.  
E E Both D Linder W V Adams  
Amer J Vet Res 22(87):308-312  
Mar 1961 41.8 AM3A
- 15688-68  
A CONSTANT TEMPERATURE BATH FOR POT-GROWN PLANTS.  
A E Steele  
Plant Dis Rep 51(3):171-173  
Mar 1967 1.9 P69P  
Baths, Greenhouse culture, Thermostats, Tomatoes.
- 15689-68  
A WIDE-RANGE VARIABLE TEMPERATURE CABINET FOR BIO-ECOLOGICAL STUDIES.  
E B White P DeBach  
J Econ Entomol 53(6):1030-1034, 6 REFS.  
Dec 1960 421 J822  
Aphelinidae, Chalcidoidea, Hymenoptera, Insect biology, Insect ecology.
- 15690-68  
A VENTILATION UNIT FOR AERATING INSECTARY SLEEVE CAGES.  
G L Pinney  
J Econ Entomol 53(5):959-960, 1 REF.  
Oct 1960 421 J822  
Air flow, Insect cages, Ventilation.
- 15691-68  
A CARDIAC BLEEDING TECHNIQUE FOR SMALL BIRDS.  
D C O'Heara  
Avian Dis 4(3):230-231  
May 1960 41.8 AV5  
Birds, Blood, Heart.

## 90 INDUSTRY

- 15692-68  
 FARM CHEMICALS HANDBOOK. 1968 ED.  
 VAB. PP. MEISTER PUBLISHING CO., WILLOUGHBY, OHIO  
 1968  
 Handbooks, Pesticides.

## Economics

- 15693-68  
 INDIA CAN FEED ITSELF.  
 G Andreasen  
 Agr Chem 20(9):31-32,170  
 Sep 1965 381 AG8  
 Agricultural efficiency, Agricultural outlook,  
 Agricultural policies, India.
- 15694-68  
 OPPORTUNITIES AND CHALLENGES ARE AHEAD FOR FERTILIZER INDUS-  
 TRY.  
 K Constant  
 Agr Chem 20(2):36-41  
 Feb 1965 381 AG8  
 Advertising, Farmers, Fertilizers, Industry, Marketing.

## Regulations

- 15695-68  
 PESTICIDE SAFETY AND USE IN EUROPE.  
 J de Bruin  
 Agr Chem 22(10):26,30-31  
 Oct 1967 361 AG8  
 Europe, Foreign trade, Pesticides.
- 15696-68  
 STANDARDIZATION OF BACILLUS THURINGIENSIS PRODUCTS.  
 HISTORY OF STANDARD.  
 H D Burges  
 Nature 215(5101), 664-665  
 05 Aug 1967 472 N21  
 Biological control (insects), Standardization, Thuricide.
- 15697-68  
 LIABILITY FOR MISUSE OF PESTICIDES.  
 J L Dye  
 Agr Chem 20(9):71-72  
 Sep 1965 381 AG8  
 Pesticides.



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