

TRIBOLIUM INFORMATION BULLETIN

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Bibliography

Anatomy and Histology.....	1
Behavior Studies.....	5
Insect Tissue Culture and Embryology.....	8
Cytology and Electron Microscopy.....	11
Ecology and Population Ecology.....	14
General.....	34
Genetics and Phenotypic Variation.....	39
Insecticides and Insecticide Resistance.....	59
Irradiation and use of Isotopes.....	73
Nutrition.....	81
Parasites and Symbionts of Coleoptera.....	86
Pests.....	95
Physiology and Biochemistry.....	117
Space and Aerial Ecology.....	135
Speciation.....	136
Statistical Methods.....	139
Taxonomic Studies.....	141
Technique.....	148
Teratology.....	154
Current Bibliography.....	157



BIBLIOGRAPHYANATOMY AND HISTOLOGY

- ABBOTT, R. H. and CHAPLAIN, R. A. 1966. Preparation and properties of the contractile element of insect fibrillar muscle. *J. Cell Sci.* 1:311-330.
- AGEE, H. R. 1967. Morphology of the central nervous system of the boll weevil, Anthrenus grandis (Coleoptera:Curculionidae), and some electrophysiological techniques. *Entomol. Soc. Amer. Ann.* 60(4):779-783.
- AIDLEY, D. J. 1967. The excitation of insect skeletal muscles. *Advances Insect Physiol.* 4:1-67.
- ALVAREZ, GUERRA, A. 1966. A comparative study of the structure and biochemical activity of flight muscles from several insect species. *Diss. Abs.* 26:6247.
- ASHHURST, D. E. 1968. The connective tissues of insects. *Ann. Rev. Entomol.* 13:45-74.
- AUBER, J. 1967. Distribution of the two kinds of myofilaments in insect muscles. *Amer. Zool.* 7(3):451-455.
- BIER, K. 1965. Function of the nutritive cells in the merostic insect ovary under special consideration of oogenesis in adephagous Coleoptera. (Ge) *Zool. Jahrb. Abt. f. Allg. Zool. u. Physiol. der Tiere.* 71: 371-384.
- BONHAG, P. F. 1958. Ovarian structure and nitellogenesis in insects. *Annu. Rev. Ent.* 3:137-160.
- BORDEN, J. H. 1968. Antennal morphology of Ips confusus (Coleoptera:Scolytidae). *Entomol. Soc. Amer. Ann.* 61(1):10-13.
- BORDEN, J. H. and WOOD, D. L. 1966. The antennal receptors and olfactory response of Ips confusus (Coleoptera:Scolytidae) to male sex attractant in the laboratory. *Entomol. Soc. Amer. Ann.* 59:253-261.
- BOULTON, P. S. and ROWELL, C. H. F. 1968. Structure and function of the extra-neural sheath in insects. *Nature* 217(5126):379-380.
- BYERS, J. R. 1967. Histology, histochemistry and fine structure of the cryptonephridium of Tenebrio molitor L. *Diss. Abstr., Sect. B*, 28(6):2465B.

- CHELLIAN, S. 1965. The male genitalia of a few predaceous coccinellids (Coleoptera: Coccinellidae) of South India. *Indian J. Entomol.* 27:165-167.
- CROSSLEY, A.C.S. 1965. Transformations in the abdominal muscles of the blue blow-fly, Calliphora erythrocephala (Meig), during metamorphosis. *J. E. bryol. & Expt. Morph.* 14(1):89-110.
- DAHL, E. 1965. Frontal organs and protocerebral neurosecretory systems in Crustacea and Insecta. *Gen. Compar. Endocrinol.* 5:614-617.
- DAJOZ, R. 1964. Anatomy and taxonomic importance of the female genital tracts of ectodermic origin at the Elateridae (Insecta, Coleoptera). (Fr) *Cahiers des Nat. (n.s.)* 20 (3):55-72.
- DE LACHAMBRE, J. 1966. Notes on the histophysiology of epidermic oenocytes of nymphs of Tenebrio molitor L. (Coleoptera, Tenebrionidae). (Fr) *Acad. Sci. Compt. Rend. Ser. D*, 263(10):764-767.
- DIMMOCK, G. 1883. On some glands open externally in insects. *Psyche*.
- DUNKEL, F. V. and BOUSH, G. M. 1968. Studies on the internal anatomy of the black carpet beetle, Attagenus megatoma. *Entomol. Soc. Amer. Ann.* 61(3):755-765.
- GILYAROV, M. S. 1966. Excretory organs of terrestrial arthropods, and the problem of ecto- and entosomatic organs. (Rus) *Zool. Zh.* 45:1323-1335.
- GONZALES, NICOLAS, M. A. 1965. On the morphological distinction of the prepupa of Tenebrio molitor L. (Sp) *Real Soc. Espan. Hist. Natur. Bol. Secc. Biol.* 63:359-361.
- GUPTA, A. P. 1965. The digestive and reproductive systems of the Meloidae (Coleoptera) and their significance in the classification of the family. *Ent. Soc. Amer. Ann.* 58:442-474.
- HAFEEZ, M. A. 1963. A note on the external sexual characters in Latheticus oryzae (Waterh). *Ent. Mon. Mag. Vol. XCIX*, pp. 141-144.
- HAFEEZ, M. A. 1964. The internal morphology of the adult of Tribolium anaphe. *Proc. Roy. ent. Soc. London, A* 39:137.
- HARSHBARGER, J.C., and TAYLOR, R. L. 1968. Neoplasms of insects. *Annu. Rev. Entomol.* 13:159-190.
- HAY, E. D. 1966. *Regeneration*. New York, Holt, Rinehart and Winston, 1966. 148p.

- HERTEL, H. 1966. Structure, form, movement. New York, Reinhold, 1966. 251 p.
- NIEME, F. 1966. Comparative functional anatomy of the abdominal musculature of some male Coleoptera with special consideration of the genital complex. (Ge) Deut. Entomol. Z. (n.s.) 13:1-168.
- HINTON, H. E. 1967. On the spiracles of the larvae of the suborder Nyxophaga (Coleoptera). Australian J. Zool. 15(5):955-959.
- HINTON, H. E. 1967. Structure and ecdysial process of the larval spiracles of the Scarabaeoidea, (albohirtum). Australian J. Zool. 15(5):947-953.
- IUGA, V. G. and ROSCA, A. 1966. Morphology of the abdominal apex of Carabidae compared to that of Coleoptera with an ovipositor. (Fr) Bucharest Mus. Hist. Natur. Grigore Antipa Trav. 6:171-266.
- LAI-FOCK, J. E. I. L. 1967. The repair of wounds to the integument of insects. Diss. Abstr., Sect. B, 27(10):3405B-3406B.
- LE BERRE, J. R. and BOULAY, C. 1965. Applied histology of the whole insect. (Fr) Ann. Epiphyt. 16:45-51.
- LEE, WEN YUNG. 1965. A study of the development of the musculature from the larva to the adult in Tenebrio molitor L. (Tenebrionidae, Coleoptera) Diss. Abs. 26(5):2932.
- LEWIS, D. J. 1965. Internal structural features of some Central American phlebotomine sandflies. Ann. Trop. Med. & Parasitol. 59(3):375-385.
- MACNEILL, N. 1968. On the possible function of the pterostigmata. Entomologist (London) 101(1258):60-63.
- MAISNER, N. 1965. Morphology and biology of Dorytomus melanophthalmus Payk. (Col. Curculionidae). (Ge) Centralbl. Gesamte Forstwesen 82(3):150-169.
- MARCUZZI, G. ITIS -9-1966 p.229. Experimental researches on malpighian tubules of Tenebrionids. Bol. Zool., in press 1965.
- MARTIN, A. R. and VEALE, J. L. 1967. The nervous system at the cellular level. Annu. Rev. Physiol. 29:401-426.
- MARTOJA, R. 1964. Un type particulier d'appareil genital femelle chez les Insectes: les ovarioles adenomorphes du coléoptère Steraspis speciosa (Buprestidae). Bull. Soc. Zool. France 89:614-641.

- MARTICJA, R. 1965. A particular type of female genitalia of the insects: the gland like ovarioles of the Coleoptera Steraspis speciosa (Heterogastrea, Buprestidae). (Fr) Soc. Zool. France, Bull. 89(5/6):614-641.
- MCINDOO, N. E. 1914. The scent producing organ of the honey bee. Proc. Acad. Nat. Sci. Phila. 66:542-555.
- MILLS, R. P and KING, R. C. 1965. The pericardial cells of Drosophila melanogaster. Q. Rev. Biol. 106(3):261-268.
- MORDUE, D. L. 1966. Spectral sensitivity of the compound eye of the boll weevil (Anthonomus grandis) using the electroretinogram. Diss. Abs. 26(7):4041.
- NAKAS, M. HIGASHINO, S. and LOEWENSTEIN, W. R. 1966. Uncoupling of an epithelial cell membrane junction by calcium-ion removal. Science 151 (3706):89-91.
- NEVILLE, A. C. 1965. Circadian organization of chitin in some insect skeletons. Quart. J. Microscop. Sci. 106(4):315-325.
- NICKLE, W. R. 1966. Note on the ovary, rachis, and spermatheca of an insect parasitic nematode, Contortylenchus elongatus Massey, 1960, Nickle, 1963. Helminthol. Soc. Wash. Proc. 33(1):37-40.
- NOIROT, C. and NOIROT-TIMOTHEE, C. A. 1967. A new type of intercellular junction (zonula continua) in the midgut of insects. (Fr.) Acad. Sci. C. R. Ser. D, 264(24):2796-2802.
- PACKARD, A. S. 1895, 1896. The external repugnatorial scent glands of insects. Ent. Soc. 3:110-127; 4:26-32.
- PUCHKOVA, L. V. 1966. Morphology of abdomen in pupae of certain groups of beetles (Coleoptera). (Rus) Entomol. Obozrenie 45:341-353.
- RAMSAY, J. A. 1964. The rectal complex of the mealworm Tenebrio molitor Phil. Trans, R. Soc. Ser. B., 248:279-314.
- RUDALL, K. M. 1965. Skeletal structure in insects. Biochem. Soc. Symp. 25: 83-92.
- ROTH, L. M. and WILLIS, E. R. 1951. Hygooreceptoes in adults of Tribolium (Coleoptera, Tenebrionidae). J. Exp. Zool. 114:527-570.
- USHERWOOD, P.N.R. 1967. Insect neuromuscular mechanisms. Amer. Zool. 7(3):553-582.
- WALD, G. 1968. Single and multiple visual systems in arthropods. J. Gen. Physiol. 51(2):125-156.
- WOLSKY, A. and ZAMORA, R. 1960. The structure of the "plant" eye of Latheticus oryzae. Amer. Nat. 94:309-312.

BEHAVIOR STUDIES

- AMOS, T. G. 1965. Kinesis, Nature, 208:908-909.
- AMOS, T. G. Oct./Dec. 1967, pub. Mar. 30, 1968. Some observations on locomotory activity of Carpophilus hemipterus L. and C. dimidiatus F. (Col., Nitidulidae). Entomol. Mon. Mag. 103(1241/1243):241-244.
- AMOS, T. G. 1967. The effect of antennectomy on the humidity reactions of Carpophilus dimidiatus and C. hemipterus (Coleoptera, Nitidulidae). Ent. exp. appl. 10:1-6.
- AMOS, T. G. 1968. Some observations on Oryzaepphilus surinamensis L. (Col. Silvanidae) in a temperature-moisture gradient. Entomologist (London) 101(1258):67-70
- AMOS, T. G. and WATERHOUSE, F. L. 1967. Phasic behaviour shown by two Carpophilus species (Coleoptera, Nitidulidae) in various humidity gradients and its ecological significance. Oikos, 18:345-350.
- AMOS, T. G. WATERHOUSE, F. L. and CHETHAM, NORMA A. 1968. Temporal distribution of Tribolium castaneum Herbst and Cadra cautella Walker on temperature gradients. Experientia 24:86-87.
- AMOS, T. G., WATERHOUSE, F. L. and DICKER, N. A. 1968. Preliminary observation on the distribution and biology of Tribolium castaneum on a temperature gradient. Tribolium Inform. Bull. 11
- ARNETT, R. H. 1968. Measurement of adventitious sounds produced by some stored-product insects. Entomol. Soc. Amer. Ann. 61(5):1170-1172.
- BARTLETT, A. C. HOOKER, P. A. and MARDEE, D. D. 1968. Behavior of irradiated boll weevils (Anthonomus grandis). I-II. J. Econ. Entomol. 61(6): 1677-1684.
- BOND, J. A. 1961. Aspects of dispersion in two species of flour beetles. Unpubl. Ph.D. dissertation, University of Chicago.
- CHASSÉ, J. L. 1965. Contribution à l'étude quantitative de la dispersion chez Tribolium confusum. PhD Thesis, Faculté de Sciences, Université de Lyon, Lyon, France.
- CHERNYSHEV, V. B. 1965. Analysis of the diurnal cycle exemplified by the behavior of Trogoderma glabrum Herbst. (Rus) Ahur. Obshch. Biol. 26 (5):577-584.
- DAVIS, D. E. 1966. Integral animal behavior. New York, Macmillan, 118 p.

- GHENT, A. W. 1963. Studies of behavior of the Tribolium flour beetles. I. Contrasting responses of T. castaneum and T. confusum to fresh and conditioned flours. Ecology 44:269-283.
- GHENT, A. W. 1966. Studies of behavior of the Tribolium flour beetles. II. Distributions in depth of Tribolium castaneum and Tribolium confusum in fractionable shell vials. Ecology 47(3):355-367.
- GRAHAM, K. and MOECK, I. S. 1968. The aligning effect of light flicker on phototaxis of the ambrosia beetle Trypodendron lineatum (Oliver). Can. J. Zool. 46(3):602-603.
- GRAHAM, W. M., ONYEARU, A. K. and WATERHOUSE, F. L. 1965. Temperature and moisture gradient equipment. Can. Entomol. 97(8):880-886. Tribolium examined.
- HINDE, R. A. 1966. Animal behaviour; a synthesis of ethology and comparative psychology. New York, McGraw-Hill, 1966. 534 p.
- HOKYO, N. and KIRITANI, K. 1966. Oviposition behavior of two egg parasites, Asolcus mitsukurii Ashmead and Telenomus nakagawai Watanabe (Hym., Proctotrupidae, Scelionidae). Entomophaga 11:27-37.
- HOKYO, N., SHIGA and NAKASUJI, F. 1966. The effect of intra- and inter-specific conditioning of host eggs on the ovipositional behavior of the two scelionid egg parasites of the southern green stink bug, Nezara viridula L. Jap. J. Ecol. 16:67-71.
- JONES, B. E. 1967. Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae) observed flying from an unusual habitat in Britain. J. stored Prod. Res. 3:185-188.
- LEFKOVITCH, L. P. 1966. The effects of emigration on populations of Lasioderma serricorne (F.) (Coleoptera:Anobiidae). Oikos 15:200-210.
- LEARNER, I. M. and INOUE, N. 1968. Behavior genetics with special reference to maze-running of Tribolium p. 51-62. Dronamraju, K. R. Ed. Haldane and Modern Biology. The Johns Hopkins Press, Maryland 384pp.
- MARLER, P. and HAMILTON, W. J. 1966. Mechanisms of animal behavior. New York, Wiley.
- MATHIEU, J. 1967. Mating behavior of five species of lucanidal (Coleoptera:Insecta.) Am. Zool. 7L206 (Abs.)
- MAZOKHIN-PORSHNYAKOV, G. A. and VISHNEVSKAYA, T. M. 1965. Proof of the ability of insects to distinguish the circle, the triangle and other simple figures. 10p.

- McDONALD, D. J. 1968. Mobility in Tribolium confusum. Ecology 49:770-772.
- MITLIN, N. and REILY, V. L. and GAST, R. T. 1966. Color preference in the feeding behavior of the boll weevil. ITIS-9: p. 173.
- MITLIN, N., REILY, V. L. and GAST, R. T. 1966. Color preference in the feeding behavior of the boll weevil (Anthonomus grandis). J. Econ. Entomol. 59(3):598-599.
- NAYLOR, A. F. 1965. Dispersal responses of female flour beetles, Tribolium confusum, to presence of larvae. Ecology 46 (3):341-343.
- OGDEN, J. C. 1967. An experimental and genetic analysis of dispersal behavior in Tribolium. Ph.D. thesis Stanford University. 86 p.
- PRUS, T. 1966. Emigrational ability and surface numbers of adult beetles in 12 strains of Tribolium confusum Duval and T. castaneum Herbst (Coleoptera, Tenebrionidae). Ekol. Pol. Ser. A. 14:548-588.
- ROEDER, K. D. 1967. Nerve cells and insect behavior. Rev. ed. Cambridge, Harvard University Press. 1967. 238 p.
No. 4): Includes biological clocks.
- STANLEY, M. S. M. and GRUNDMANN, A. W. 1965. Observations on the morphology and sexual behavior of Tribolium confusum (Coleoptera: Tenebrionidae). Kans. Ent. Soc. J. 38 (1):10-18.
- SURTEES, G. 1965. Ecological significance and practical implications of behavior patterns determining the spatial structure of insect populations in stored grain. Bull. Entomol. Res. 56 (1):201-213.
- SURTEES, G. 1966. Locomotory behavior of pyrethrum-resistant and susceptible strains of grain weevil, Sitophilus granarius (L.) Anim. Behav. 14:201-203.
- VAN DER SCHAAF, PAUL. 1968. Resistance of corn varieties to infestation of the larger rice weevil, Sitophilus zeamais. Motschulsky. Master's Thesis. Kansas State University, Manhattan, Kansas.
- WOJCIK, D. P. 1968. Tests for audible and ultrasonic sound production by stored-product insects. J. Econ. Entomol. 61(5):1414-1417.
- ZYROMSKA-RUDZKA, H. 1966. Abundance and emigrations of Tribolium in a laboratory model Ekologia Polska Ser. A. 14:491-518.
- ZYROMSKA-RUDZKA, H. 1966. An appreciation of the laboratory set for investigating the emigration activity of Tribolium. Ekologia Polska (40 14:492-518.

INSECT TISSUE CULTURE
AND EMBRYOLOGY

- ANDERSON, D. T. 1966. The comparative embryology of the Diptera. *Annu. Rev. Entomol.* 11:23-46.
- BIJJANI, Y. 1954. Studies in the embryological development of the mealworm, *Tenebrio molitor* Linné (Tenebrionidae, Coleoptera). Republished Ph.D. dissertation. University of Illinois, Urbana, Illinois.
- BLAZEJEWSKI, F. 1965. Remarks on wing development in the Meligethini (Col., Nitidulidae). (*Ge*) *Pol. Pismo Entomol.* 35(2):391-401.
- BOGOYAVLENSKII, K. S. 1932. On formed elements of insect blood. 23 p. Ref. Transl. 16502 Translation from *Arkhiv Anatomii, Gistologii i Embriologii* 11: 361-387.
- CHASE, A. M. 1967. Effects of actinomycin D on development in pupae of *Tenebrio molitor*. *Nature* 215(5109):1516-1517.
- COUNCE, S. J. 1966. Culture of insect embryos in vitro. *N. Y. Acad. Sci, Ann.* 139(1):65-78.
- DAVYDOVA, E. D. 1967. Effect of removal and implantation of adjoining and cardial bodies on the development of wings and the metamorphosis in *Lampyrus noctilica* L. (Coleoptera, Lampyridae). (Rus) *Akad. Nauk SSSR. DOKL.* 172:1218-1221.
- GURDON, J. B. and WOODLAND, H. R. 1968. The cytoplasmic control of nuclear activity in animal development. *Cambridge Phil Soc. Biol. Rev.* 43(2):233-267.
- JOBIN, L. et L. HUOT. 1966. Aperçu du développement embryonnaire et post-embryonnaire du Grillon domestique. *Acheta domesticus* L. *Naturaliste Can.* 93:701-718.
- KELLY, R. P. and LUDWIG, D. 1967. Distribution of nitrogen during the embryonic development of the mealworm, *Tenebrio molitor* Linnaeus. *N. Y. Entomol. Soc.* 75(1):45-53.
- KINSELLA, J. E. 1966. General metabolism of the hexapod embryo with particular reference to lipids. *Compar. Biochem. Physiol.* 19:291-304.

- KORSCHOLT, E. and HEIDER, K. 1899. Textbook of the Embryology of Invertebrates. Vol. e. Macmillan Co. New York 441 p.
- LAVERDURE, A. M. 1967. In vitro culture of Tenebrio molitor (Coleoptera) ovaries; the importance of composition of culture media on survival, growth and vitellogenesis. (Fr) Acad. Sci. Compt. Rend. Ser. D, 265(6):505-507.
- LENDER, T. and LAVERDURE, A. M. 1967. In vitro culture of Tenebrio molitor (Coleoptera) ovaries; growth and vitellogenesis. (Fr) Acad. Sci. Compt. Rend. Ser. D, 265(5):451-454.
- LOCKSHIN, R. A. 1966. Insect embryogenesis; macromolecular synthesis during early development. Science 154(3750):775-776. In Leptinotarsa decemlineata, Tenebrio molitor and Dermestes maculata.
- LUDWIG, D. and RAMAZZOTTO, L. J. 1965. Energy sources during embryogenesis of the yellow mealworm, Tenebrio molitor. Ent. Soc. Amer. Ann. 58: 543-546.
- MCLAUGHLIN, R. E. and LUSK, J. W. 1967. Morphogenesis of testes and ovaries in the boll weevil, Anthonomus grandis (Coleoptera: Curculionidae). Entomol. Soc. Amer. Ann. 60:120-126.
- MITSUHASHI, J. 1965. Insect tissue culture, (Ja) Biol. Sci. 17(3):105-117.
- NORLANDER, R. H. and EDWARDS, J. S. 1968. Morphological cell death in the post-embryonic development of the insect optic lobes. Nature 218(5143):780-781.
- PAJNI, H. R. 1965. Metamorphosis of the salivary glands in Callosobruchus maculatus (F.) (Bruchidae; Coleoptera). Panjab University Res. Bull. (n.s.) 16:265-266.
- RAHMAN, S. B., PERLMAN, D. and RISTICH, S. S. 1966. Growth of insect cells in tissue culture (31583). Soc. Exp. Biol. Med. Proc. 123:711.
- REMPEL, J. G. and CHURCH, N. S. 1965. The embryology of Lytta viridana Le Conte (Coleoptera: Meloidae). I. Maturation, fertilization, and cleavage. Canad. J. Zool. 43:915-925.
- SEIDEL, F. 1966. The egg system of insects and the dynamism of their activation. (Ge) Deut. Zool. Ges. Verhandl. 1965:166-188.
- SEITZ, K. A. 1966. Normal development of anachnid embryo Cupiennius salei Keyserling, and its regulatory capacity after X-ray radiation. (Ge) Zool. Jahrbucher Abt. Anat. Ontog. Tiere 83:327-447.
- SMRECZYNSKI, S. 1932. Embryologische Untersuchungen über die Zusammensetzung des Kippes von Silpha obscura (Coleoptera). Zool. Jahrb. (Anat) 55:233-314.

- STANLEY, M. S. M. 1966. The development of the confused flour beetle, Tribolium confusum Du Val. Diss. Abs. 26:6254.
- STANLEY, M.S.M. 1965. The development of the confused flour beetle, Tribolium confusum. Du Val. Ph.D. Thesis, University of Utah, 212 p.
- ULLMANN, S. L. 1964. The origin and structure of the mesoderm and the formation of the coelomic sacs in Tenebrio molitor L. (Insecta, Coleoptera.) Roy. Soc. Philos. Trans. Ser. B, Biol. Sci. 248(747) : 245-277.
- ULLMANN, S. L., 1967. The development of the nervous system and other ectodermal derivatives in Tenebrio molitor L. (Insecta, Coleoptera). Roy. Soc. Philos. Trans. Ser. B. Biol. Sci. 252:1-25.
- ZAKHVATKIN, YU. A. 1967. Embryonic development of Phyllodecta vitellinae L. (Coleoptera, Chrysomelidae). (Rus) Zool. Zh. 46:88-97.
- ZIELINSKA, Z. M. 1965. Culture of invertebrate tissues. (Pol) Kosmos, Ser. A, Biol. 14:471-486.

CYTOLOGY AND ELECTRON
MICROSCOPY

- BECK, J. S. 1962. Cell differentiation and radiopathology in the wing of Tribolium Confusum. University of California, Lawrence Radiation Laboratory Report 10211;122-159.
- BEERMANN, W. 1965. Operative organization of chromosomes. (Ge) Naturwissenschaften 52:365-375. Includes Drosophila melanogaster.
- BOUIX, G. 1965. Chromosome types of five species of Carabidae (Coleoptera); a preliminary study of chromosome evolution in this family. (Fr) Arch. Zool. Exp. Gen. 106:671-692. English summary.
- BOYES, J. W. 1965. Cytotaxonomy of insects. Entomol. Soc. Quebec. Ann. 10: 99-108.
- CAMERON, M. L. 1965. Some details of ultrastructure in the development of flagellar fibers of the Tenebrio molitor sperm. Canada. J. Zool. 43:1005-1010.
- CRUMPACKER, D. W. and KASTRITSIS, C. D. 1967. A new gene arrangement in the third chromosome of Drosophila pseudoobscura. J. Hered. 58(1):3-6.
- GASSNER, G. and BRELAND, O. P. 1967. A phase-contrast study of the spermatozoa of a tiger beetle (Cincindela belfragei) (Coleoptera:Curculionidae). Entomol. Soc. Amer. Ann. 60:244-248.
- JOHN, B. and SHAW, D. D. 1967. Karyotype Variation in Dermestid beetles. Chromosoma (Berl.)
- KATO, K. 1966. Cytochemical and electron microscope study of the elimination chromatin in Dytiscidae. Diss. Abs. 26:4127-4128.
- MATSUZAKI, M. 1965. Electron microscopic studies on the early developments of various insect eggs. II. On the changes of the nurse cells and the nutritive substances in telotrophic ovaries. (Ja) New Entomol. 14:1-9. English summary. Epilachna vigintioctomaculata and Cicadella ferruginea.
- MOECK, H. A. 1968. Electron microscopic studies of antennal sensilla in the ambrosia beetle Trypodendron lineatum (Oliver) (Scolytidae). Can. J. Zool. 46(3):521-556.
- NAIR, K. S. and KARNAVAR, G. K. 1968. A cytological study of changes in the fat body of Trogoderma granarium during metamorphosis with special reference to the proteinaceous globules. J. Insect Physiol. 14(11): 1651-1659.
- OATLEY, C. W., NIXON, W. C. and PEASE, R. F. W. 1965. Scanning electron microscopy. Adv. Electronics and Electron Physics. 21:181-247.

- PEASE, R. F. W. and HAYES, T. L. 1966. Some biological applications of the scanning electron microscope. Proc. VI Int. Congr. Electron Microscopy, Kyoto. I: 19-20.
- PEASE, R. F. W. and HAYES, T. L. 1966. Scanning electron microscopy of biological material. Nature (London) 220:1049.
- PEASE, R. F. W., HAYES, T. L., CAMP, A. S. and AMER, N.M. 1966. Electron microscopy of living insects. Science 154:1185-1186.
- PEASE, R. F. W., HAYES, T. L. and McDONALD 1966. Applications of the scanning electron microscope to biologic investigations. Lab. Investig. 15: 1320-1326.
- PEASE, R. F. W. and NIXON, W. C. 1965. High resolution scanning electron microscopy. J. Scientific Instr. 42:81-85.
- PURCELL, C. M., and VIRKKI, N. 1966. Two *Trox* karyotypes differing radically in the location of centromeres. P. R. Univer. J. Agr. 50(2):158-160.
- RIEFFEL, S. M. 1965. The differentiation and behavior of the chromosomes in the germ line of *Sciara coprophila*. Diss. Abs. 26(5):2427.
- ROBERTSON, J. G. 1966. The chromosomes of bisexual and parthenogenetic species of *Calligrapha* (Coleoptera:Chrysomelidae) with notes on sex ratio, abundance and egg number. Can. J. Genet. Cytol. 8:695-732.
- SANDERSON, A. R. 1966/1967, pub. 1968. Cytological studies of stored product insects. I. *Caryedon gonagra* (F.) (Bruchidae). Roy. Soc. Edin. Proc. Sect. B, Biol. 70(2):107-114.
- SHAW, D. D. 1968. Selection for supernumerary Y-chromosomes in *Deomestes maculatus* (Coleoptera:Dermaptera). Can. J. Genet. Cytol. 10:54-62.
- SINGH, S. B. and MUSGRAVE, A. J. 1966. Some studies on the chromatin and cell wall of the mycetomal micro-organisms of *Sitophilus granarius* (L.) (Coleoptera). J. Cell Sci. 1:175-180.
- SMITH, S. G. 1965. Heterochromatin, colchicine, and karyotype. Chromosoma 16: 162-165.
- SMITH, S. G. 1965. a. Cytological species-separation in Asiatic *Exochomus* (Coleoptera:Coccinellidae). Can. J. Genet. Cytol. 7:363-373.
- SMITH, S. G. 1965. b. *Chilocarus similis* Rossi (Coleoptera:Coccinellidae): disinterment and case history. Science 148:1614-1616.
- SMITH, S. G. 1966. a. Natural hybridization in the coccinellid genus *Chilocarus*. Chromosoma 18:380-406.
- SMITH, S. G. 1966. Cytological species-separation in Asiatic *Exochomus* (Coleoptera: Coccinellidae): A validation. Can. J. Genet. Cytol. 8:744-745.

- SOKOLOFF, A., HAYES, T. L., PEASE, R. F. W. and ACKERMANN, M. 1967. Tribolium castaneum: morphology of "cucreate" revealed by the scanning electron microscope. *Science* 157:443-445.
- SOTELO, J. R. and WETTSTEIN, R. 1966. Fine structure of meiotic chromosomes: comparative study of nine species of insects. *Chromosoma* 20:234-250.
- SUOMALAINEN, E. 1966. The first known case of polyploidy in a parthenogenetic curculionid native of America. *Hereditas* 56: 213-216.
- SVIDERSKU, V. L. 1965. Recent data on the thin structure and innervation of the muscular fibers in insects (Insecta): locomotor muscles. (Rus) *Ent. Obozr.* 44(2):272-282.
- TINYAKOV, G. G. 1965. Chromosome maps of salivary gland of Drosophila funebris. (Rus) *Moskov. Obshch. Isp. Prirody. B. Otd. Biol.* 70:111-114.
- TAKENOUCHE, Y. 1965. Chromosome survey in thirty-four species of bisexual and parthenogenetic weevils of Canada. *Can. J. Genet. Cytol.* 7(4):663-687.
- VAGO, C., BERGOIN, M., DEVAUCHELLE, G., and DUTHOIT, J. L. 1968. Electron microscope study of the inclusion of spindle virus in Coleoptera. (Fr). *Acad. Sci. C. R. Ser. D*, 226(20):2126-2128.
- VIRKKI, N. 1965. Chromosomes of certain anthribid and brentid beetles from El Salvador. *Helsingfors. Suomalainen Tiedeakatemia Toimituksia. Ser. A, IV. Biol.* 83, 11p.
- VIRKKI, N. 1968. Regular segregation of seven asynaptic sex chromosomes in the male of Asphaera daniela bechyne (Coleoptera, Alticidae). *Caryologia* 21(1):47-51.
- VIRKKI, N. and PURCELL, C. M. 1965. The lowest chromosome number in Coleoptera. *P. R. Univ. J. Agr.* 49(3):386-387.
- WAGONER, D. E. 1965. The frequency of effective breakage of heterochromatin in Drosophila melanogaster. *Diss. Abs.* 26(5):2938.
- WAHRMAN, J. 1966. A carabid beetle (Graphipterus serrator) with only eight chromosomes. *Heredity* 21: 154-159.
- WEBBER, F. 1967. Polymorphism of a chromosome within the ground beetles populations in Carabus auronitens Fabr. *Experientia.* 23:257-258.
- WEBBER, F. 1968. Intraspecific variation of the heterochromatic arm of a chromosome in the genus Carabus auronitens L. (Coleoptera). (Ge) *Chromosoma* 23(3):288-308.
- ZIMMERING, S. and FANUCCI, A. J. 1965. Assortment of non-randomly disjoined chromatids. *Canad. J. Genet. and Cytol.* 7(2):250-253. Drosophila melanogaster studied.

ECOLOGY AND
POPULATION ECOLOGY

- ADEYEMI, S. A. O. 1968. A laboratory study of competition between Tribolium castaneum (Hbst.) (Coleoptera, Tenebrionidae) and three moth species. Bull. Entomol. Res. 58(1):131-45.
- AKADEMIYA NAUK SSSR. 1966. Ekologiya i fiziologiya diapauzy koloradskogo zhuka (Leptinotarsa decemlineata Say.) Ecology and physiology of Colorado potato beetle diapause (Leptinotarsa decemlineata Say). Moskva, Nauka.
- ANDERSON, N. H. 1966. Depressant effect of moonlight on activity of aquatic insects. Nature (London) 209 (5020): 319-320.
- ARZAMASOV, I. T. 1966. Dependence of co-existence ratios of insectivorous parasiticoenosis members. (Rus) Akad. Nauk Belourssk. SSR. Dokl. 11(5):468-471.
- ASAHINA, E. 1966. Freezing and frost resistance in insects. In Merryman, H.T., ed. Cryobiology, p 451-586.
- ATALLAH, Y. H. 1966. Ecological and nutritional studies on Coleomegilla maculata De Geer (Coleoptera:Coccinellidae). II The effects of different population densities and sex ratios on oviposition. J. Econ. Entomol. 59 (5):1179-1180.
- ATALLAH, Y.H. and KILLEBREW, R. 1967. Ecological nutritional studies on Coleomegilla maculata (Coleoptera: Coccinellidae). IV. Amino acid requirements of the adults determined by the use of C¹⁴-labelled acetate. Entomol. Soc. Amer. Ann. 60:186-188.
- ATALLAH, Y. H. and NEWSON, L. D. 1966. Ecological and nutritional studies on Coleomegilla maculata De Geer (Coleoptera:Coccinellidae). I. The development of an artificial diet and a laboratory rearing technique. J. Econ. Entomol. 59(5):1173-1179.
- AVIDOV, Z., APPLEBAUM, S. W. and BERLINGER, M. J. 1965. Physiological aspects of host specificity in the Bruchidae. II. Ovipositional preference and behaviour of Callosobruchus chinensis L. Entomol. Exp. Appl. 8:96-106.
- BANERJEE, B. 1966. Critical application of logistic principle on the laboratory population of Anthrenus flavipes Lec. indian J. Entomol. 28:359-364
- BANO, A. GUNDU RAE, H. R. and MAJUINDER, S.K. 1966. Food preferences of Sitophilus, Tribolium and Bruchus Proc. 2nd All-Ind. Cong. Zool. Varanasi (1962) 2:393-397.
- BAKER, H, G. and HURD, P. D. 1968. Intrafloral ecology. Annu. Rev. Entomol. 13:385-414.

- BARRERA, A. 1965. Coleópteras escolopa vísitas de mamíferos. *Crenba, Mex.* 23:201-206.
- BARTLETT, A. C. 1967. Genetic markers in the boll weevil (*Anthonomus grandis*) J. *Hered.* 58(4):159-163.
- BAZYKIN, A. D. 1967. On the comparative effectiveness of some methods of the population density regulation. (Rus) *Zhur. Obshch. Biol.* 28(4): 463-466.
- BECK, S. D. 1968. *Insect photoperiodism* New York, Academic Press, 1968. 288p. Bibliography, p. 240-265.
- BELSHE, J. F. 1968. The effects of inter-species copulation on the fecundity and fertility of *Tribolium* (Coleoptera, Tenebrionidae). *Diss. Abstr., Sect. B*, 28(9):3921B.
- BLAZEJEWSKA, A. 1965. The influence of starvation of larvae upon the development of ovaries in Colorado beetle--*Leptinotarsa decemlineata* Say (Col., Chrysomelidae). (Pol) *Pol. Pismo Entomol. Ser. B*, 3/4:209-215.
- BOND, J. A. 1961. Aspects of dispersion in two species of flour beetles. Unpublished doctoral dissertation. University of Chicago.
- BORDEN, J. H. 1967. Factors influencing the response of *Ips confusus* (Coleoptera, Scolytidae) to male attractant. *Can. Entomol.* 99(11):1164-1193.
- BRANSON, T. F. and ORTMAN, E. E. 1967. Fertility of western corn rootworm (*Diabrotica virgifera*) reared as larvae on alternate hosts. *J. Econ. Entomol.* 60:595.
- BROWER, L. P. 1969. Ecological Chemistry. *Sci. American.* 220:22-29.
- BROWER, L. P., BROWER, J. VAN Z., and CORVINO, J. M. 1967. *Proc. Nat. Acad. Sci.* 57:893-898.
- BROWER, L. P., RYERSON, W.M., CUPPINGER, L. L. and GLAZIER, S. C. 1968. Ecological chemistry and the palatability spectrum. *Science* 161:1349-1350.
- BUCHNER, P. Endosymbiosis of animals with plant microorganisms. *Rev.* 909p. Bibliography p. 839-889.
- BUROV, V. M. 1967. The role of population density in the dynamics of the pea beetle *Bruchus pisorum* L. (Coleoptera, Bruchidae) abundance. (Rus) *Zool. Zh.* 46(9):1357-1361.
- BUTLER, P. M. 1949. Observations on the biology of *Palsrua natzeturgi* Wissman with comparative notes on Tenebrionidae in general (Coleoptera). *Trans. R. Ent. Sci. London* 100. 249-273.
- CAMPBELL, J. M. 1966. Sexual behavior in the genus *Androchirus* (Coleoptera: Alleculidae). *Entomol. Soc. Wash. Proc.* 68(3):258-264.

- CARLE, P. 1965. An experimental analysis of the factors conditioning the fecundity of the bean weevil (Acanthoscelides obtectus Say). (Fr) Ann. Epiphyt 16:215-249.
- CHAUDHRY, H. S. and KAPOOR, R. P. D. 1968. Effect of relative humidity on the developmental stages of Tribolium castaneum (Coleoptera:Tenebrionidae) Entomol. Soc. Amer. Ann. 61(2):290-292.
- CHAUVIN, R. 1965. Recent developments in the ecology of insects, especially in its relation to the ethology. (Fr) Ann. Biol. 69:585-626.
- CHAUVIN, R. 1967. The world of an insect. New York, McGraw-Hill. 1967. 256 p.
- CLARKE, K. U. 1967. Insects and temperature. In Rose, A. H., ed. Thermobiology, p. 293-353.
- CLARK, L. R. et al. 1967. Ecology of insect populations in theory and practice (Methuen). Barnes and Noble, New York.
- CLOUDSLEY-THOMPSON, J. L. 1965. Animal conflict and adaptation. Chester Springs, Pennsylvania, Dufour Editions, 1965. 160 p.
- COHEN, B. 1968. The influence of larval crowding on the development time of populations of Drosophila melanogaster on chemically defined medium. Can. J. Zool. 46(3):492-497.
- COOMBS, C. W. and WOODROFFE, G. E. 1965. Some factors affecting the longevity and oviposition of Ptinus tectus Boieldieu (Coleoptera, Ptinidae) which have relevance to succession among grain beetles. J. Stored Prod. Res. 1(2):111-127.
- CRESS, D. C. 1966. Observations on the mating habits of Pasimachus elongatus (Coleoptera:Carabidae). Kans. Entomol. Soc. J. 39(2):231-232.
- CROSS, W. H. and MITCHELL, H. C. 1966. Mating behavior of the female boll weevil (Anthonomus grandis). J. Econ. Entomo. 59:1503-1507.
- CURRIE, J. E. 1967. Some effects of temperature and humidity on the rates of developments, mortality and oviposition of Cryptolestes pusillus (Schonherr) (Coleoptera, Cucujidae). J. Stored Prod. Res. 3(2): 97-108.
- DANILEVSKII, A. S., GORYSHIN, N.I. and TYSHCHENKO, V. P. 1968. Endogenous rhythms and the problem of photoperiodism in insects. (Rus) Leningr. Univ. Vestnik. Ser. Biol. 2:39-45.
- DAVEY, K. G. 1965. The physiology of reproduction in insects. Entomol. Soc. Quebec. Ann. 10:13-25.

- DAVID, J., BOULETREAU, M. Contribution a l'etude de la biologie et de l'ecologie d'un coleoptere entomophage: Xylodrepa quadripunctata (Schreb.) (Silphidae) Bull. Soc. Lim. Lyon.
- DAWSON, P. S. 1966. Developmental rate and competitive ability in Tribolium. Evolution 20:104-116.
- DAWSON, P. S. 1967. Developmental rate and competitive ability in Tribolium. II. Changes in competitive ability following further selection for developmental rate. Evolution 21(2):292-298.
- DAWSON, P. S. 1967. Interspecific competition, egg cannibalism and the length of larval instars in Tribolium. Evolution 21(4):857-858.
- DAWSON, P. S. 1968. Xenocide, suicide, and cannibalism in flour beetles. Amer. Natur. 102(924):97-105.
- DAWSON, P. S. and LERNER, I. M. 1966. The founder principle and competitive ability of Tribolium. Nat. Acad. Sci. Proc. 55:1114-1117.
- DEAL, J. 1941. The temperature preferendum of certain insects. J. Anim. Ecol. 10:323-356.
- DEBACH, P. 1965. Some biological and ecological phenomena associated with colonizing entomophagous insects. In International Union of Biological Sciences Symposia on General Biology, 1, Asilomar, Calif., 1964. The genetics of colonizing species, proceedings, p. 287-306,
- DEBACH, P. 1966. The competitive displacement and coexistence principles. Annu. Rev. Entomol. 11:183-212.
- DETHIER, V. G. 1968. To each his taste. Entomol. Soc. Amer. Bull. 14(1):10-14. Ref.
- DYTE, C. E. 1965. Studies on insect infestations in the machinery of three English flour mills in relation to seasonal temperature changes. J. Stored Prod. Res. 1:129-144.
- ECKSTEIN, K. 1934. Zur Biologie des Mehlkäfers Tenbrio molitor L. Mitt. ges. Vorratschutz 10:23-24.
- EDNEY, E. B. 1967. Water balance in desert arthropods. Science 156:1059-1066.
- KHRLICH, P. R. and BIRCH, L. C. 1967. The balance of nature and population control. Amer. Natur. 101(918):97-107.
- EISNER, T. 1966. Defensive secretions of arthropods. Science 153:1341-1350.
- EISNER, T. and MEINWALD, J. 1966. Defensive secretions of arthropods. Science 153:1341-1350.

- EISNER, T., MEINWALD, Y. C. ALSOP, D. W., and CARHEL, J. E. 1968. Defense mechanisms of Arthropods. XXI. Formic acid and n-Nonyl acetate in the defensive spray of two species of Heliomorhoides. Entomol. Soc. Amer. Ann. 61(3):610-613.
- EL HARIRI, G. 1966. Laboratory studies on the reproduction of Adalia bipunctata (Coleoptera, Coccinellidae). Entomol. Exp. Appl. 9(2):200-204.
- EL-KIFL, A. H. 1965. Effect of soil type on the soil arthropod and annelid fauna. Agr. Res. Rev. 43(4):127-139.
- ELTON, C. S. 1966. The pattern of animal communities. London, Methuen, 432 p.
- FARKAS, J. 1965. The effect of food moisture on the increase of some storage insect and mite pests. (Hu) Budapest. Központi Élelmiszeripari Kutatóintézet Közlem. 1:14-18.
- FARKAS, J. 1966. The effect of hydrature in foodstuffs on the reproduction of some pests and mites damaging stored products. Acta. Biol. 16:217-225.
- FOURIE, G. J. J. 1967. The influence of certain factors on the fecundity of Sitophilus oryzae. (L.). S. Afr. J. Agr. Sci. 10(2):331-334.
- FOX, I., and BAYONA, I. G. 1968. Alphitobius laevigatus, a predator on flea larvae. J. Econ. Entomol. 61(3):877.
- FRANCKE-GROSMANN, H. 1965. A symbiosis organ in the bark beetle Dendroctonus frontalis Zimm. (Coleoptera, Scolytidae). (Ge) Naturwissenschaften 52:143.
- FRANZ, J. M. 1965. Quality and intraspecific competition in the process of regulating insect populations. (Ge) Z. f. Angew. Ento. 55(4):319-325.
- FRIEDERICHS, K. 1967. Thoughts on the balance of nature and some other basic concepts. (Ge) Anz. Schadlingkunde 40(1):1-8.
- FUJII, K. 1965. Studies on interspecies competition between the azuki bean weevil and the southern cowpea weevil. 1. The reversal in competition result. Res. Popul. Ecol. 7:43-51.
- FUJII, K. 1965. A statistical model of the competition curve. Res. Population Ecol. 7(2):118-125.

- GAST, R. T. 1966. Oviposition and fecundity of boll weevils in mass-rearing laboratory cultures. *J. Econ. Entomol.* 59(1):173-176.
- GAST, R. T. and LANDIN, M. 1966. Adult boll weevils (*Anthonomus grandis*) and egg marked with dye fed in larval diet. *J. Econ. Entomol.* 59(2): 474-475.
- OENTRY, J. W. and GERBERG, E. J. 1968. Dipterous eggs as food for adult Coccinellidae (Coleoptera:Coccinellidae.) *Entomo. Soc. Wash. Proc.* 70(2):142.
- GILBERT, E. E. 1965. Infra-red time and tunnelling studies of *Tribolium confusum*. *Bull. Ecol. Soc. Amer.* 46:130 (Abs.).
- GILBERT, E. E. 1965. A time-lapse photographic method for studying population behavior of flour beetles, *Tribolium*. *Jour. S. M. P. T. E.* 74: 901-904.
- GONZALES, C. Q. 1965. Some biological and ecological studies of *Acalymma trivittata* (Mann.) (Coleoptera:Chrysomelidae). *Diss. Abs.* 26(6): 2986-2987.
- GRESSITT, J. L. 1965. Biogeography and ecology of land arthropods of Antarctica. *Monog. Biol.* 15:431-490.
- GRESSITT, J. L. 1966. Epizotic symbiosis: cryptogamic plants growing on various weevils and on a colydiid beetle in New Guinea. *Pacific Insects.* 8:294-297.
- GRUM, L. 1967. Remarks on fluctuations in density of Carabidae populations. *Ekol. Pol. Ser. A,* 15(14):335-345.
- HAFEEZ, M. A. 1963. The Biology of *Latheticus oryzae*. Ph.D. thesis, University of London.
- HAFEEZ, M. A. 1966. The effect of light on the life cycle of *Latheticus oryzae*. *J. Stored Prod. Res.* 1:243-246.
- HAFEEZ, M. A. 1966. The effect of temperature and high relative humidity on the rate of development of *Latheticus oryzae*. *J. of Stored Prod. Res.* 1:235-242.
- HAFEEZ, M. A. and CHAPMAN, G. 1966. Effects of temperature and high relative humidity on the rate of development and mortality of *Latheticus oryzae* Waterhouse (Coleoptera, Tenebrionidae). *J. Stored Prod. Res.* 1(3):235-242.
- HALSTEAD, D. G. H. 1967. Biological studies on species of *Palorus* and *Coelopalorus* with comparative notes on *Tribolium* and *Latheticus* (Coleoptera:Tenebrionidae). *J. Stored Prod. Res.* 2:273-313.

- HARCOURT, D. G. and LEROUX, E. J. 1967. Population regulation in insects and man. *Amer. Sci.* 55(4):400-415.
of nature.
- HARCOURT, D. G. and LEROUX, E. J. 1968. Population regulation in insects and man. (Fr) *Phytoprotection* 49(1):1-18.
- HARRIS, F. 1966. Observations on the lesser mealworm, Alphitobius diaperinus (Panz). *Ga. Entomol. Soc. J.* 1(1):17-18.
- HASSELL, M. P. 1966. Evaluation of parasite or predator responses. *J. Anim. Ecol.* 35:65-75.
- HAVERFIELD, L. E. 1965. A note on the mating ritual and biology of Eleodes hispilabris connexa (Coleoptera:Tenebrionidae). *Kans. Entomol. Soc. J.* 38(4):389-391.
- HEATWOLE, H., and HEATWOLE, A. 1968. Movements, host-fungus preferences, and longevity of Bolitotherus cornutus (Coleoptera:Tenebrionidae) *Entomol. Soc. Amer. Ann.* 61(1):18-23.
- HEWITT, O. H. 1967. A road-count index to breeding populations of red-winged blackbirds. *J. Wildlife Manage.* 31:39-47.
- HICKMAN, V. V. 1965. On Planarivora insignis gen. et sp. n. (Diptera:Mycetophilidae), whose larval stages are parasitic in land planarians. *Roy. Soc. Tasmania. Papers & Proc.* 99:1-8.
- HO, F. K. 1967. Identification of Tribolium larvae by their setal characteristics (Coleoptera:Tenebrionidae). *Ento. Soc. Amer. Annals.* 60:729-732.
- HO, F. K. and DAWSON, P. S. 1966. Egg cannibalism by Tribolium larvae. *Ecology* 47:318-322.
- HOKYO, N., K., KIRITANI, F. NAKASUJI and SIGA, M. 1966. Comparative biology of the two scelionid egg parasites of Nezara viridula L. (Hemiptera:Pentatomidae). *Appl. Ent. Zool.* 1:53-61.
- HOLLING, C. S. 1966. The strategy of building models of complex ecological systems, In Watt, K. E. F. ., ed. *Systems analysis in ecology*, p. 195-214.
- HOOVER, D. L., and FLOYD, E. H. 1965. A study of the capability of the rice weevils Sitophilus sasakii and S. oryzae to reproduce parthenogenetically. *Ent. Soc. Amer. Ann.* 58:565-567.
- HOWE, R. W. 1965. Sitophilus granarius (L.) (Coleoptera, Curculionidae). breeding in acorns. *J. Stored Prod. Res.* 1:99-100.

- HOWE, R. W. 1965. A summary of estimates of optimal and minimal conditions for population increase of some stored products insects. *J. Stored Prod. Res.* 1:177-184.
- HOWE, R. W. 1965. Some remarks on the biology of Tribolium. XII Internatl. Congr. of Ent., London. *Prox.* 1:271-272.
- HOWE, R. W. 1966. Development period, and the shape of the curve representing it in stored products beetles. *J. Stored. Prod. Res.* 2:117-134.
- HOWE, R. W. 1967. Temperature effects on embryonic development in insects. *Annu. Rev. Entomol.* 12:15-42.
- HOWE, R. W. 1967. The influence of age of parents on some characteristics of the offspring of insects bred in the laboratory. *J. Stored Prod. Res.* 3(4):371-385.
- HOWE, R. W. and HOLE, B. D. 1966. The susceptibility of the developmental stages of Sitophilus granarius (L) to methyl bromide. *J. Stored Prod. Res.* 2:13-26.
- HOWE, R. W. and HOLE, B. D. 1967. The yield of cultures of Sitophilus granarius at 25°C and 70 per cent relative humidity with some observations on rates of oviposition and development. *J. Stored Prod. Res.* 2:257-272.
- HUFFAKER, C. B. 1967. A note on competition. *Hilgardia* 37(14):563-567.
- HUGHENBLOER, H. 1965. Observations on Acanthoscelides obtectus Say. (Ge) *Entomol. Bl.* 61(2):124-125.
- HURLOCK, E. T. 1965. Some observations on the loss in weight caused by Sitophilus granarius (L.) (Coleoptera, Curculionidae) to wheat under constant experimental conditions. *J. Stored Prod. Res.* 1(2):193-195.
- HURPIN, B. and FRESNEAU, M. 1966. Élevage de deux dynastides, Oryctes nasicornis L., Phyllognathus silenus F. (Coleopt. Scarabaeidae).
- INOUE, N., and LERNER, I. M. 1965. Competition between Tribolium species (T. castaneum and T. confusum) (Coleoptera, Tenebrionidae) on several diets. *J. Stored Prod. Res.* 1(2):185-191.
- ISTOCK, C. A. 1966. Distribution, coexistence, and competition of whirligig beetles. *Evolution* 20:211-234.
- IWAO, S., KIRITANI, K. and HOKYO, N. 1966. Application of a marking-and-recapture method for the analysis of larval-adult populations of an insect, Nezara viridula. *Res. Popul. Ecol.* 8:147-160.

- JACKLIN, S. W., YONCE, C. E. and HOLLON, J. P. 1968. Crowding effects on plum curculios Conotrachelus nunuphar reared at several densities on two sizes of green apples. J. Econ. Entomol. 61(3):816-819.
- JAYARAMAN, S. and DUCOFF, H. S. 1967. The response of McGill black and wild type flour beetles, (Tribolium confusum) to temperature stress and to anoxia Am. Zool. 7:194-195.
- JONES, B. A. 1967. Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae) observed flying from an unusual habitat in Britain. J. Stored Prod. Res 3:185-187.
- JURZITZA, G. 1966. Uric acids as supplemental source of nitrogen for the larvae of Lasioderma serricorne F. (Ge) Z. Morphol. Okolog. Tiere 57:244-248.
- KABIR, S. M. H. 1966. Interactions in stored grain of populations of Sitophilus zeamais Motschusky, Rhizopertha dominica (Fabricius) and Tribolium castaneum (Herbst), Diss. Abstr., Sect. B, 27(1):330B-331B.
- KALMUS, H. 1966. Circadian regulation and related responses. In Kalmus, H., ed. Regulation and control in living systems, p. 155-175.
- KAUFMANN, T. 1966. Observations on some factors which influence aggregation by Blaps sulcata (Coleoptera:Tenebrionidae) in Israel. Entomol. Soc. Amer. Ann. 59(4):660-664.
- KEARSEY, M. J. 1965. Cooperation among larvae of a wild type strain of Drosophila melanogaster. Heredity 20(2):309-312.
- KEARSEY, M. J. 1965. The interaction of competition and food supply in two lines of Drosophila melanogaster. Heredity 20(2):169-181.
- KIRITANI, K., HOKYO, N. and IWA0, S. 1966. Population behaviour of the southern green stink bug, Nezara viridula with special reference to the developmental stages of early-planted paddy. Res. Popul. Ecol. 8:50-63.
- KIRITANI, K. and KIMURA, K. 1966. A study on the nymphal aggregation of the cabbage stink bug, Eurydema rugosum Motschulsky (Pentatomidae, Heteroptera). Appl. Ent. Zool. 1:21-28.
- KIRITANI, K., HOKYO, N. and KIMURA, K. 1966. Factors affecting the winter mortality in the southern green stink bug, Nezara viridula L. Ann. Soc. ent. France 2:199-207.
- KIRITANI, K., HOKYO, N. and KIMURA, K. 1967. The study on the regulatory system of the population of the southern green stink bug, Nezara viridula, under semi-natural conditions. Appl. Ento. Zool. 2:39-50.

- KIRITANI, K., and KIMURA, K. 1967. Effects of parental age on the life cycle of the southern green stink bug, Nezara viridula. Appl. Ent. Zool. 2:69-78.
- KIRITANI, K., NAKASUJI, F. and HOKYO, N. 1966. The survival rate of eggs and larvae in relation to group size in the southern green stink bug, Nezara viridula. Jap. J. appl. Ent. Zool. 10:205-211.
- KIYOKU, N. 1966. Self-regulation in the experimental population of Azuki-bean weevil, Callosobruchus chinensis. (Ja) Okayama. Univer. Fac. Agr. Sci. Rep. 27:9-15.
- KOLBE, W. 1968. Comparison of soil-inhabiting Coleoptera from two Oak-Birch forests. (Ge) Entomol. Z 78(12):140-144.
- KOT, J. 1966. Factors affecting the efficacy of introduction of Trichogramma. (pol) Postepy Nauk Roln. 4:131-139.
- LABEYRIE, V. 1964. Study of the numerical development of populations of Acanthoscelides obtectus Say; influence of initial sex rates. (Fr). Paris. Soc. Biol. Comp. Rend. 158(12):2435-2437.
- LABEYRIE, V. 1965. Multiplication of Acanthoscelides obtectus Say when the population density is low. (Fr). Ann. Epiphyt. 16:393.
- LANIER, G. N., and WOOD, D. L. 1968. Controlled mating, karyology, morphology, and sex-ratio in the Dendroctonus ponderosae complex. Ento. Soc. Amer. Ann. 61(2):517-529.
- LAUGHLIN, R. 1965. Capacity for increase; a useful population statistic. J. Anim. Ecol. 34:77-91. In insects:statistical research methods.
- LEFKOVITCH, L. P. 1966. Some observations on the life cycle of Carpophilus dimidiatus (F.) Coleoptera, Nitidulidae) on wheat bran. J. Stored Prod. Res. 2:163-165.
- LEFKOVITCH, L. P. 1966. The effects of adult emigration on populations of Lasioderma serricorne (F.) (Coleoptera, Anobiidae). Oikos 15(2) 200-210.
- LEFKOVITCH, L. P. 1966. An index of spatial distribution. Res. Popul. Ecol. 8:
- LEFKOVITCH, L. P. 1966. A population growth model incorporating delayed responses. Bull. math. Biophys. 28:219-233.
- LEFKOVITCH, L. P. 1967. A theoretical evaluation of population growth after removing individuals from some age groups. Bull. Entomol. Res. 57(3):437-445.
- LEFKOVITCH, L. P., and CURRIE, J. E. 1967. Some morphological, biological and genetical differences between Cryptolestes pusillus fuscus ssp.n. and C. pusillus pusillus (Schonherr) (Coleoptera, Cucujidae). J. Stored Prod. Res. 3(4):311-320.

- LEON, T. 1966. A review of recent ecological studies in the Philippines. *Sci. Rev.*, Feb. 1966:11-21.
- LESLIE, P. H., PARK, T. and MERTZ, D. B. 1968. The effect of varying the initial numbers on the outcome of competition between two Tribolium species. *J. Anim. Ecol.* 37:9-23.
- LEWIS, D. 1966. Molecular regulation in the cell. In Kalmus, H., ed. *Regulation and control in living systems*, p. 61-80.
- LLOYD, M. 1967. Mean crowding. *J. Anim. Ecol.* 36:1-30.
- LLOYD, N. 1968. Self regulation of adult numbers by cannibalism in two laboratory strains of flour beetles (Tribolium castaneum). *Ecology* 49(2):245-259.
- LOSCHIAVO, S. R. 1965. Methods for studying aggregation and feeding behavior of the confused flour beetle, Tribolium confusum (Coleoptera: Tenebrionidae). *Ent. Soc. Amer. Ann.* 58(3):383-388.
- LOSCHIAVO, S. R. 1967. Adult longevity and oviposition of Trogoderma parabile Beal (Coleoptera, Dermestidae) at different temperatures. *J. Stored Prod. Res.* 3(4):273-282.
- LOSCHIAVO, S. R. and SINHA, R. N. 1966. Feeding, oviposition, and aggregation by the rusty grain beetle, Cryptolestes ferrugineus (Coleoptera: Cucujidae) on seed-borne fungi. *Ann. Entomol. Soc. Amer.* 59:578-585.
- LUTTA, A. S. 1965. On the gonotrophic cycle of horseflies in Karelia. (Rus) *Med. Parazitol. i Parazitarnye Bolezni* 1:29-32.
- LYNGNES, R. 1966. Male copulation technique of Anobium punctatum De Geer. (No) *Norsk Entomol. Tidsskr.* 13:353-358.
- MACARTHUR, R. H. and LEVINS, R. 1965. Competition, habitat selection and character displacement in a patchy environment. *PNAS* 51:1207-1210.
- MAGIS, N. 1966. Drilus flavescens Fourcroy, predator of snails (Coleoptera, Drilidae). (Fr) *Natur. Belg.* 47:457-466.
- MARCUZZI, G. 1964. Observations on the relationships between tenebrionid fauna and soil. *Pedobiologia* 4(3):210-219.
- MASCHWITZ, U. 1967. A new kind of defense by insects against microorganisms. (Ge) *Naturwissenschaften* 54(24):649.

- MASON, G. F. 1966. Animal appetites. New York, Morrow, 96p.
- MATHIEU, J. 1967. Mating behavior of five species of Lucanidae (Coleoptera: Insecta) Am. Zool. 7:206-(Abs.).
- MCFARLANE, J. A. and WEAVING, A. J. S. 1967. A means of differentiating between Acanthoscelides obtectus (Say) and Zabrotes subfasciatus (Boh.) (Coleoptera, Bruchidae) in white haricot beans at the pupal stage. J. stored Prod. Res. 3:261-262.
- MCLAUGHLIN, R. E., BELL, M. R. and VEAL, S. D. 1966. Bacteria and fungi associated with dead boll weevils (Anthonomus grandis) in a natural population. J. Invertebrate Pathol. 8(3):401-408.
- MCMULLEN, R. D. 1967. A field study of diapause in Coccinella novemnotata (Coleoptera:Coccinellidae). Can. Entomol. 99:42-49.
- MEDVEDEV, G. S. 1966. Adaptation types in structure of desert darkling beetle legs (Coleoptera, Tenebrionidae). (Rus) Entom. Obozrenie 14:803-826.
- MERTZ, D. B. 1965. Age-distribution and abundance in populations of genetic strain C. IV-a of the flour beetle Tribolium castaneum. Unpublished doctoral dissertation. Department of Zoology, The University of Chicago.
- MERTZ, D. B. 1968. Cannibalism of the pupal stage by adult flour beetles: an experiment and a stochastic model. Biometrics 24:247-275.
- MERTZ, D. B. and DAVIES, R. B. 1968. Cannibalism of the pupal stage by adult flour beetles (Tribolium castaneum): An experiment and a stochastic model. Biometrics. 24:247-275.
- MERTZ, D. B., PARK, T. and YODEN, W. J. 1965. Mortality patterns in eight strains of flour beetle. Biometrics. 21:99-114.
- MILLER, J. L. 1965. Prey-predator interactions between insects (chiefly meloid beetles) and lizards of the genera Phrynosoma, Uta and Cnemidophorus. Diss. Abs. 26(5):2934.
- MILLIMAN, L. 1967. Immunity in insects. Agr. Chem 22:30, 32-33.
- MITCHELL, E. R. and TAFT, H. M. 1966. Starvation method for obtaining diapausing boll weevils (Anthonomus grandis) able to survive the winter in hibernation. J. Econ. Entomol. 59(1):55-57.
- NOELLER, J. 1965. Synicological investigation of dipterous larvae in the beach deposits of marine algae (Fucus). (Ge) Naturwissenschaften. 52(10):267-268.
- MONRO, J. 1967. The exploitation and conservation of resources by populations of insects. J. Anim. Ecol. 36(3):531-547.

- MOORE, B. P. 1967. Hydrogen cyanide in the defensive secretions of larval paropsini (Coleoptera:Chrysomelidae). Aust. Entomol. Soc. J. 6:36-38.
- MORGAN, REV.M. T. 1965. Ecological variations of laboratory populations of three mutants of Tribolium castaneum (Herbst) and three mutants of Tribolium confusum (du Val). Ph.D. Thesis, The Catholic University of America, Washington, D. C. 62p.
- MORGAN, R. F. 1964. Environmental biology, v. 2. New York, Macmillian, 258p. Contents: Animals of the environment; Plants of the environment.
- MORIMOTO, N. 1965. Effect of aggregation upon some ecological characters of two lady beetles, Epilachna sparsa orientalis and E. vigintioctomaculata. (Ja) Jap. J. Appl. Ento. and Zool. 9:73-78.
- MORISITA, M. 1965. The fitting of the logistic equation to the rate of increase of population density. Res. Population Ecol. 7:52-55.
- MOTT, D. G. 1966. The analysis of determination in population systems. In Watt, K. E. F., ed. Systems analysis in ecology, p. 179-194.
- MUGGLETON, J. 1966. Diurnal flight in Acilius sulcatus (L.) (Col. Dytiscidae). S. London Entomol. Natur. Hist. Soc. Proc. Trans. 3:84.
- MULDER, R. H. 1964. Insects associated with Xanthorrhoea sp. Entomol. Soc. Australia (N.S.W.) J. 1:12.
- MURAI, M. 1966. A statistical consideration on the change of the distribution pattern between two successive stages. Res. Popul. Ecol. 8:8-13.
- MURDOCH, W. W. 1966. Population stability and life history phenomena. Amer. Natur. 100:5-11.
- MURDOCH, W. W. 1967. Life history patterns of some British Carabidae (Coleoptera) and their ecological significance. Oikos 18:25-32.
- NAKAMURA, H. 1966. The activity-types observed in the adult of Callosobruchus chinensis L. (Ja) Jap. J. Ecol. 16:236-241.
- NAKAMURA, H. Comparative study of adaptability to the density in two species of Callosobruchus. Jap. J. Ecol. (in press)
- NAKASUJI, F., HOKYO, N. and KIRITANI, K. 1966. Assessment of the potential efficiency of parasitism in two competitive scelionid parasites of Nezara viridula L. (Hemiptera:Pentatomidae). Appl. Ento. Zool. 1:107-113.

- NAYLOR, A. F. 1965. Dispersal responses of female Tribolium confusum to presence of larvae. *Ecology* 46:341-343.
- NEF, L. 1967. Aggregative distributions and their use in animal ecology. (Fr) *Biometrie-Praximetrie* 8(3/4):160-190.
- NIVEN, B. S. 1967. The stochastic simulation of Tribolium castaneum populations. *Physiol. Zool.* 40(1):67-82.
- OKADA, I., and HARDIN, R. T. 1967. An experimental examination of restricted selection index, using Tribolium castaneum. I. The results of two-way selection. *Genetics* 57(2):227-236.
- PARK, T., GREGG, E. V. and LUTHERMAN, C. Z. 1941. Studies in population physiology X. inter-specific competition in population of granary beetles. *Physiol. Zool.* 14:395-430.
- PARK, T., MERTZ, D. B., GRODZINSKI, W. and PRUS, T. 1965. Cannibalistic predation in populations of flour beetles. *Physiol. Zool.* 38:284-321.
- PARK, T., MERTZ, D. B. and NATHANSON, M. 1968. The cannibalism of pupae by adult flour beetles. Tribolium confusum and T. castaneum. *Physiol. Zool.* 41(2):228-253.
- PAVIOUR-SMITH, K. 1965. Some factors affecting numbers of the fungus beetle Tetratoma fungorum F. *J. Anim. Ecol.* 34(3):699-724.
- PATRASCANU, E. 1964. Contribution to the study of the biology of the insects Adalia bipunctata L., and Propylaea 14-punctata L. (Rum) Jassy. *Inst. Agron. "Ion Ionescu Brad"*. *Lucrari Stiint.* 313-321.
- PIMENTEL, D. 1949. Biology of Gnathocerus carnutus. *J. Econ. Entomol.* 42:229-231.
- PIMENTEL, D. 1965. Population ecology and the genetic feed-back mechanism. *Proc. XIth Int. Congr. Genet.* 2:483-488.
- PIMENTEL, D. 1966. Complexity of ecological systems and problems in their study and management. In Watt, K. E. F., ed. *Systems analysis in ecology*, p. 15-35.
- PIMENTEL, D. 1966. Population ecology of insect invaders of the Maritime Provinces. *Can. Entomol.* 98:887-894.
- PREISS, F. J., and DAVIDSON, J. A. 1968. The effects of temperature and humidity on egg hatch of the lesser mealworm, Alphitobius diaperinus (Panzer) (Coleoptera:Tenebrionidae). *Md. Agr. Exp. Sta. Misc. Publ.* 660,7p.

- PREVETT, P. F. 1966. Observations on the biology of six species of Bruchidae (Coleoptera) in Northern Nigeria. Entomol. Mon. Mag. 102:174-180.
- PREVETT, P. F. 1966. Observations on biology in the genus Caryedon Schonherr (Coleoptera, Bruchidae) in Northern Nigeria, with a list of associated Hymenoptera. Proc. B. ent. Soc. Land, A. 41:9-16.
- PREVETT, P. F. 1967. Observations on the biology of six species of Bruchidae (Coleoptera) in Northern Nigeria. Ent. mon, mag., 102 (1226-1228) 174-180.
- PRUS, T. 1966. Emigrational ability and surface numbers of adult beetles in 12 strains of Tribolium confusum Duval and T. castaneum Herbst (Coleoptera, Tenebrionidae). Ecol. Pol. Ser. A. 14:548-588.
- QAMAR, Z., and QAYYUM, H. A. 1968. Effect of different temperatures and relative humidities on the bionomics and mortality of Tribolium castaneum (Hbst). Pakistan J. Sci. Res. 19(1):44-50.
- RAINIO, M. 1966. Abundance and phenology of some coprophagous beetles in different kinds of dung. Ann. Zool. Fenn. 3(2):88-98.
- RASMUSSEN, S. 1967. Growth of larvae of the house long-horn beetle (Hylotrupes bajulus L.) in constant conditions-Oikos 18:155-177.
- RASMUSSEN, S. 1967. Hylotrupes (Col. Cerambycidae) in dead trees on Farön, a Swedish island. Entomologiske Meddelelser 35:223-226.
- RAYCHAUDHURI, A. and BUTZ, A. 1965. Aging. I. Effects of parental age on the life cycle of Tribolium confusum (Coleoptera:Tenebrionidae). Ent. Soc. Amer. Ann. 58:535-540.
- RAYCHAUDHURI, A. and BUTZ, A. 1965. Aging II. Changes in acid and alkaline phosphatase contents of aging male and female Tribolium confusum (Coleoptera:Tenebrionidae). Ent. Soc. Amer. Ann. 58:541-543.
- RESSAL, F. 1967. Anthropogenic and climatic influences on the animal kingdom and their effects. (Ge) Entomol. Nachrichtenbl. 14(3):29-35.
- RESSEL, F. 1967. On the occurrence of some winter active insects in the district of Scheibbs. (N. O.). (Ge) Entomol. Nachrichtenbl. 14(7): 85-87. In Austria.
- REYNOLDS, J. L. 1967. Assessment by progeny rearings of early changes in competing populations of Tribolium confusum Duval and T. castaneum (Herbst). Ph.D. thesis. University of Illinois, Urbana.
- RHINE, J. J. and STAPLES, R. 1968. Effect of high-amylose field corn on larval growth and survival of five species of stored-grain insects. J. econ. Ent. 61:280-282.

- RIAH, P. 1967. Kvantitativni metody vyzkumu hmizich viocenz; studijni zprava (Quantitative methods of studying insect communities; reviews). Praha, Ustredi Zemedelskeho a Potravinarskeho Vyzkumi, 48p.
- RICHARD, G. Animal migrations and movements. (Fr) Ann. Epiphyt. 18(1):95-101.
- ROTH, M. 1966. Apropos some rare or little known insects captured in colored traps. (Fr) Soc. Entomol France. Bull 71:112-113.
- ROTH, M. 1968. Principle of analytical synecology and recent methods of sampling in entomological ecology. (Fr) Rev. Zool. Agr. Appl. 67(1/3):21-26.
- RUBTSOV, I. A. 1965. Early spring and winter fauna of Simuliidae. (Rus) Zool. Zhur. 44(10):1485-1496.
- RUSSELL, M. P. 1966. Effects of four sorghum varieties on the longevity of the lesser rice weevil, Sitophilus oryzae (L.). J. Stored Prod. Res. 2:75-79.
- SALT, G. and VAN DEN BOSCH, R. 1967. The defense reactions of three species of Hypera (Coleoptera, Curculionidae) to an ichneumon wasp (Blatt-hyplectes curculionis). J. Invertebrate Pathol. 9(2):164-177.
- SANO, I. Density effect and temperature as the factors producing the active form of Callosobruchus maculatus. J. Stored Prod. Res.
- SASABA, T. 1966. Interspecific competition between two species of Trichogrammatidae. III. The analytical study on the competition. Res. Popul. Ecol. 8:102-106.
- SAXENA, S. G. 1966. On colour perception in C. oryzae. Beitrage zur Entomologie.
- SCHOENER, T. W. and JANZEN, D. H. 1968. Notes on environmental determinants of tropical versus temperate insect size patterns. Amer. Natur. 102(925):207-224.
- SCHWARTZ, P. H. 1968. Distribution of released Japanese beetles. (Popillia japonica) in a grid of traps. J. Econ. Entomol 61(2):423-426.
- SEVASTOPULO, G. 1965. A note on the evolution of defensive and repellent odor in insects. Entomologist 98(1227):180.
- SHULOV, A. S. 1966. Influence of environmental conditions on population dynamics of the khapra beetle (Trogoderma granarium); final technical report. Jerusalem, Hebrew University of Jerusalem.

- SINGH, S. R. and WILBUR, D. A. 1966. Effects of temperature, age and sex on longevity of three adult populations of the rice weevil complex. Kans. Entomol. Soc. J. 39:569-572. Sitophilus oryzae and S. zeamais from Kansas, Louisiana, and Arkansas.
- SINHA, R. N. 1965. Development of Cryptolestes ferrugineus (Stephens) and Oryzaephilus mercator (Fauvel) on seed-borne fungi. Entomol. Exp. Appl. 8:309-313.
- SINHA, R. N. 1966. Development and Mortality of Tribolium castaneum and T. confusum on seed-borne fungi. Ann. Entomol. Soc. Amer. 59:192-201.
- SINHA, R. N. 1966. Feeding and reproduction of some stored-product mites on seed-borne fungi. Ent. Soc. Amer. Annal. 59:1227-1232.
- SINHA, R. N. and SYUNRO UTIDA. 1967. Climatic areas potentially vulnerable to stored product insects in Japan. Appl. Ent. Zool. 2:124-132.
- SINHA, R. N. and WALLACE, H. A. H. 1966. Ecology of insect-induced hot spots in stored grain in Western Canada. Res. Pop. Ecol. 8:107-132.
- SIVIK, F. P. 1966. Rice weevil (Sitophilus oryza) population study during a normal storage period. Fla. Entomol. 49:33-34.
- SLUSS, R. R. 1967. An ecophysiological study of Hippodamia quinque-signata punctulata LeConte (Coleoptera:Coccinellidae). Diss. Abstr. Sect B. 27:3980B-3981B.
- SMITH, LAWRIE, 1965. The intrinsic rate of natural increase of Cryptolestes ferrugineus (Stephens) (Coleoptera, Cucujidae). J. Stored Prod. Res. 1:35-49.
- SMITH, L. B. 1965. The effect of temperature and humidity on the rate of increase, r_m , of the rusty grain beetle, Cryptolestes ferrugineus (Stephens) (Coleoptera:Cucujidae). Proc. XIIth Int. Congr. Ento. 623.
- SMITH, L. B. 1966. Effect of crowding on oviposition, development and mortality of Cryptolestes ferrugineus (Stephens) (Coleoptera:Cucujidae). J. Stored Prod. Res. 2:91-104.
- SOKOLOFF, A., and LERNER, I. M. 1967. Laboratory ecology and mutual predation of Tribolium species. Amer. Natur. 101(919):261-276.
- SOKOLOFF, A., LERNER, I. M. and HO, F. K. 1965. Self-elimination of Tribolium castaneum following xenocide of Tribolium confusum. Amer. Nat. 99:399-404.
- SOKOLOFF, A., OVERTON, L. F. and HO, F. K. 1966. Comparative studies in Tribolium, I. Productivity of T. castaneum and T. confusum in several commercially available diets. J. Stored Products Research.

- SOUTHWOOD, T. R. E. 1966. Ecological methods with particular reference to the study of insect populations. London, Methuen, 391 p.
- SOUTHWOOD, T. R. E. 1967. The interpretation of population change. *J. Anim. Ecol.* 36(3):519-529. Ref. Insects.
- STANLEY, M. S. M. and GRUNDMANN, 1965. Observations on the morphology and sexual behavior of Tribolium confusum Duval, *J. Kansas Ent. Soc.* 38:10-18.
- STANLEY, M. S. M. and GRUNDMANN, A. W. 1966. Effects of moisture on the chorion of eggs of Tribolium confusum (Coleoptera:Tenebrionidae). *Entomol. Soc. Amer. Ann.* 59:233-234.
- STARK, R. W. 1966. The organization and analytical procedures required by a large ecological systems study. In: Watt, K E. F. ed. *Systems analysis in ecology*, p. 37-68.
- SURTEES, G. 1965. Ecological significance and practical implications of behavior patterns determining the spatical structure of insect populations in stored grain. *Bull. Ent. Res.* 56:201-213.
- STRAWBRIDGE, D. W. 1953. Population dynamics of the flour beetle Tribolium castaneum Herbst. Dissertation for a Degree of Doctor of Philosophy, Univ. of Chicago.
- STUBBS, A. E. 1968. Geology as an ecological factor in the distribution of insects. *Entomol. Rec. Variation* 80:80-83.
- TAFT, H. M. and HOPKINS, A. R. 1966. Effect of different hibernation environments on survival and movement of the boll weevil (Anthonomus grandis). *J. Econ. Entomol.* 59:277-279.
- TANNER, J. T. 1966. Effects of population density on growth rates of animal populations. *Ecology* 47:733-745.
- TAYLOR, N. W. 1965. A theoretical study of population in Tribolium confusum. *Ecology* 46:334-340.
- TAYLOR, N. W. 1967. A mathematical model for Tribolium confusum populations. *Ecology*. 48:290-294.
- TEOTIA, T. P. S. and PANDEY, K. K. 1967. The influence of temperature and humidity on the contact toxicity of some insecticide deposits to Tribolium castanem Herbst. *Bull. Grain Technol.* 5(3):154-160.
- THIELE, H. U. and KREHANM I. 1967. Variable control of adult imago diapause of both sexes of Agonum assimile Payk. (Ge) *Naturwissenschaften* 54(5):122-123.

- TITOVA, E. V. and ZHAVORONKOVA, T. N. 1965. The effect of virgin steppe plowing on the composition and number of carabid beetles in populations. (Rus) *Vses. Entomol. Obshch. Tr.* 50:103-120.
- TUMLINSON, J. H., HARDEE, D. D., MINYARD, J. P., THOMPSON, A. C., GAST, R. T., and HEDIN, P. A. 1968. Boll weevil (*Anthonomus grandis*). Sex attractant:bolation studies. *J. Econ. Entomol.* 61(2):470-473.
- UTIDA, S. 1967. Collective oviposition and larval aggregation in *Zabrotes subfasciatus* (Coleoptera, Bruchidae). *J. Stored Prod. Res.*, 2:315-322.
- UTIDA, S., and SINHA, R. N. 1967. Climatic areas potentially vulnerable to stored product insects in Japan. *Appl. Ent. Zool.* 2:124-132.
- UTIDA, S. 1967. Polymorphism in the southern cowpea weevil, *Callosobruchus maculatus* and the adaptation of its life to the stored condition of bean. *Plant Protection*. (Tokyo, Japan), 21:243-248.
- UTIDA, S. 1967. Damped oscillation of population density at equilibrium. *Res. Popul. Ecol.* 9:1-9.
- UTIDA, S. 1967. A decade of insect population ecology in Japan. *Kontyu*, 35: 196-204.
- VAN DEN BOSCH, R. 1968. Comments on population dynamics of exotic insects. *Entomol. Soc. Amer. Bull.* 14(2):112-115.
- VAN VALEN, L. 1960. Further competitive exclusion. *Science* 132:1674-1675.
- VIKTOROV, G. A. 1965. Fluctuations in the abundance of insects as a regulated process. (Rus) *Zhur. Obshch. Biol.* 26:43-55.
- VUKASOVIC, P. and GLUMAC, S. 1967. The effect of nutrition on fertility and longevity of *Acanthoscelides obtectus* Say. (Se) *Zastita Bilja* 93/95:11-20.
- WILLIAMS, R. N. 1967. Ecology of the maize weevil, *Sitophilus zeamais* (Motschulsky), relative to flight habits, attraction to sunflowers, and two hymenopterous parasites. *Diss. Abstr., Sect. B*, 27:3981B.
- WILLIAMS, S. A. 1966. *Rhizophagus picipes* (Ol.) politus (Hellwig) (Col., Rhizophagidae); an unusual habitat. *S. London Entomol. Natur. Hist. Soc. Proc. Trans.* 3:84.
- WALKER, J. K. 1966. The relationship of the fruiting of the cotton plant and overwintered boll weevils (*Anthonomus grandis*) to the F_1 generation. *J. Econ. Entomol.* 59:323-326.

- WALKER, J. K. 1967. Studies in the fall and winter of oviposition prior to diapause in the boll weevil (Anthonomus grandis) with observations on reversion from diapause to reproduction. *J. Econ. Entomol* 60: 798-802.
- WATT, K. E. F. 1968. Ecology and resource management; a quantitative approach. McGraw-Hill, New York.
- WATTERS, F. L. 1966. The effects of short exposures to subthreshold temperatures on subsequent hatching and development of eggs of Tribolium confusum Duval (Coleoptera, Tenebrionidae). *J. Stored Prod. Res.* 2(2): 81-90.
- WEBER, F. 1967. The length of circadian rhythm periodicity of three Carabus Species. (Coleoptera). (Ge) *Naturwissenschaften* 54(5):122.
- WOOD, D. L., BROWNE, L. E., BEDARD, W. D., TILDEN, P. E., SILVERSTEIN, R. M., and RODIN, J. O. 1968. The response of Ips Confusus to synthetic sex pheromones in nature. *Science* 159(3821):1373-1374.
- YINON, U. and SHULOV, A. 1967. The humidity responses of Trogoderma granarium Everts (Col., Dermestidae). *Bull. Entomol. Res.* 57(3):451-458.
- YOSHIDA, T. 1966. Studies on the interspecific competition between bean weevils. *Mem. Fac. Lib. Arts Educ., Miyazaki Univ.* Vol. 20:59-98.
- YVORE, P., LACOTTE, R., and FINELLE, P. 1965. Biological and ecological study of Glossina fusca congolensis Newst, and Everts in Central African Republic. I. Influence of climate and vegetation on the tsetse fly distribution and density. (Fr) *Rev. Elevage Med. Vet. Pays Trop.* (n. s.) 18(2):151-164.
- ZASLAVSKII, V. A. 1966. Isolating mechanism and its role in the ecology of two allied Chilocorus species (Chilocorus geninus and Chilocorus bipustalatus) (Coleoptera, Coccinellidae). (Rus) *Zool. Zhur.* 45: 203-212.
- ZYROMSKA, RUDZKA. 1966. Abundance and emigrations of Tribolium in a laboratory model. *Ekologia. Polska Sec. A.* 14:491-518.

GENERAL

STATISTICAL METHODS

ANDERSEN, F. S. 1965. The negative binomial distribution and the sampling of insect populations. Proc. XII. Int. Congr. Ent., London p. 395.

ANDERSEN, F. S. 1966. Statens Skadedyrlaboratorium (Government Pest Infestation Laboratory.) Annual Report 1965, Lyngby, Denmark.

ANNUAL, review of entomology, volume 11, edited by R. F. Smith and T. E. Mittler. Palo Alto, 1966.

ANNUAL, review of entomology. Volume 12, edited by R. F. Smith and T. E. Mittler. Palo Alto, 1967. 563p.

ANNUAL, review of entomology. Volume 13, edited by R. F. Smith and T. E. Mittler. Palo Alto, California, 1968. 488p.

AUSTRALIA. COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION. DIV. OF ENTOMOLOGY. Annual report, 1962-1963. Canberra, 1964. 85p.

BAETA NEVES, C. M. 1966. Aspectos históricos e actuais da defesa fitossanitária do trigo, da farinha e do pão em Portugal. I Colóquio sobre Cereais, Farinha, Pão, "2-17 Dezembro 1964, Gremio dos Industriais de Lisboa.

BAUER, K. H. 1950. Veber chemie und Krebs. Dargestellt am Anilinkrebs Arch. Klin. Chir. 264:28-37.

BLAIR, K. G. 1925. A list of the Heteromorous Coleoptera collected mainly during the war, by various members of H. M. forces in Mesopotamia. J. Bombay nat. Hist. Soc. 30:428-440.

BLICKENSTAFF, C. C. 1965. Common names of insects approved by the Entomological Society of America. Ent. Soc. Amer. B. 11(4):287-320. I, Insects listed by common names; II, Insects listed by scientific names; III, Phylum, class, order, and family names.

BOAS, H. 1952. A case of universal exanthem produced by the rice flour beetle Tribolium destructor. Ugeskrift for Laeger 114:1641.

BOYLAND, E., CHARLES, B. T. and GOWING, N. F. C. 1961. The induction of tumors in mice by intravaginal application of chemical compounds. Bart. J. Cancer. 15:252-255.

CEBALLOS, P. 1965. Forest entomology in philately. (Sp) Spain. Serv. Plagas Forest. Bol. 8(16):140-143.

- CONGRESS OF BRITISH ENTOMOLOGISTS, 14, New York, 1965. Summaries of papers, by D. C. Geddes. *Entomologist*. (London) 98:218-223.
- DENMARK STATENS SKADEDYRLABORATORIUM. 1965. *Arsberetning*. Annual report of the Government Pest Infestation Laboratory. Lyngby, 1.
- ECKSTEIN, F. 1931. On immunity in insects. 12 p. Translation from *Anzeiger für Schädlingskunde*. 7(5):49-55.
- ENKERLIN, D. 1967. Agriculture and entomology. (Sp). In Inter-American Institute of Agricultural Sciences. *Las ciencias agrícolas en América Latina*, p. 239-255.
- ENTOMOLOGICAL SOCIETY OF AMERICA. 1965. Membership list. *Ent. Soc. Amer. B.* 11(4):217-283. As of Oct. 20, 1965.
- ESSIG, E. O. 1926. *Insects of western North America*. IX-1035p. The MacMillan Co., New York, N. Y.
- FALL, H. C. 1901. List of Coleoptera of southern California. *California Acad. Sci. Occas. Pap.* 8:1-282.
- FOWLER, W. W. 1891. *The Coleoptera of the British Islands*. 5 vols. Reeve and Co., London, England.
- FOX, R. M. 1965. The importance of introductory entomology in a modern biological program. *Ent. Soc. Amer. B.* 11(2):78-80.
- FREEMAN, J. A. 1960. (1962). The influence of climate on insect populations of flour mills. *Internat'l. Cong. Ent. Trans.* 11th. Cong. 2:301-308.
- FRIEDMANN, B., MARRIAN, D. H. and SIMON-REUSS, I. Sulphydryl addition compounds of some quinones and related substances in their action on the growth of normal cells. *Brit. J. Pharmacol.* 3:330-340.
- FRISON, T. H. 1926. Contribution to the knowledge of the interrelations of the bumblebees of Illinois with their animate environment. *Ent. Soc. Amer. Ann.* 19:203-235.
- GANNETT, H. 1906. *Dictionary of Attitudes in the United States*. Washington, D. C. (U. S. Geological Survey Bull.) #274. 1072 p.
- GARCIA DE VIEDMA, M. 1964. Coleoptera larvae. (Sp) *Graellsia* 20(4/6):245-275.
- GEIGER, W. B. 1946. The mechanism of the antibacterial action of quinones and hydroquinones. *Arch. Biochem.* 11:23-32.
- GRINBERG, R. and URQUIZA, L. M. C. 1948. The effect of o- and p- quinone on Roffo's rat sarcoma. *Semana Med. (Buenos Aires)* 11:1010-1013.
- GULLAND, J. M. 1932. The spermicidal activity of quinones and quinols. *Biochem. J.* 26:32-45.
- HOFFMANN-OSTENHOF, O. 1947. Mechanism of the antibiotic action of quinones. *Science.* 105:549-550.

- HUEPER, W. C. 1965. Experimental studies on 8-hydroxyguinoline in rats and mice. *Arch. Path.* 79:245-250.
- HUEPER, W. and CONWAY, W. D. 1964. "Chemical carcinogenesis and cancer". Charles C. Thomas Publ., Springfield, Ill.
- HUTCHINSON, G. E. 1965. The ecological theater and the evolutionary play. Yale University Press, New Haven, Conn. 139 p.
- INTERNATIONAL CONGRESS OF ENTOMOLOGY, 12, LONDON, 1964. Proceedings, edited by P. Freeman. Partial contents: Sect. 1, Systematics, including phylogeny; Sect. 2, Morphology, anatomy, paleontology; Sect. 3, Physiology and biochemistry; Sect. 4, Genetics & cytology; Sect. 5, Behaviour; Sect. 6, Ecology; Sect. 7, Geographical distribution; Sect. 8, Insecticides & toxicology; Sect. 9a, Agricultural entomology; Sect. 9b, Industrial & Stored products entomology; Sect. 10, Forest entomology, etc.; Sect. 11, Insect pathology, etc; Sect. 12, Medical and veterinary entomology. Contains approximately 650 papers. Individual papers are indexed in the Pesticides Documentation Bulletin, Vol. 2, No. 23, pub. by Nat'l. Agr. Library.
- JORDAN, E. L. 1965. Invertebrate zoology. Ed. 2. Lucknow, Chand, 263 p.
- KLOTS, A. B. 1966. The world of insects. n. p., 63 p.
- KLOTS, A. B. and KLOTS, E. B. 1965. Living insects of the world. Garden City, New York, Doubleday. 304 p.
- KNAPP, E. and KREBS, A. 1967. Insekten; ein Photoheft (Insects; a book of Photographys). Naturforsch. Ges. Schaffhausen. Neujahrsbl. 19, 39 p.
- KNOWLTON, G. F. 1965. 4-H entomology in Utah. Utah. State Univ. Ext. Entomol. Mineo Ser. 64, 1p.
- KRACKE, R. R. and PARKER, F. P. 1934. The etiology of granulopenia. *Am. J. Clin. Path.* 4:453-469.
- KRACKE, R. R. and PARKER, F. P. 1934. The etiology of granulopenia (agranulocytosis) with particular reference to drugs containing the benzene ring. *J. Lab. Clin. Med.* 19:799-818.
- KUHN, R. and BEINERT, H. 1943. Veber das aus Krebserregenden Azofarbstoffen entstehendl Fermentgift. *Ber.* 76:904.
- LADISCH, R. K., SUTER, STR. M. ST. A., and FROIO, G. F. 1969. Sweat gland carcinoma produced in mice by insect quinones. *Proc. Penna. Acad. Sci* (in press).
- LECERCQ, M. 1966. Les insectes comestibles. *Natura Monsana.* 19:10-13.
- MAYER, R. L. 1948. Asomatic amines and azo dyes in allergy and cancer. *J. Invest. Dermatol.* 10:389.

- MAYER, R. L. 1958. Die Begiehungen zwischen toxischen, allergischen und carcinogenen Eigenschefaten aromatischer Amine. *Klin. Wchschr.* 36: 885-893.
- MILLS, R. B. 1966. Stored-products insects as experimental animals in high school biology. *The American Biology Teacher.* 28:638-643.
- NACHTIGALL, W. 1965. Aerodynamics of Coleopte flight; do elytra act as supporting wings? (Ge) *Deut. Zool. Ges. Verhandl* 27:319-323.
- OLDROYD, H. 1966. *Insects and their world.* Ed.2. London, British Museum (Natural History), 144 p.
- OREGON ENTOMOLOGICAL SOCIETY. 1967. Joint proceedings with the Washington State Entomological Society, Sept. 16, 1967, in Portland, Oreg. *Entomol. Soc. Bull.* 30:209-230.
- OXFORD, A. E. 1942. On the chemical reactions occurring between certain substances which inhibit bacterial growth and the constituents of bacteriological media. *Biochem J.* 36:438-444.
- PANEL discussion: The introductory course in entomology. *Entomol. Soc. Amer. N. Cent. Br. Proc.* 21:34-37. 1966, pub. 1967.
- PARRISH, D. W., DECOURSEY, J. D. and GEARY, J. M. 1966. Present and future concept in the gathering of entomological information. *Entomol. Soc. Amer. Bull.* 12(2):128-129.
- PAYNE, R. M. 1967. How I became an entomologist. *Entomol. Rec. J. variation* 79(2):44-45.
- PHAFF, H. J., MILLER, M. W. and MRAK, E. 1966. *The life of yeasts. Their nature, activity, ecology and relation to mankind.* Harvard Univ. Press, Cambridge, Mass. 186 p.
- PHILLIPS, J. R. and YEARIAN, W. C. 1966. Rearing insects for research purposes. *Ark. Farm Res.* 15:10.
- RODRIGUEZ, J. G. 1966. Axenic Arthropoda: current status of research and future possibilities. *N. Y. Acad. Sci. Ann.* 139(1):53-64.
- ROLSTON, L. H. and MCCOY, C. E. 1966. *Introduction to applied entomology.* New York, Ronald Press, 208p.
- SEIFTER, J. 1948. General pharmacology and toxicology of quinones and hydroquinones, in "Biological Antioxidants". C. G. McKenzie, Ed. Josiah Macy Found., New York. (Trans 3rd. Conf., 1948. 50-57 p.)
- SMITH, C. N. (Ed)1966. *Insect colonization and mass production.* Academic Press, N.Y.

- SOUTHWOOD, T. R. E. 1964. Insect conservation: an appeal. Ent. Mon. Mag. 100(1206-1207):288.
- SOUTHWOOD, T. R. E. 1965. Insect conservation: an appeal. Entomologist 98(1227): 191-192.
- SOUTHWOOD, T. R. E. 1965. Insect conservation; an appeal. Ent. Rec. & J. Variation 77:141-142.
- STATENS SKAEDYRLABORATORIUM-(Government Pest Infestation Laboratory) 1967. Annual Report 1966. Lyngby, Denmark.
- STEINER, P. E. 1952. Some relations of pathology to clinical research in cancer. In: "Clinical Problems in Cancer Research". D. A. Karnofsky, Ed. Slvan-Kettering Inst. 25-33 p.
- STEPHENS, J. F. 1839. A manual of British Coleoptera or beetles XII, 443 p. Longman and Co., London, England.
- TINDALE, N. B. 1966. Insects as food for the Australian aborigines. Australian Natur. Hist. 15(6):179-183.
- URQUHART, F. A. 1965. Introducing the insect. London, Frederick Warne, 258 p.
- UTAH, STATE UNIVERSITY. AGRICULTURAL EXTENSION SERV. 1964. 4-H entomology project. I-III, by G. F. Knowlton. Logan. 3v. (its 4-H Series, A-12).
- VILLIERS, A. 1964. Les insectes (The insects). Paris, Hachette, 63 p.
- WILSON, D. M. 1966. Insect walking. Annu. Rev. Entomol. 11:103-122.
- WYNDER, E. L., KMET, J., DUNGAL, N. and SEGI, M. 1963. The epidermiological investigation of gastric cancer. Cancer 16:1461-1496.

GENETICS AND PHENOTYPIC VARIATION

- ABDULLAH, M. and ABDULLAH, A. 1966. *Saperda* Fabricius, 1775=*Eutetrappa* Bates, 1884, syn. n. (Coleoptera: Cerambycidae, Lamiinae), with a catalogue, new records, color variation and a key to the species. Roy. Entomol. Soc. London, Proc. Ser. B, Taxonom 35(7/8):87-94.
- AMOS, T. G. and SCOTT, J. S. 1965. Pearl eye in *Carpophilus dimidiatus* F. (Coleoptera, Nitidulidae). Amer. Nat. 99:421-423.
- ANN. REV. of Entomol. 11. 1966. Regulation of gene action in insect development. H. Kroeber and M. Lezzi.
- ARIGA, H. and OTHERS. 1965. *Konchu iden-gaku* (Insect genetics). Tokyo, Azumi Shobo, 446 p.
- ASTAUROV, B. L. 1965. Two landmarks in the development of genetical concepts. (Rus) Moskov. Obshch. Isp. Prirody. B. Otd. Biol. 70:25-32.
- AUERBACH, C. 1967. The chemical production of mutations. Science 158(3805): 1141-1147.
- AYALA, F. J. 1967. Dynamics of populations. II. Factors controlling population growth and population size in *Drosophila pseudoobscura* and in *Drosophila melanogaster*. Ecology 48(1):67-75.
- AYALA, F. J. 1968. Evolution of fitness. II. Correlated effects of natural selection on the productivity and size of experimental populations of *Drosophila serrata*. Evolution 22(1):55-65.
- BACCI, G. 1965. Sex determination. Oxford, 306 p. (International Series of Monographs in Pure and Applied Biology, v. 26)
- BAKKE, A. 1968. Field and laboratory studies on sex ratio in *Ips acuminatus* (Coleoptera, Scolytidae) in Norway. Can. Entomol. 100(6):640-648,
- BARKE, H. E. and DAVIS, R. 1967. Sexual dimorphism in the lesser mealworm, *Alphitobius diaperinus* (Panz.) (Coleoptera: Tenebrionidae). Ga. Entomol. Soc. J. 2(4):119-121.
- BARKER, J. S. F. 1967. Factors affecting sexual isolation between *Drosophila melanogaster* and *Drosophila simulans*. Amer. Natur. 101(919): 277-287.
- BARKER, P. S., and JOHNSTON, J. A. 1968. Reproductive capacity of two strains of *Cryptolestes turcicus* (Coleoptera: Cucujidae). Can. Entomol. 100:198-199.
- BARTLETT, A. C. and BELL, A. E. 1966. "Ivory" an eye-color mutation in *Tribolium castaneum*. Entomol. Soc. Amer. Ann. 59(4):865-866.

- BARTLETT, ALAN C., BELL, A. E. and ANDERSON, V. L. 1966. Changes in quantitative traits of Tribolium under irradiation and selection. *Genetics* 54:699-713.
- BARTLETT, A. C., MATTIX, E. B., and WILSON, N. M. 1968. Multiple matings and use of sperm in the boll weevil, Anthonomus grandis. *Entomol. Soc. Amer. Ann.* 61(5):1148-1155.
- BARTLETT, A. C., WILSON, N. M. and MATTIX, E. B. 1968. The fate of genetic markers in populations of boll weevils (Anthonomus grandis). *J. Econ. Entomol.* 61(3):808-812.
- BECKER-CARUS, C. 1966. Effects of length of day on the formation of sexes of Armadillidium vulgare (Crust. Isopoda). (Ge) *Deut. Zool. Ges. Verhandl.* 1965:234-238.
- BENDER, H. A. and GAENSSLEN, R. A. 1967. Physiological genetics. In Wright, J. W. and Pal, R., ed. *Genetics of insect vectors of disease*, p. 487-504.
- BHAT, P. N. 1965. Genetical investigation of prediction of asymmetrical responses to two-way selection in Tribolium castaneum. *Diss.* *Abs.* 26(4):1871.
- BHAT, P. N. 1965. Genetical Investigation of prediction of Asymmetrical Response to two-way selection in Tribolium castaneum. Ph.D. thesis. Purdue University, 143 pages.
- BIER, K. and RIBBERT, D. 1966. Structure and genetic activity of the germ tract body DNA of Dytiscus (marginalis). (Ge). *Naturwissenschaften* 53(4):115.
- BIGELOW, R. S. 1965. Hybrid zones and reproductive isolation. *Evolution* 19(4):449-458.
- BIGELOW, R. S. 1967. Population genetics. and ecology. *New Entomol.* 4(1):7-12.
- BLACKMAN, D. G. 1966. A pearl-eyed mutation in Oryzaephilus surinamensis (L.) (Coleoptera, Silvanidae). *J. stored Prod. Res.*, 2:167-169.
- BLAIR, P. V. 1961. Quantitative consequences of mating systems and selection methods. Ph.D. thesis, Purdue University, Lafayette, Indiana.
- BLAIR, P. V., KYLE, W. H., ANDERSON, V. L. and BELL, A. E. 1961. Quantitative consequences of mating systems and selection methods. *Genetics.* 43:852-(Abs).
- BLEST, A. D. 1966. Evolutionary relationships between insects and their predators. In Kalmus, H, ed. *Regulation and control in living systems*, 380-396 p.
- BLICKENSTAFF, C. C. 1965. Partial intersterility of Eastern and Western U. S. strains of the alfalfa weevil (Hypera postica). *Ent. Soc. Amer. Ann.* 58:523-526.

- BODOR, J. 1965. Four new variations of *Crioceris* Fourc. (Coleoptera, Chrysomelidae). (Hu) *Rovartani Kozlemyek* (n. s.) 18:300-301.
- BOYLAN, W. J. and WONG, W. C. 1965b. Heterosis in *Tribolium castaneum*. *Canad. J. Genet. & Cytol.* 7(1):84-87.
- BOYLAN, W. J. and WONG, W. C. 1965. Responses to selection and combining ability in *Tribolium castaneum* *Genetics.* 52:429-430 (Abs).
- BRAY, D. F. 1966. Variability and restrictions against inbreeding and unequal family size in control populations of *Tribolium*. *Genet. Res.* 7(1):122-129.
- BRAY, D. F. and SCHEINBERG, E. 1967. Genotype-environment interaction in *Tribolium castaneum* and its control by selection. *Genetics* 56:588.
- BRAY, D. F. and SCHEINBERG, E. 1967. Further information on the control of genotype-environment interaction by selection in *Tribolium castaneum*. *Canadian Journal of Genetics and Cytology.*
- BRIEN, P. 1965. Remarks on the sexual reproduction of Invertebrata. (Fr) *Ann. Biol.* 4:329-365.
- BROWN, A. W. A. 1967. Genetics of insecticide resistance in insect vectors. In Wright, J. W. and PAL, R., ed. *Genetics of insect vectors of disease*, p. 505-552.
- BRUDNAYA, A. A, CHUDINOVA, A. N. and ANOSKINA, N. I. 1965. Resistance of pests of stored grain to fumigants. (Rus) Moskow. *Vsesoyuzn. Nauch.-Issled. Inst. Zern. i Prod. ego Pererabotki. Trudy* 53:109-123.
- BUTTERWORTH, F. M. 1965. The developmental genetics of the mutant apterous (ap) of *Drosophila melanogaster*. *Diss. Abs.* 26(6):2984.
- CHANDLEY, A. C. 1965. Application of the "distributive pairing" hypothesis to problems of segregation in translocation heterozygotes of *Drosophila melanogaster*. *Genetics.* 52(2, pt. 1):247-258.
- CHEVRIKOV, S. S. 1965. On some moments of the process of evolution from the modern genetic standpoint. (Rus) Moskow. *Obshch. Isp. Prirody. B. Otd. Biol.* 70:33-74.
- CHIGUSA, SADAO, SCHIDELER, DORIS M. and BELL, A. E. 1966. High frequency wild-type reversion of an eye-color mutant in *Tribolium castaneum*. *Genetics.* 54:327-328.
- COLAS, G. 1967. *Carabus rutilans* Dejean and its races. (Fr) *Entomologists (Paris)* 23:9-14.

- COSTANTINO, R. F. 1967. Genetic parameters in a developing biological system (abst). *Genetics*. 56:552.
- COSTANTINO, R. F. 1967. On population biology: unification of biochemical, genetical, and biometrical concepts. Diss. Abstr., Sect. A, 28(6): 2271B.
- COSTANTINO, R. F. 1967. On population biology: Unification of biochemical, genetical, and biometrical concepts, Ph.D. Thesis, 104pp, Purdue University Library.
- COSTANTINO, R. F., BELL, A. E. and ROGLER, J. C. 1966. Genetic control of lipid metabolism in Tribolium. *Nature (London)* 210(5032):221-222.
- COSTANTINO, R. F., BELL, A. E. and ROGLER, J. C. 1966. Genetic basis of selection response for small 13-day larval weight in a population of Tribolium castaneum. *Genetics*. 54:328.
- COSTANTINO, R. F., BELL, A. E., and ROGLER, J. C. 1967. Genetic analysis of a population of Tribolium:I. Corn oil sensitivity and selection response. *Heredity* 22:
- COSTANTINO, R. F., ROGLER, J. C. and BELL, A. E. 1968. Genetic analysis of a population of Tribolium:II. Metabolic pattern of the corn oil sensitive anomaly. *Heredity*
- CRAIG, G. B., HICKEY, W. A. and VANDE HEY, R. C. 1960. An inherited male-producing factor in Aedes aegypti. *Science* 132:1887-1889.
- CREED, E. R. 1966. Geographic variation in the two-spot ladybird (Adalia bipunctata) in England and Wales. *Heredity* 21:57-72.
- CRENSHAW, J. W. 1965. Radiation-induced increases in fitness in the flour beetle Tribolium confusum. *Science* 149(3682):426-427.
- CRENSHAW, J. W. 1966. Productivity and competitive ability in Tribolium. *Am. Nat.* 100:683-687.
- CROW, J. F. 1966. The evolution of resistance in hosts and pests. *Agr. Chem.* 21(4):31-32.
- CROW, J. F. 1966. Evolution of resistance in hosts and pests. *Nat. Res. Council. Sci. Aspects Pest Contr. Symp.* 263-275.
- CURTIS, C. F. 1968. Possible use of translocations to fix desirable genes in insect pest populations. *Nature*. 218(5139):368-369.
- DALY, H. V. and SOKOLOFF, A. 1965. Labiopedia, sex-linked mutant in Tribolium confusum Duval (Coleoptera:Tenebrionidae). *J. Morphol.* 117(2): 251-269.

- DANCIS, B. M. 1966. Experimental hybridization of an insular form of Tropisternus collaris (Fabricus) with mainland subspecies (Coleoptera; Hydrophilidae). Ind. Acad. Sci. Proc. 76:279-283.
- DAVYDOVA, E. D. 1966. Wing musculature of fireflies (Coleoptera, Lampyridae) with a different degree of elytrae and wing reduction. (Rus) Zool. Zh. 45(7):1023-1032.
- DAWSON, P. S. 1965. Serrate a sex-linked recessive gene in the flour beetle, Tribolium castaneum. Can. J. Genet. Cytol. 7(4):559-562.
- DAWSON, P. S. 1965. The genetics of developmental rate and its relationship to competitive ability in Tribolium. Diss. Abs. 25:3801.
- DAWSON, P. S. 1965. Estimation of components of phenotypic variance for developmental rate in Tribolium. Heredity 20:403-417.
- DAWSON, P. S. 1965. Genetic homeostasis and developmental rate in Tribolium. Genetics. 51(6):873-885.
- DAWSON, P. S. 1965. Genotype-environment interactions and developmental rate in the flour beetles Tribolium castaneum and T. confusum (Coleoptera, Tenebrionidae). Ann. Appl. Biol. 56:21-25.
- DAWSON, P. S. 1966. Developmental rate and competitive ability in Tribolium. Evolution 20:104-115.
- DAWSON, P. S. 1966. Insect antennal development and the serrate gene in Tribolium castaneum. J. Theor. Biol. 12:133-139.
- DAWSON, P. S. 1966. Genetic markers for two more linkage groups in Tribolium confusum. Canad. J. Genet. Cytol. 8:792.
- DAWSON, P. S. 1966. Correlated responses to selection for developmental rate in Tribolium. Genetica 37 63-77.
- DAWSON, P. S. 1967. Natural selection in a balanced lethal system in Tribolium castaneum. (Abs). Genetics. 56:554.
- DAWSON, P. S. 1967. A balanced lethal system in the flour beetle, Tribolium castaneum. Heredity 22(3):435-438.
- DAWSON, P. S. 1967. Developmental rate and competitive ability in Tribolium. II. Changes in competitive ability following further selection for developmental rate. Evolution 21:292.
- DAWSON, P. S. 1967. Developmental rate and competitive ability in Tribolium. III. Competition in unfavorable environments. J. Stored Prod. Res. 3:193.
- DAWSON, P. S. 1968. Xenocide, Suicide, and cannibalism in flour beetles. Amer. Natur. 102:97-105.

- DAWSON, P. S. 1968. Mutation as a source of indeterminism in Tribolium "competition" experiments. *Genetics* 60:172 (Abs).
- DAWSON, P. S. 1968. Genetic evidence for an hypothesis concerning evolution in Tribolium (confusum and T. castaneum). *J. Hered.* 59(3):188-190.
- DAWSON, P. S. 1968. A mutant gene maintained at high frequency in spite of complete selection against the homozygote. *Genetics*. 59(4):537-542.
- DAWSON, P. S. 1968. Developmental and genetic homeostasis in two species of flour beetles. *Evolution* 22:217-227.
- DAWSON, P. S. and LERNER, I. M. 1966. The founder principle and competitive ability of Tribolium. *Nat. Acad. Sci. Proc.* 55:1114-1117.
- DAWSON, P. S., SOKOLOFF, A., and RODRIGUEZ, P. 1965. A sexual aberration in the red rust flour beetle Tribolium castaneum Herbst. (Coleoptera:Tenebrionidae). *Pan-Pacific Ent.* 41:13-16.
- DEWES, A. A. and BELL, A. E. 1967. Close linkage of eye color genes in Tribolium castaneum. *Genetics*. 56:633-640.
- DUNCAN, G. J. 1967. The molecular properties and evolution of excitable cells. Oxford, Pergamon Press, 1967. 253 p. (International Series of Monographs on Pure and Applied Biology. Division:Zoology, v. 35)
- DUNN, L. C. and BENNETT, D. 1967. Sex differences in recombination of linked genes in animals. *Genet. Res. Camb.* 9:211-220.
- DYTE, C. E., LLOYD, C. J. and BLACKMAN, D. G. 1966. Synergism of DDT against resistant strains of Tribolium and Sitophilus.
- DYTE, C. E. and BLACKMAN, D. G. 1967. Selection of a DDT-resistant strain of Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae). *J. Stored Prod. Res.* 2:211-228.
- EDDLEMAN, H. 1965. Scar; a temperature sensitive mutation in Tribolium castaneum Herbst. *Ind. Acad. Sci. Proc.* 74:398-401.
- EDDLEMAN, H. L. 1965. Effect of temperature on penetrance of the scar mutant of Tribolium castaneum. *Genetics*. 52:441.
- EHRMAN, L. 1965. Direct observation of sexual isolation between allopatric and sympatric strains of the different Drosophila paulistorum races. *Evolution* 19:459-464.
- EHRMAN, L. 1966. Mating success and genotype frequency in Drosophila. *Animal Behavior* 14:332-339.
- EHRMAN, L., SPASSKY, B. PAULOVSKY, O. and DOBZHANSKY, T. 1965. Sexual selection, geotaxis, and chromosomal polymorphism in experimental populations of Drosophila pseudoobs. ura. *Evolution* 19:337-346.

- EHRMAN, L., and WILLIAMSON, D. L. 1965. Transmission by injection of hybrid sterility to nonhybrid males in Drosophila paulistorum: preliminary report. Nat'l. Acad. Sci. Proc. 54(2):481-483.
- ELENS, A. A. 1965. Studies of selective mating using the sex-linked mutants white and bar of Drosophila melanogaster. Experimentia 21(10):594-595.
- ENFIELD, F. D., COMSTOCK, R. E. and BRASKERUD, O. 1965. Linkage and the degree of dominance of genes affecting pupa weight in Tribolium castaneum. Genetics 52:442.
- ENFIELD, F. D., COMSTOCK, R. E. and BRASKERUD, O. 1966. Selection for pupa weight in Tribolium castaneum. I. Parameters in base populations. Genetics. 54:523-533.
- ENGELHARDT, M., RAPOPORT, H. and SOKOLOFF, A. 1965. Odorous secretion of normal and mutant Tribolium confusum. Science 150(3696):632-633.
- EVERS, A. M. J. 1965. The principle of allometry and possibilities for its use in entomology. (Ge) Entomol. Bl. 61: 27-37.
- EWING, A. W. and MANNING, A. 1967. The evolution and genetics of insect behaviour. Annu. Rev. Entomol. 12:471-494.
- FONSECA, J. P. C. DA. 1965. Sexual dimorphism of wheat weevils of the genus Sitophilus Schonh. (Coleoptera, Curculionidae). (Fr) Paris. Mus. Nat. Hist. Natur. Bull. (ser.2) 37:290-293.
- FORCE, D. C. 1967. Genetics in the colonization of natural enemies for biological control. Entomol. Soc. Amer. Ann. 60(4):722-729.
- FRANKLIN, I. R. 1967. The effect of linkage on genetic variance. Ph.D. thesis. University of California, Berkeley, California.
- FRANKLIN, R. T. 1966. Secondary sexual characters of the pales weevil (Hylobius pales). Ga. Entomol. Soc. J. 1(1):19-20.
- FRASER, R. A., and SCOWCROFT, W. R. 1965. Variation of scutellar bristles in Drosophila (melanogaster). V-VI. Austral. J. Biol. Sci. 18:851-875.
- FRINSTROM, J. W. 1965. Development of the morphological mutant cryptocephal of Drosophila melanogaster. Genetics. 52(2, pt.1):297-318.
- FURSCH, H. 1964. Race formation in the species Chnootriba similis and maderi (Col. Coccinellidae). (Ge) Munich. Mus. O. Frey. Entomol. Arb. 15(1): 108-110.
- GEORGHIOU, G. P. 1966. Genetic studies on insecticidal resistance. Advances in Pest Control Research 6:171-230.
- GLASSMAN, E. 1965. Genetic regulation of xanthine dehydrogenase in Drosophila melanogaster. Fed. Amer. Soc. Exp. Biol. Fed. Proc. 24:1243-1251.

- GLICH, B., and MITLIN, N. 1968. An immunological study of the antigens of Anthonomus grandis grandis and Anthonomus grandis thuberiae. Entomol. Soc. Amer. Ann. 61(2):548-550.
- GODWIN, P. A. and ODELL, T. M. 1967. Experimental hybridization of Pissodes strobi and P. approximatus (Coleoptera:Curculionidae). Entomol. Amer. Ann. 60:55-58.
- GUSTAFSSON, A. 1951. Some aspects of variation and evolution in plants. Evolution 5:181-184.
- HAAS, H. J. 1968. On the epigenetic mechanisms of patterns in the insect integument (a reappraisal of older concepts.). Int. Rev. Gen. Exp. Zool. 3:1-51.
- HANKS, G. D. 1965. Are deviant sex ratios in normal strains of Drosophila caused by aberrant segregation. Genetics 52(2, pt. 1):259-266.
- HAMILTON, W. D. 1966. The moulding of senescence by natural selection. J. Theor. Biol. 12(1):12-45.
- HAMILTON, W. D. 1967. Extraordinary sex ratios. Science 156(3774):477-488.
- HARDIN, R. T. and BELL, A. E. 1965. Two-way selection for body weight in Tribolium castaneum on two levels of nutrition. Genet. Res. 9: 309-330
- HARDIN, R. T. and BELL, A. E. 1967. Two-way selection for body weight in Tribolium on two levels of nutrition. Genet. Res. Comb. 9:309-330.
- HARDIN, R. T., ROGLER, J. C. and BELL, A. E. 1967. Genetic and environment interactions in growth of Tribolium castaneum. Canad. J. Zool. 45: 139-144.
- HARRISON, R. A. 1965. Resistance in insects. N. Z. Weed Pest Contr. Conf. Proc. 18th Annu. Meeting 151-154.
- HELLE, W. 1967. Genetics of resistance to insecticides. (Du) Vakbl. Biol. 47: 61-68.
- HENSON, W. R. 1959. Elytral pattern distribution in adjacent populations of Chrysomela aeneicollis (Schaeffer). Can. Field-Natur. 73:26-28.
- HENSON, W. R. 1965. Changes in elytral pattern distribution in Chrysomela aeneicollis Schaeffer (Coleoptera, Chrysomelidae). Can. Field-Natur. 79(4):257-260
- HESS, O. 1965. Structural differences in the Y chromosome of Drosophila hydei and their relations to gene activities. III. Sequence and localization of the loops. (Ge) Chromosoma 16:222-248.
- HILDRETH, P. E. 1965. Fertilization in Drosophila. II. Time of inactivation of a gene effect. Nat'l. Acad. Sci. Proc. 54(3):736-741.

- HOY, M. A. and DALY, B. B. 1966. Premature eversion of the ovipositor in a pupa of Tribolium confusum Duval (Coleoptera: Tenebrionidae). Pan-Pacific Entomol. 42(1):29-30.
- HRDÝ, I. and HURKOVÁ, J. 1966. Vorläufige Mitteilung zum Problem der DDT-resistenz bei Populationen von Leptinotarsa decemlineata Say aus der Tschechoslowakei.
- HUET, C. 1965. Study of the differentiation of the female genital apparatus of Tenebrio molitor (Coleoptera). (Fr) Paris. Soc. de Biol. Rend. 159-57-60.
- IABLOKOFF, A. K. 1966. Structural variations and coloring in Leptura otini Peyerimhoff (Col., Cerambycidae). (Fr) Soc. Entomol. France. Bull. 71:89-90.
- INAIZUMI, M. 1966. Studies on the hind-wing morphology of the Carabinae in Japan (Coleoptera). (Ja) Kontyu 34:248-265.
- IYAMA, S. 1965. Effect of linkage disequilibrium in an outbreeding population. I. Ebony locus in Drosophila melanogaster. (Ja) Jap. J. Breeding 15(3):57-58.
- JACKSON, D. J. 1928. The inheritance of long and short wings in the weevil Sitona hispidula, with discussion of wing reduction among beetles. Trans. Roy. Soc. Edinburgh 55:665-735.
- JANDER, U. 1966. Research on the racial history of grooming activities of tracheate insects. (Ge) Z. Tierpsychol. 23:799-844.
- JAYARAMAN, S. and DUCOFF, H. S. 1967. The response of McGill black and wild type flour beetles (Tribolium confusum) to temperature stress and to anoxia. Am. Zool. 7:194-195.
- JOHNSON, G. R. 1966. Recombination differences with reciprocal crosses in Tribolium castaneum. Genetics. 53(1):111-115.
- KALMUS, H. 1966. Regulation and control in living systems. London, Wiley. 468 p.
- KANG, Y. S., YI, T. J. and BHANG, K. W. 1965. Two new species of the Drosophilidae from Korea. Annot. Zool. Jap. 38(2):97-100.
- KARTEN, I. 1965. Genetic differences and conditioning in Tribolium castaneum. Physiol. Zool. 38:69-79.
- KATIIYAR, K. P. and FERRER, W. F. 1965. Evaluation of four types of yeast used in larval diet of the Mediterranean fruit fly Ceratitidis capitata Wied. (Sp) Turrialba 15(3):202-207.
- KATO, M. 1965. Fatty acids in Drosophila melanogaster. II. Canad. J. Biochem. 43:1907-1914.

- KAZAZIAN, H. H., YOUNG, W. J. and CHILDS, B. 1965. X-linked 6-phosphogluconate dehydrogenase in Drosophila: subunit associations. Science 150:1601-1602.
- KELLER, E. C. and GLASSMAN, E. 1965. Phenocopies of the ma-1 and ry mutants of Drosophila melanogaster: inhibition in vivo of xanthine dehydrogenase by 4-hydroxypyrazolo (3,4-d) 1 pyrimidine. Nature (London) 208(5006):202-203.
- KEYL, H. G. 1965. A demonstrable local and geometric increase in the chromosomal DNA of Chironomus (thummi). Experimentia 21(4):191-193.
- KHAN, A. H. and ALDERSON, T. 1965. Mutagenic effect of irradiated and un-irradiated DNA in Drosophila. Nature (London) 208(5011):700-702.
- KIKKAWA, H. 1968. Biochemical genetics of proteolytic enzymes in Drosophila melanogaster I. General considerations. Jap. J. Genet. 43(2):137-148.
- KIMURA, M. 1968. Genetic variability maintained in a finite population due to mutational production of neutral and nearly neutral isocalleles. Genet. Res. 11(3):247-269.
- KIRPICHNIKOV, V. S. 1967. The general theory of heterosis. 1. Genetic mechanisms. (Rus) Genetika 10:167-180.
- KOBAKHIDZE, D. and SIKHARULIDZE, T. 1967. Sex ratios of Dendroctonus micans Kugel. (Coleoptera, Scolytidae) in natural populations in Georgia (USSR). (Ge) Acad. Polon. Sci. Bull. Ser. Biol. 15(7):401-403.
- KOGAN, M. 1964. Analysis of a small sample of a population of "Epistomentis pictus" (Gory, 1841) and considerations on the variations described (Coleoptera, Buprestidae). (Por) Rev. Bras. de Biol. 24(3):349-358.
- KOLITSOV, N. K. 1965. Hereditary molecules. (Rus) Moskov. Obshch. Isp. Prirody. B. Otd. Biol. 70:75-104.
- KOSSWIG, C. 1965. Genetic basis of polymorphism. (ge) Zool. Anz. 175(1):21-50.
- KRAUS, E. 1968. A genetical investigation of Biomass in two populations of Tribolium castaneum and its response under various criteria of selection. Ph.D. Thesis Purdue University.
- KROEGER, H. and LEZZI, M. 1966. Regulation of gene action in insect development. Annu. Rev. Entomol. 11:1-22.
- LABEYRIE, V. 1967. Effects of physiological state of insect parents on their progeny. (Rus) Zhur. Obshch. Biol. 28:30-49.
- LABEYRIE, V. 1967. Physiology of the mother and condition of progeny of insects. (Fr) Bull. Biol. Fr. Belg. 101:13-71.

- LAKOGY, A. 1966. Experiments on the development of the resistance to DDT of the Colorado potato beetle (Leptinotarsa decemlineata Say) and of the blossom beetle (Meligethes aeneus F.) in Poland.
- LANE, C. and ROTHSCHILD, M. 1965. A case of Mullerian mimicry of sound. Roy. Entomol. Soc. London. Proc. Ser. A Gen. Entomol. 40:156-158.
- LERNER, I. M. and INOUE, N. 1968. Behavior genetics with special reference to maze-running of Tribolium. In Dronamraju, K. R. Ed., Haldane and Modern Biology, The Johns Hopkins Press, Baltimore, Maryland. 384 pp.
- LEROI, B. 1966. Influence of the date of fecundation on the reproduction of female Oryzaephilus surinamensis L. (Coleoptera, Cucujidae). (Fr) Acad. Sci. Compt. Rend. Ser. D. 263(5):529-532.
- LEVENE, H., LERNER, I. M., SOKOLOFF, A., HO, F. K. and FRANKLIN, I. R. 1965. Genetic load in Tribolium. Nat'l. Acad. Sci. Proc. 53:1042-1050.
- LEVY, A. 1965. Sex ratio in isogenic laboratory populations of Drosophila melanogaster. Amer. Nat. 99:426-429.
- LEWONTIN, R. C. 1965. Selection for colonizing ability. In International Union of Biological Sciences Symposia on General Biology, 1, Asilomar, Calif, 1964. The genetics of colonizing species, proceedings, p. 77-94.
- LINDGREN, D. L. and VINCENT, L. E. 1966. Development of resistance in stored product insects to insecticides. Cereal Sci. Today 11:12-41, 26.
- LINSLEY, D. L. and GRELL, E. H. 1968. Genetic variation of Drosophila melanogaster. Carnegie Inst. of Washington, Washington, D. C. Publ. #627.11 472 pp.
- LUNING, K. G. 1966. Drosophila-tests in pharmacology. Nature (London) 209:84-86.
- MACALHAES, L. E. DE, TOLEDO, J. S. DE, and CUNHA, A. B. DA. 1965. The nature of lethals in Drosophila willistoni. Genetics. 52:599-608.
- MARKKULA, M. and PUHAKAINEN, P. 1966. Notes on the wing length of some Sitona (Col, Curculionidae) species. Suomen Hyontheistietellinen Aikakauskirja. Ann. Entomol. Fenn. 32(1):55-57.
- MARZLUF, G. A. 1965. Enzymatic studies with the suppressor of vermilion of Drosophila melanogaster. Genetics. 52(3):503-512.
- MATTINGLY, P. F. 1967. Genetics of behaviour. In Wright, J. W. and Pal, R., ed. Genetics of insect vectors of disease, 553-566p.
- MAXWELL, F. G., LAFEVER, H. N. and JENKINS, J. N. 1966. Influence of the glandless gene in cotton on feeding, oviposition, and development of the boll weevil (Anthonomus grandis) in the laboratory. J. Econ. Entomol. 59(3):585-588.

- MCCOY, J. R., LLOYD, E.P. and BARTLETT, A. C. 1968. Diapause in crosses of a laboratory and a wild strain of boll weevils. *J. Econ. Ent.* 61:163-166.
- MCDONALD, D. J. and DAVIDSON, L. J. 1965. Population fitness in Tribolium confusum. I. An approach to the problem. *Amer. Natur.* 99(909): 463-470.
- MCDONALD, D. J. and STONER, L. 1968. Population fitness in Tribolium confusum. II. Population characteristics influencing the capacity for survival. *Amer. Natur.* 102(926):323-336.
- MEDVEDEV, G. S. 1959. Types of oral apparatuses of Tenebrionidae of Turkmenia. 12 p. (TF 62-15642) Transl. 15377.
- MERRELL, D. J. 1965. Lethal frequency and allelism in DDT resistant populations and their control. *Amer. Nat.* 99:411-417.
- MEUNIER, K. 1965. Normal polymorphism of a functionally inert organ (mandible) of the Lucanidae Coleoptera Lamellicornia. (Ge) *Zool. Anz.* 175:50-92.
- MICHELSEN, A. 1966. On the evolution of tactile stimulatory actions in longhorned beetles (Cerambycidae, Coleoptera). *Z. Tierpsychol.* 23:257-266.
- MISSONNIER, J. and STENGEL, M. 1966. Etude des facteurs de fecondite des adultes de Chortophila brassicae, Hygleymyia antiqua et Pegomyia betae. *Ann. Epiphyties* 16:5-41.
- MORGAN, M. T. 1965. Ecological variations of laboratory populations of three mutants of Tribolium castaneum (Herbst) and three mutants of Tribolium confusum (duVal). *Diss. Abs.* 26(4):1874.
- MORRISON, F. O. and KUMAR, V. 1966. Susceptibility levels of stored product pests to present day insecticides.
- MOSSE, I. B. , TURBIN, N. V. and FREIMANIS , YA. F. 1964. Effect of conjugate aromatic compounds on heredity. I. The mutational and antimutational effect of certain indene compounds. (Rus) *Akad. Nauk Belorusskoi SSR. Dok.* 8:827-829.
- MUKAI, T., CHIGUSA, S., and YOSHIKAWA, I. 1965. The genetic structure of natural populations of Drosophila melanogaster, III. Dominance effect of spontaneous mutant polygenes controlling viability in heterozygous genetic backgrounds. *Genetics.* 52(3):493-501.
- NAKAMURA, H. 1966. Two activity-types observed in the adult of Callosobruchus chinensis. *Jap. J. Ecol.* 16:(in press).
- NASH, T. A. M. and KERNAGHAN, R. J. 1965. A high proportion of early deaths among uninseminated females of Glossina austeni Newst. *Bull. Ent. Res.* 56(1):65-66.

- NAYAK, B. N. and FRIARS, G. W. 1968. A selection experiment involving a genotype X environment interactions in Tribolium castaneum. Can. J. Genet. Cytol. 10:768.(Abs).
- NEVILLE, A. C. 1967. Daily growth layers in animals and plants. Cambridge Phil. Soc. Biol. Rev. 42:421-441
- NOVOZHENOV, YU. I. 1967. Fitness of natural populations of the cockchafer Melolontha hippocastani F. (Rus) Zool. Zh. 46:73-82.
- O'DONALD, P. 1968. The evolution of dominance by selection for an optimum. Genetics 58(3):451-460.
- OGDEN, J. C. 1967. An experimental and genetic analysis of dispersal behavior in Tribolium. Ph.D. Thesis. Stanford University. Stanford, California.
- OGITA, Z. and KASAI, T. 1965. Genetic of multiple esterases in Musca domestica. Jap. J. Genet. 40:1-14.
- OPPENORTH, F. J. 1965. Biochemical genetics of insecticide resistance. Ann. Rev. Ent. 10,230.
- OROZCO, F. 1967. Tribolium castaneum in animal improvement. (Sp) Avicult. Tec. 18(4):147-148, 151-152, 155-158, 161-162.
- PARE, J. P. 1965. Genetic basis for deleterious genes in populations of Drosophila melanogaster under selection. Diss. Abs. 26(5):2426.
- PARKIN, E. A. 1966. Resistance of field strains of stored-product beetles.
- PARSONS, P. A. 1965. Assortative mating for a metrical characteristic in Drosophila (melanogaster). Heredity 20(2):161-167.
- PATERSON, H. E. Population genetic studies in areas of overlap of two subspecies of Musca domestica L. Monog. Biol. 14:244-254.
- PIMENTEL, D. 1968. Population regulation and genetic feedback. Science 159 (3822):1432-1437.
- PIPKIN, S. B. and WIRTH, W. W. 1965. Lectotypes of Panama Drosophila (Diptera, Drosophilidae). Ent. Soc. Wash. Proc. 67(3):147-148.
- PITMAN, G. B., VITs, J. P. and RENWICK, J. A. A. 1966. Variation in olfactory behavior of Ips confusus (LeC. Coleoptera:Scolytidae) between laboratory and field bioassays. Naturwissenschaften 53(2): 46-47.
- PRADHAN, S. and BHATIA, S. K. 1966. Studies on development of resistance to insecticide in Tribolium castaneum Herbst.

- PRIORE, R. 1964. Chromatic variability in Rodolia cardinalis Muls. (Coleoptera Coccinellidae). (It) Portici. Lab Entomol. Agr. "Filippo Silvestri." Boll. 22:283-288.
- PUISSEGUR, C. 1965. A new hemimelanistic Chrysocarabus auronitens festivus Def. from the Montagne Noire (Coleop. Carab.)(Fr.) Entomologiste (Paris) 21:22-24.
- QUARTERMAIN, A. R. 1967. Beetle pest proves be experimental asset. New Zeal. J. Agr. 115:20-21.
- QUARTERMAIN, A. R. 1967. Population structure and breeding for genetic improvement. Proc. A. Z. Soc. Anim. Prod. 27:46-47.
- RAI, K. S. 1967. Techniques for the study of cytogenetics and genetics of insect vectors of disease, 673-701 p.
- RAPOPORT, I. A. and FILIPPOVA, L. M. 1965. Difference of mutagenic effect of preparations synthesized for chemotherapy. (Rus) Moskov. Obshch. Isp. Prirody. B. Otd. Biol. 70:117-129.
- RAYAUD, P. 1968. Hybrids from breeding Coleoptera Carabidae. (Fr) Soc. Linn. Lyon. Bull. Mens. 37:145-147.
- REDDI, O. S., REDDY, G. M. and RAO, M. S. 1965. Induction of crossing-over in Drosophila males by means of ovarian extract. Nature (London) 208(5006):203.
- REMINGTON, C. L. 1968. The population genetics of insect introduction. Annu. Rev. Entomol. 13:415-426.
- RENSING, L., BRUNKEN, W. and HARDELAND, R. 1968. On the genetics of a circadian rhythm in Drosophila. Experientia 24:509-510.
- RICHARDSON, R. H. and KOJIMA, K. I. 1965. The kinds of genetic variability in relation to selection responses in Drosophila fecundity. Genetics 52:583-598.
- RITOSSA, R. M., PULITZER, J. F., SWIFT, H. and VON BORSTEL, R. C. 1965. On the action of ribonuclease in salivary gland cells of Drosophila (busckii). Chromosoma 16:144-151.
- ROBERTS, C. W. and JURILOFF, D. 1968. Evidence for gene homology of two pearl-eyed genes in the Tribolium castaneum and Tribolium confusum. Can. J. Genet. Cytol. 10:139-142.
- ROSS, M. N., COCHRAN, D. G. and SMYTH, T. 1964. Eye color mutations in the American cockroach, Periplaneta americana. Ent. Soc. Amer. Ann. 57:790-792.

- ROSS, M. H. and COCHRAN, D. G. 1966. Mutant stocks of the German cockroach.
- ROSS, M. H., COCHRAN, D. G. and SMYTH, T., Jr. 1964. Eye-color mutations in the American cockroach, Periplaneta americana. Ann. Ent. Soc. Amer. 57, 790.
- ROSS, M. H. and COCHRAN, D. G. 1966. A preliminary report on genetic variability in the German cockroach, Blattella germanica. Ann. Ent. Soc. Amer. 58, 368.
- RUDKIN, G. T. 1965. The relative mutabilities of DNA regions of the X chromosome of Drosophila melanogaster. Genetics 52:655-681.
- SANKARANARAYANAN, K. 1965. Inbreeding and genetic loads in irradiated experimental populations of Drosophila melanogaster. Nature (London) 207:1216-1217.
- SANO, I. 1967. Density effect and environmental temperature as the factors producing the active form of Callosobruchus maculatus (F.) (Coleoptera, Bruchidae). J. Stored Prod. Res. 2:187-195.
- SCHAFFER, H. E. 1968. A measure of discrimination in mating; Evolution 22: 125-129.
- SCHEINBERG, E. 1966. The sampling variance of the correlation coefficients estimated in genetic experiments. Biometrics. 22:187-191.
- SCHEINBERG, E. 1966. Genetic gains in populations of Tribolium castaneum selected for three quantitative traits under uni-stage tandem selection and under restricted selection indices. Ph.D. Thesis, 92 p. Purdue University Library.
- SCHEINBERG, E. 1966. Genetic gain in populations of Tribolium castaneum selected for three quantitative traits under uni-stage tandem selection and under restricted selection indices. Diss. Abstr. Sect. B. 27:370B.
- SCHEINBERG, E. 1966. Theoretical consideration and experimental evidence for a high relative efficiency of indirect to direct selection for larval weight in Tribolium castaneum. Proc. Pop. Gene. (NCR-21) T. C. M., Iowa State University. 168-180.
- SCHEINBERG, E. 1966. Genetic gain in populations of Tribolium castaneum selected for three quantitative traits under uni-stage tandem selection and under restricted selection indices. Ph.D. Dissertation, Purdue University Library, 107 p.
- SCHEINBERG, E. 1967. Experimental evidence for a high relative efficiency of indirect to direct selection in Tribolium castaneum. Genetics 56:588.

- SCHNEIDER, E. 1967. The sampling variance of the relative efficiency of indirect to direct selections when using variance-covariance components. Australian Journal of Statistics. 9:35-40.
- SCHNEIDER, E. 1967. An approach to data processing in selection for genetic gain using high speed computers. Canadian Journal of Genetics and Cytology. 9:857-873.
- SCHNEIDER, E., BELL, A. E. and ANDERSON, V. L. 1965. Genetics gain in Tribolium castaneum under uni-stage tandem selection and restricted selection index. Genetics. 52:472-473.
- SCHNEIDER, E., BELL, A. E. and ANDERSON, V. L. 1967. Genetic gains in populations of Tribolium castaneum under uni-stage tandem selection and under restricted selection indices. Genetics. 55:69-90.
- SCHMIDT, T. H. and ENGLERT, D. C. 1967. The "mottled" mutation in Tribolium castaneum. Canad. J. Cytol. 9:335-341.
- SCHUMANN, H. 1967. Pigment content and the size of eye in various races of Drosophila. (Ge) Umschau 67(17):552.
- SHAW, D. D. 1966. The inheritance of two mutations, "pearl" and "fuscous" in Dermestes maculatus De Geer (Coleoptera, Dermestidae). J. Stored Prod. Res. 1:261-265.
- SHAW, D. D. 1968. Selection for supernumerary Y-Chromosomes in Dermestes maculatus (Coleoptera: Dermestidae) Can. J. Genet. Cytol. 10: 54-62.
- SMITH, B. C. 1965. Differences in Anatis mali auct. and Coleomegilla maculata lengi Timberlake to changes in the quality and quantity of the larval food (Coleoptera:Coccinellidae). Can. Entomol. 97: 1159-1166.
- SMITH, B. C. 1966. Variation in weight, size and sex ratio of coccinellid adults. (Coleoptera:Coccinellidae). Can. Entomol. 98:639-644.
- SMITH, S. G. 1966. Natural hybridization in the coccinellid genus Chilocorus. Chromosoma 18:380-406.
- SODERSTROM, E. L. and WILBUR, D. A. 1966. Biological variations in three geographical populations of the rice weevil (Sitophilus oryzae) complex. Kans. Entomol. Soc. J. 39:32-41.
- SOKOLOFF, A. 1965. Further linkage group identifications in Tribolium. Genetics. 52:476.
- SOKOLOFF, A. 1965. An unusual modifier-suppressor system in Tribolium castaneum. Amer. Nat. 99:143-151.

- SOKOLOFF, A. 1966. "Spatulate" - a new autosomal dominant with recessive lethal effects in Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae). J. Stored Prod. Res. 1:291-292.
- SOKOLOFF, A. 1966. Morphological variation in natural and experimental populations of Drosophila pseudoobscura and D. persimilis. Evolution 20:49-71
- SOKOLOFF, A. 1966. The genetics of Tribolium and related species. Advan. Genet. Suppl. 1, 212 p.
- SOKOLOFF, A. 1969. Genotype-environment interactions in the outcome of "competition" in Tribolium II. Genetic influence in the survival of Tribolium castaneum and T. confusum in mixed cultures. Genetika.
- SOKOLOFF, A., HAYES, T. L., PEASE, R. F. W. and ACKERMANN, M. 1967. Tribolium castaneum: morphology of "aureate" revealed by the scanning electron microscope. Science 157(3787):443-445. 470 Sci2.
- SOKOLOFF, A., FRANKLIN, I. R., OVERTON, L. F. and HO, F. K. 1966. Comparative studies with Tribolium (Coleoptera, Tenebrionidae) I. Productivity of T. castaneum (Herbst) and T. confusum Duval on several commercially available diets. J. Stored Prod. Res. 1: 295-311.
- SOKOLOFF, A., FRANKLIN, I. R. and LAKHANPAL, R. K. 1966. Comparative studies with Tribolium (Coleoptera, Tenebrionidae) II. Productivity of T. castaneum (Herbst) and T. confusum. On natural, semi-synthetic and synthetic diets. J. Stored Prod. Res. 1:312-324.
- SOKOLOFF, A. and HOY, M. A. 1968. Mutations as possible aids for establishing genitalic homologies in the sexes in Tribolium castaneum. Entomol. Soc. Amer. Ann. 61:550-553.
- SOKOLOFF, A., HOY, M. A. and JOHNSON, G. R. 1966. Linkage studies in Tribolium castaneum (Herbst). XI. The map position of "platinum eye" and "spatulate". J. Stored Prod. Res. 1:255-260.
- SOKOLOFF, A. and LERNER, I. M. 1967. Laboratory ecology and mutual predation of Tribolium species. Am. Naturalist 101:261-276.
- SOKOLOFF, A., ACKERMANN, M. and OVERTON, L. F. 1967. Linkage studies in Tribolium confusum Duval. II. The map position of three homeotic mutants. Can. J. Genet. Cytol. 9:490-502.
- SOKOLOFF, A., SHRODE, R. R. and BIWATERS, J. H. 1965. Productivity in Tribolium castaneum. Physiol Zool. 38:165-173.
- SPASSKY, B., DOBZHANSKY, T., and ANDERSON, W. W. 1965. Genetics of natural populations. XXXVI. Epistatic interactions of the components of the genetic load in Drosophila pseudoobscura. Genetics 52:653-664.

- SPIELMAN, A., and KITZMILLER, J. B. 1967. Genetics of populations of medically important arthropods. In Wright, J. W., and Pal, R., ed. Genetics of insect vectors of disease, 459-485 p.
- STEINHAUSEN, W. R. 1966. Comparative morphology of the labrum of leaf beetle larvae (Col. Chrys.) (Ge) Deut. Entomol. Z. (n. s.) 13:313-322.
- STEMLEY, R. G. and WILBUR, D. A. 1966. A color characteristic for sexing live adult lesser grain borers (Rhyzopertha dominica). J. Econ. Entomol. 59:760-761.
- STERN, C. 1965. Development and genetics of patterns. (Ge) Naturwissenschaften 52:357-365.
- TSUKAMOTO, M. 1965. The estimation of recombination values in backcross data when penetrance is incomplete, with a special reference to its application to genetic analysis of insecticide-resistance. Jap. J. Genet. 40(3):159-171.
- UCHIDA, S. 1966. Water content of body in several kinds of the bean weevil. (Ja) Jap. J. Appl. Entomol. Zool. 10(1):39-43.
- URSPRUNG, H. and LEONE, J. 1965. Alcohol dehydrogenases: a polymorphism in Drosophila melanogaster. J. Exp. Zool. 160:147-154.
- UTIDA, S. 1965. Phase dimorphism observed in the laboratory population of the cowpea weevil. Callosobruchus maculatus, IV. The mechanism of induction of the flight form. Jap. J. Ecol. 15:193-199.
- VINCENT, L. E. and LINDGREN, D. L. 1967. Susceptibility of laboratory and field-collected cultures of the confused flour beetle and red flour beetle to malathion and pyrethrius. J. Econ. Ent. 60: 1763-1764.
- WALLACE, B. 1965. The viability effects of spontaneous mutations in Drosophila melanogaster. Amer. Nat. 99:335-348.
- WEBER, J. and ROBERTS, C. W. 1966. The Genetics of Riboflavinless, Pearl-Eyed Trait in Tribolium confusum. Can. J. Genet. Cytol. 8:796-806.
- WEBER, J. and ROBERTS, C. W. 1967. Riboflavin accumulation in p^r , p^s and wild type genotypes of Tribolium confusum. Can. J. Genet. Cytol. 9:565-568.
- WEBER, J. and ROBERTS, C. W. 1967. Relationship between Malpighian Tubule pigmentation and riboflavin associated with eye-color mutants of Tribolium confusum. Can. J. Genet. Cytol. 9:302-306.
- WEHNER, R. 1968. Changes in the determination of organ rudiments of Drosophila. Umschau 68:325.
- WHITTEN, M. J. 1968. Genetical control of penetrance and evolution of dominance in Drosophila (melanogaster). Heredity 23:263-278.

- WICKLER, W. 1965. Mimicry and the evolution of animal communication, *Nature* (London) 208(5010):519-521.
- WIEGAND, H. 1965. Relation between the duration of tests and the resistance. (Ge) *Arch. Pflanzenschutz* 1:39-40.
- WIESE, L. 1966. Sex determination. (Ge) *Fortschr. Zool.* 18:139-206.
- WILLIAMS, G. C. 1966. *Adaptation and natural selection; a critique of some current evolutionary thought.* Princeton, New Jersey, Princeton University Press, 1966. 307 p.
- WILSON, E. O. 1965. The challenge from related species. In *International Union of Biological Sciences Symposia on General Biology, 1, Asilomar, Calif. 1964. The genetics of colonizing species, proceedings, 7-27 p.*
- WILSON, F. 1965. Biological control and the genetics of colonizing species. In *International Union of Biological Sciences Symposia on General Biology, 1, Asilomar, Calif., 1964. The genetics of colonizing species, proceedings, 307-329 p.*
- WILSON, L. F., WADDELL, C. D. and MILLERS, I. 1966. A way to distinguish sex of adult Hylobius weevils in the field. *Can. Entomol.* 98: 1118-1119.
- WILSON, S. P., KYLE, W. H., and BELL, A. E. 1965. The effects of mating systems and selection on pupa weight in Tribolium. *Genet. Res.* 6:14-24.
- WILSON, S. P., KYLE, W. H. and BELL, A. E. 1965. The effects of mating systems and selection on pupal weight in Tribolium (castaneum) *Genet. Res.* 6:341-351.
- WILSON, S. P., KYLE, W. H. and BELL, A. E. 1966. The influence of mating systems on parent-offspring regression. *J. Heredity* 57:124-125.
- WILSON, S. P., BLAIR, P. V., KYLE, W. H. and BELL, A. E. 1968. The influence of selection and mating systems on larval weight in Tribolium *J. Heredity* 59:313-317.
- WINTERINGHAM, F. P. W. and HEWLETT, P. S. 1966. Insect cross resistance phenomena; their practical and fundamental implications. *Chemy Ind.* 35, 1512, 256 p.
- WOODROFFE, G. E. 1965. Intraspecific variation in tarsal number in Cryptophagus schrotteri Reitter (Col., Cryptophagidae). *Entomol. Mon. Mag.* 101:118.
- WORLD HEALTH ORGANIZATION. 1967. Scientific Group on the Genetics of Vectors and Insecticide Resistance. Report of Meeting in Geneva, Aug. 5-9, 1963. In Wright, J.W. and Pal, R., ed. *Genetics of insect vectors of disease, 705-734 p.*
- WRIGHT, J. W. and PAL, R., ed. 1967. *Genetics of Insect Vectors of Disease.* New York, Elsevier Publishing Company, 1967. 794 p.

- YOUNG, F. N. 1965. The genetic basis of color patterns of aquatic beetles of the Tropisternus collaris complex (Coleoptera:Hydrophilidae). Entomol. Soc. Amer. N. Cent. Br. Proc. 20:87-92.
- YOUNG, F. N. 1965. Color pattern inheritance in experimental hybrids of North and South American forms of Tropisternus collaris (Fabricius) (Coleoptera; Hydrophilidae). Ind. Acad. Sci. Proc. 74:194.
- YOUNG, F. N. 1966. Genetic variability in a population of Tropisternus collaris (Fabricius) (Coleoptera;Hydrophilidae). Ind. Acad. Sci. Proc. 75:137-140.
- YOUNG, F. N. 1966. Studies on the color patterns in crosses of Tropisternus from western Mexico with other color forms of the Tropisternus collaris complex (Coleoptera;Hydrophilidae). Ind. Acad. Sci. Proc. 76:272-278.
- YOUNG, S. S. Y., and SHELDON, B. L. 1965. Correlated response in scutellar bristles to selection for abdominal bristles in Drosophila melanogaster. Genetics 52(2, pt. 1):287-295.
- ZURABYAN, A. S. and TIMOFEEV-RESOVSKII, N. V. 1967. Heterozygotic polymorphism in quantitatively stable populations (Rus) Zhur. Obshch. Biol. 28:612-617.
- ZASLAVSKII, V. A. 1967. The reproductive isolation in certain freely-crossing insect species. (Rus) Akad. Nauk SSR. Dokl. 174(6):1433-1434.

INSECTICIDES AND INSECTICIDE RESISTANCE

- ABDEL-RAZIG, M. EL. T. 1967. Evaluation of compounds of cadmium and related metals as reproduction inhibitors in insects. Diss. Abstr, Sect. B. 27:4594B.
- AEROSOL review. 1966. London, 1956. 86 p.
- ALVAREZ-ESTRADA, D. and ESPINOSA DE LOS MONTEROS, J. 1966. Insecticidal properties of silicates. (Sp). Rev. Agroquim. Tecnol. Aliment 6: 245-257.
- ARUTYUNOVA, E. V. 1965. Some peculiarities of joint effect of BHC and heptachlor on the physiological state of wireworms. (Rus) Vses. Nauch-Issled. Inst. Zashch. Rast. Tr. 24:85-88.
- ASHRAFI, S. H. and ALI, A. 1965. Residual action of Makrolin as compared with other insecticides on Tribolium castaneum (Herbst) Tenebrionidae: Coleoptera. Pakistan J. Sci. Indus. Res. 8:289-290.
- AUSTRALIA, COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION. 1966. A bacterial insecticide. Rural Res. G. S. I. R. O. (Commonwealth Sci. Ind. Res. Organ.) 55:20-22.
- BACHE, C. A. and LISK, D. J. 1966. Determination of organophosphorus insecticide residues using Cooks's emission spectroscopic detector. Residue Rev. 12:36-44.
- BAGENT, J. L. 1967. Investigations on the possible existence of rhythms in sensitivity to methyl parathion in twospecies of insects. Diss. Abstr., Sect. B, 28:1972B-1972B.
- BAILEY, T. E. and HANNUM, J. R. 1967. Distribution of pesticides in California. Amer. Soc. Civil Eng. J. 93 (SA5, proc. paper 5510):27-43.
- BANG, Y. H. and TELFORD, H. S. 1966. Effect of sublethal doses of fumigants on stored-grain insects. Wash. Agr. Exp. Sta. Tech. Bull. 50. 22p.
- BANO, A., and MAJUMDER, S. K. 1965. Pathological changes induced by tricalcium phosphate in insects. J. Invertebrate. Pathol. 7:384-387.
- BARKER, P. S. 1966. Fumigation techniques. ITIS-9:139 p.
- BATORA, V. 1965. Some results of investigations on phosphororganic pesticide residues. (Pol)Poznan. Inst. Ochrony Roslin. Biul. 32:1-10.
- BERATLIEF, C., POPESCU, C. and COJOCARU, M. 1965. Observations on the efficiency of silica gel in the insect pest control of stored wheat. (Rum) Bucharest. Inst. Cent. Cercet. Agr. Sect. Prot. Plant. An. 3:363-367.

- BERCK, B. 1961. Polarographic determination of fumigant gases. Paper C3-22 Proc. XVIIIth Intern. Congr. Pure and Applied Chemistry, Montreal 18:261 (Abstract).
- BERCK, B. 1962. A rapid method of measuring mercury residues of treated seed. Proc. Assoc. Comm. on Plant Diseases, N. R. C. 30th Ann. Meeting, Winnipeg 30:31-32.
- BERCK, B. 1962. Research on pesticides and pesticide residues. Can. Dept. of Agric. Research for Farmers 7:8-9.
- BERCK, B. 1962. Distribution and persistence of fumigants. Pesticide Research Report 1962, Nat'l Comm. on Pesticide Use in Agriculture, Ottawa 1:184-186.
- BERCK, B. 1962. Microdetermination of fungicidal metals. Pesticide Research Report 1962, Nat'l Comm. on Pesticide use in Agriculture, Ottawa 1:222-224.
- BERCK, B. 1963. Interim report on microdetermination of fungicidal metals. Proc, Assoc. Comm. on Plant Diseases, N. R. C. 31st Ann. Meeting, Edmonton, Canada 31:50-51.
- BERCK, B. 1964. Exploratory tests on microdetermination of copper, zinc and nickel by gas chromatography. Proc. Assoc. Comm. on Plant Diseases, N. R. C. 32nd Ann. Meeting, Saskatoon, Canada. 32: 24-25.
- BERCK, B. 1966. Investigations on fumigants. I. The nature and properties of fumigants. Occup. Health Review 18:16-26.
- BERCK, B. 1966. Some relationships between atmospheric gases and biocidal effectiveness of fumigants applied to wheat in hermetic storage. Proc. North Dakota Acad. of Science, Vol. 20 (Abstract).
- BERCK, B. 1966. New findings about fumigant and atmospheric gases in the control of insects and molds in grain. Proc. Entomol. Soc. Manitoba Vol. 22.
- BERCK, B. 1966. Phosphine residues of wheat, oats, barley, flax and milled wheat products. Pesticide Use in Agriculture, Nat'l Comm. on, Ottawa, Pesticide Research Report, 1966. Vol. 5 (In press)
- BERCK, B. 1966. Natural fungistatic and insecticidal vapors generated by wheat in hermetic storage. Proc. Assoc. Comm. on Plant Diseases, N. R. C. 34th Annual Meeting, Edmonton, Canada. 34: 28-29.
- BISHOP, J. L. 1966. Development of heptachlor resistance in the alfalfa weevil in Virginia. Journ. Econ. Ent. 57, 486, 1964. 209 p.
- BLAZEJEWSKA, A. 1966. Pathological changes in the alimentary canal and ovaries of *Tenebrio molitor* L. (Col., Tenebrionidae) under the effect of HCN. (Pol)Pol. Pismo Entomol. Ser. B, 1/3:7-16.
- BLICKLE, R. L. 1943. The relative effects of falling, rising, and constant concentrations of sulphur dioxide on the confused flour beetle and the granary weevil. Abstr. doct. Diss. Ohio Univ. 40:17-20.

- BORKOWSKI, T. and CHROBOK, F. 1965. Studies on detection of organophosphorus insecticides using infrared spectrophotometry. (Pol) Poznan. Inst. Ochrony Roslin. Biul 32:93-107.
- BRUDNAYA, A. A., CHUDINOVA, A. N. and ANOSKINA, N. I. 1966. The effect of sublethal doses of toxic chemicals on pests of stored grain. Rus Entomol. Obozrenie 45:83-94.
- BUCK, J. B., KEISTER, M. L. and POSNER, I. 1952. Physiological effects of DDT on *Phormia* larvae. Ann. Entomol. Soc. Am. 45:369-384.
- BUSVINE, J. R. and BARNES, S. 1947. Observations on mortality among insects exposed to dry insecticidal films. Bull. Ent. Res. 38:81-90.
- BYRDY, S. 1965. The biological investigation of zoocides in laboratory. (pol) Poznan. Inst. Ochrony Roslin. Prace Nauk. 7:5-114.
- CAEMONA, B. C. 1966. Practical system for corn preservation on the farm (Sp). Agr. Trop. 22(3):86-88.
- CARLSON, S. D. 1966. Fumigation of *Tribolium confusum* adults with 80:20 (CCl₄:CS₂) during carbon dioxide-or nitrogen-induced respiration elevation or depression. J. Econ. Entomol. 59:870-872.
- CARLSON, S. D. 1967. Fumigation of the confused flour beetle (*Tribolium confusum*) with methyl bromide at high and low rates of respiration. J. Econ. Entomol. 60:684-687.
- CHAMP, B. R. and CRIBB, J. N. 1965. Lindane resistance in *Sitophilus oryzae* (L.) and *Sitophilus zeamais* Motsch. (Coleoptera, Curculionidae) in Queensland. J. Stored Prod. Res. 1:9-24.
- CHAUDHARY, K. D., BERNARD, R. and LEMONDE, A. 1966. Effect of furadroxyl on *Tribolium confusum* Duval. Can J. Zool. 44:144-146.
- CHINNERY, A. B. 1966. Fumigation of grain; use of aluminum phosphide. Fert. Feed. Stuffs J. 63:786-787.
- COLLINS, W. E. and KING, H. L. 1953. A modified technique for laboratory evaluation of contact insecticides. J. Econ. Ent. 51-53.
- CORNWELL, P. B. 1966. Arprocarb for control of cockroaches and ants. Int. Pest Contr. 8:18-21.
- CUTTING, W. C. 1967. Handbook of pharmacology; the actions and uses of drugs. Ed. 3. New York, Appleton-Century-Crofts, 1967. 649 p.
- DIRECTORY of pesticides, 1967. Pest Contr. 35:84-88, 90, 92-98.
- DOWELL, F. H. and KARABINOS, J. V. 1968. Mexican bean beetle (*Epilachna varivestis*) egg hatching inhibition and sieva bean chlorosis induced by plastic petri dish extracts. J. Econ. Entomol.
- DYTE, C. E. and BLACKMAN, D. G. 1967. Selection of a DDT-resistant strain of *Tribolium castaneum* (Herbst) (Coleoptera, Tenebrionidae). J. stored Prod. Res., 2:211-228.

- DYTE, C. E. and ROWLANDS, D. G. 1966. Metabolism of malathion in resistant and susceptible strains of Tribolium castaneum.
- DYTE, C. E. and ROWLANDS, D. G. 1966. Synergism of malathion in resistant and susceptible strains of Tribolium castaneum. 150 p.
- EBELING, W. and WAGNER, R. E. 1965. Influence of humidity on the volatilization of insecticide residues as affected by formulation and substrate. J. Econ. Ent. 58:240-245.
- EDEL'MAN, N. M. 1968. The use of antimetabolites in applied entomology. (Rus) Usp. Sovrem. Biol. 65:107-119.
- EDMUNDSON, R. S. and LAMBIE, A. J. 1966. Cyclic organophosphorus compounds as possible pesticides. I-II. Chem. Soc. J. C., Org. 21:1997-2003.
- ELLIS, V. J. 1964. The effect of some organophosphorus insecticides on Dermestes spp.-an histochemical study. Proc. Ent. Congr. Ent. London, 502 p.
- ENGLEMANN, J. 1965-66. Some organic insecticides and their effects. III. Univ. Dep. Chem. Chem. Eng. Org. Seminar Abstr. 2:18-24.
- EPSTEIN, J. and DEMEK, M. M. 1967. Detection and estimation of organophosphorus compounds with hydroxamic acids using a chemical analog of the cholinesterase inhibition method. Anal. Chem. 39:1136-1144.
- ESTES, P. M. 1965. The effects of time and temperature on methyl bromide fumigation of adults of Sitophilus granarius and Tribolium confusum. J. Econ. Ent. 58:611-614.
- FRANCA, R. P. DE. 1967. Preservation of stored products in Angola. (Por) Gaz. Agr. Angola 12:242-243.
- FRANCA, R. P. DE. 1967. The preservation of stored products in Angola. II. (Por) Gaz. Agr. Angola 12:322, 325, 327, 351.
- FREAR, D. E. H. and DILLS, L. E. 1967. Mechanism of the insecticidal action of mercury and mercury salts. J. econ. Ent. 60:970-974.
- FUKUTO, T.R., FAHMY, M. A. H. and METCALF, R. L. 1967. Alkaline hydrolysis, anticholinesterase, and insecticidal properties of some nitro-substituted phenyl carbamates. J. Agr. Food Chem 15:273-281
- FULTON, R. A., SULLIVAN, W. N. and MANGAN, G. F. 1953. Effectiveness of lindane vaporizers. J. Econ. Ent. 46:639-641.
- GEORGHIOU, G. P. 1965. Physiological and genetical bases of resistance to carbamate insecticides in houseflies and mosquitoes. Proc. XII. Int. Congr. Ent., 494 p.

- GHADIOK, G. R. 1966. Whole godown fumigation. *Indian Farming* 16:25, 27.
- GIRISH, G. K. and RAI, B. K. 1966. Effect of temperature on the susceptibility of grubs of Trogoderma granarium Everts to pyrethrins. *Indian J. Entomol.* 28:401-404.
- GLASS, E. H. 1944. Value and use of volatile nitriles for household fumigation. *J. Econ. Ent.* 27:74-78.
- GODA, M. and SAKA, S. 1966. On the joint toxic action between gamma-BHC and EDB (ethylene dibromide) against the American cockroach and the rust-red flour beetle. (Ja) *Jap. J. Appl. Entomol Zool.* 10: 212-214.
- GONSALEZ, M. F. 1966. Precautions and proper use of insecticides. (Sp) *Manabi. Consorcio Cent. Agr. Rev.* 109:53-57.
- GOODHUE, L. D. and SULLIVAN, W. N. 1941. Insecticidal smokes. Their application in the control of household insects. *Soap* 17:98-100.
- GOUVEIA, M. E. S. 1965. Determinação de resíduos de DDT e malatião em feijão armazenado. *Garcia de Orta* 13:139-148.
- GREEN, A. A. and TYLER, P. S. 1966. A field comparison of malathion, dichlorvos and fenitrothion for the control of Oryzaephilus surinamensis (L.) (Coleoptera, Silvanidae) infesting stored barley. *J. Stored Prod. Res.* 1:273-285.
- GREENING, H. G. 1967. Sorptive dusts; a new approach to household pest control. *Pybuthrin Dig.* 4:9-11.
- GROSCH, D. S. 1967. Insecticides cause no genetic damage. *Res. Farming (N. C. Sta)* 25:7.
- HALILOVA, R. 1937. On the conditions resulting in poisoning of Tribolium confusum Duv. and T. ferrugineum Fab. *Acta. Univ. Asiae Mediae. Ser. VIII-a* 44 Tashkent:3-14.
- HALL, I. M. 1967. The development and use of microbial insecticides containing entomogenous bacteria and viruses. *Mushi* 39:75-84.
- HAMILTON, E. W. 1966. LD₅₀'s for aldrin against resistance larvae and adults of western corn rootworm (Diabrotica virgifera). *J. Econ. Entomol.* 59:473-474.
- HASSLER, H. 1967. DDT solution as a preservative of insect collections. (Ge) *Entomol. Z.* 77:93-94.
- HIGHLAND, H. A. 1967. Resistance to insect penetration of carbaryl-coated kraft bags. *J. Econ. Ent.* 60:451-452.
- HORNSTEIN, I., SULLIVAN, W. N. and TSAO, CHING-HSI. 1955. Residual effectiveness of mixtures of organic phosphorus insecticides with chlorinated terphenyls. *J. Econ. Ent.* 48:482-483.

- HORSFALL, W. R. 1934. Some effects of ethylene oxide on the various stages of the bean weevil and the confused flour beetle. *J. Econ. Ent.* 27:405-409.
- HOWE, R. W. and HOLE, B. D. 1966. The susceptibility of the developmental stages of *Sitophilus granarius* (L.) (Coleoptera, Curculionidae) to methyl bromide. *J. Stored Prod. Res.* 2:13-26.
- HUKUSIMA, S. 1966. Approach to integrated control of arthropod pests in apple orchards by the use of selective pesticides. ITIS-159 p.
- HUKUSIMA, S. 1966. Some physiological aspects of coccinellid beetles in relation to their tolerance against pesticide treatments. ITIS- 159 p.
- HURKOVA, J. 1966. Resistance of the colorado-beetle to DDT. ITIS-159 p.
- HURKOVA, J. and HRDY, I. 1966. A contribution to the occurrence of DDT-resistant strains of *Leptinotarsa decemlineata* Say in Czechoslovakia.
- ILIC, B. 1965. A contribution to the study of the effect of temperature of wheat on the effectiveness of phosphine. (Se) *Agrohemijska 12*: 675-684.
- ILIC, B. 1966. Study of the effectiveness of the new formula of the preparation phostoxin in the control of stored wheat pests. (Se) *Agrohemijska 1/2*:19-29.
- ILIC, B. 1967. Comparative studies of the effectiveness and applicability of lindane and pyrethrins in the control of stored products. (Se) *Agrohemijska 7/8*:357-366.
- INGLE, L. 1965. A monograph on chlordane; toxicological and pharmacological properties. Urbana, Univ. Ill. 88p.
- INGRAM, W. R., MCNUTT, D. N. and DAVIES, J. C. 1967. A note on some unintentional biological effects of insecticide application in Uganda. *PANS (Pest Articles News Sum). Sect. A. Insect.* 13:148-151.
- JESO, F. DI, MALCOVATI, M., and SPERANZA, M. L. 1965. Identification and determination of phosphagen in different species of insects. (Fr) *Paris. Soc. Biol. Compt. Rend.* 159:809-813.
- JONES, D. P. 1965. Evolution of conventional insecticides. *Soc. Chem.* 50:242-248.
- JOTWANI, M. G. and SARUP, P. 1966. Relative toxicity of different pesticides to the adults of the singhara beetle, *Galerucella birmanica* (Jacoby) (Chrysomelidae: Coleoptera).
- KAMEL, A. H., FAM, E. Z. and EZZAT, T. M. 1965. Silica aerogels as grain protectants. *Soc. entomol. Egypte. Bull.* 48:37-47.

- KENAGA, E. E., WHITNEY, W. K., HARDY, J. L. and DOTY, A. E. 1965. Laboratory tests with Dursban insecticide. *J. Econ. Ent.* 58:1043-1050.
- KENAGA, E. E. 1966. Pesticide reference standards of the Entomological Society of America. *Entomol. Soc. Amer. Bull.* 12:117-127.
- KLASSEN, W. and CHANG, T. H. 1966. Tris (laziridinyl) phosphine oxide; caution on use. *Science* 154:920.
- KLASSEN, W., NORLAND, J. F. and BORKOVEC, A. B. 1968. Potential chemosterilants for boll weevils (Anthonomus grandis). *J. Econ. Entomol.* 61:401-407.
- KOROTKOVA, O. A. 1965. Attractive substance (attractants). 11 p. Ref. (JPRS 29, 658:TT 65-30770) Transl. 15112.
- KUMAR, V. and MORRISON, F. O. 1964. Recording the susceptibility levels of current stored product pest populations to current insecticides. *Proc, XIIth Int. Congr. Ent.* London. 656 p.
- LA HUE, D. W. 1966. Evaluation malathion, synergized pyrethrum, and diatomaceous earth on shelled corn as protectants against insects in small bins. U. S. D. A. Marketing Res. Rep. 768, 10p.
- LA HUE, D. W. 1967. Evaluation of malathion, synergized pyrethrum, and a diatomaceous earth as protectants against insects in sorghum grain in small bins. USDA Marketing Res. Rep. 78, 11p.
- LAL, R. and SINGH, Y. P. 1966. Effect of food on the susceptibility of Tribolium castaneum Herbst to insecticides. *Indian, J. Ent.* 28:88-93.
- LAL, R. and VERMA, A. N. 1966. Effect of temperature and humidity on the toxicity of insecticidal residues. 167 p.
- LEFKOVITCH, L. P. 1965. Differences between six species of Cryptolestes (Coleoptera, Cucujidae) in susceptibility to methyl bromide vapour. *Bull. Entomol. Res.* 56:197-200.
- LEMON, R. W. 1966. Susceptibility of Tribolium spp. to organophosphorus insecticides. 168 p.
- LEMON, R. W. 1966. Persistence of organophosphorus compounds on concrete. 168 p.
- LEMON, R. W. 1967. Laboratory evaluation of malathion, bromophos and fenitrothion for use against beetles infesting stored products. *J. Stored Prod. Res.* 2:197-210.
- LEMON, R. W. 1967. The effect of fenchlorphos on Sitophilus spp. (Coleoptera, Curculionidae). *J. Stored Prod. Res.* 3:397-400.

- LEPESME, P. 1938. Concerning possible utilization of calcined magnesia in the production of grains against weevils Calandra granaria and C. oryzae. 4 p. (TT 64-16705) Trans. 15981.
- LICHTENSTEIN, E. P. 1965. Problems associated with insecticidal residues. Conf. Res. Needs Approaches Use Agr. Chem. Public Health Viewpoint. Res. Pesticides. Proc. 1964. 199-203.
- LINDGREN, D. L. and SINCLAIR, W. B. 1945. Sorption of HCN by insect pupae. J. Econ. Ent. 38:617.
- LINDGREN, D. L. and VINCENT, L. E. 1965. The susceptibility of laboratory-reared and field-collected cultures of Tribolium confusum and T. castaneum to ethylene dibromide, hydrocyanic acid, and methyl bromide. J. Econ. Ent. 58:551-555.
- LLOYD, C. J. 1966. Pyrethrin resistant grain weevils Sitophilus granarius L. 169 p.
- LLOYD, C. J. and DYTE, C. E. The susceptibility of larvae of Dermestes L. (Coleoptera, Dermestidae) to some contact insecticides. J. Stored Prod. Res. 1:159-167.
- LLOYD, C. J. and DYTE, C. E. 1966. The susceptibility of larvae of Dermestes L. (Coleoptera, Dermestidae) to some contact insecticides. Journ. Stored Prod. Res., 1:228-p
- LOBSACK, T. 1966. Das Ratsel der Keim-Resistenz; wie machen es Insekten und Mikroben, gegen so starke Mittel wie DDT oder Penicillin unempfindlich zu werden? (Mystery of resistance; how the insects and microbes are building their resistance against such strong preparations as DDT and penicillin?). Kosmos 62:68-70.
- LOMAKINA, V. I., ROSLAVTSEVA, S. A., YA, A., MANDEL'BAUM, and MEL'NIKOV, N. N. 1965. Biological effects of some phosphor-carbonic and phosphoric acid derivatives. (Rus) Khim. Sel'skom Khoz. 6:19-24.
- LORD, K. A. and POTTER, C. 1954. Differences in esterases from insect species: toxicity or organo-phosphorus compounds and in vitro anti-esterase activity. J. Sci. Fd. Agric. 5:490-498.
- LYON, R. L. 1965. "Structure and toxicity of insecticide deposits for control of bark beetles." U. S. D. A. Tech. Bull. 1343. 59. p.
- LYON, W. F. and DAVIDSON, R. H. 1965. The effect of humidity on the volatilization of certain insecticides. J. Econ. Entomol. 58:1037
- MARKE, D. J. B. and LILLY, C. H. 1951. Smoke generators for the dispersion of pesticides. J. Sci. Fd. Agric. 2:56-65.

- MC INTOSH, A. H. 1947. Relation between particle size and shape of insecticidal suspensions and their contact toxicity. I. DDT suspensions against Tribolium castaneum Hb. Ann. Appl. Biol. 34:586-610.
- MC INTOSH, A. H. 1966. Use of organo-tin compounds in insect control. 171 p.
- MELLO, E. J. R. 1965. Common names of insecticides and acaricides. (Por) Biologico 31:78-80.
- METCALF, R. L. 1967. Mode of action of insecticide synergists. Annu. Rev. Entomol. 12:229-256.
- MEXIA, J. T. 1966. Techniques for the study of tolerance distributions to insecticides. I-III. Inst. Med. Trop. An. 23:191-212.
- MEXIA, J. T. 1966. Note on the statistical determination of diectetic preferences of insects. Inst. Med. Trop. An. 23:183-184.
- MEYER, J. H. 1966. DDT as protective agent for insect collections. (Ge) Entomol. Z. 76:244-247.
- MOOKHERJEE, P. B., SHARMA, G. C. and TULLI, S. 1964. Effect of post-treatment temperature on the susceptibility of the Khapra (Trogoderma granarium EVERTS) grubs to pyrethrum. Indian Journ. Ent. 26:215p.
- NAGASAWA, S. and SHINOHARA, H. 1965. Joint sterilizing effect of a mixture of apholate and metepa on the azuki bean weevil, Callosobruchus chinensis L., with special reference to the hatchability of eggs deposited by treated weevils. Jap. Journ, Appl. Ent. Zool. 9:162p.
- NAGASAWA, S. and SHINOHARA, H. 1965. Mating competition between apholate-sterilized males of the azuki bean weevil, Callosobruchus chinensis L. Jap. Journ, Appl. Ent. Zool. 9:271 p.
- NAGASAWA, S., SHINOHARA, H. and SHIBA, M. 1966. Differential susceptibility in sexes of the azuki bean weevil (Callosobruchus chinensis L.) for the sterilizing effect of Dowco-186. IFIS-9:176 p.
- NAGASAWA, S., SHINOHARA, H. and SHIBA, M. 1965. Sterilizing effect of Dowco-186 on the azuki bean weevil. Callosobruchus chinensis L., with special reference to the hatchability of the eggs deposited by treated weevils. Botyu-Kagaku 30:91.
- NATIONAL PEST CONTROL ASSOCIATION. 1968. USDA cancels registrations for certain uses of 269 pesticides. 6:68, 3 p.
- NELSON, H. D. 1966. Malathion-treated drying trays to protect raisins from insects; commercial tests in 1965. U. S. Agr. Res. Serv. ARS 51-9, 7 p.

- NIGAM, P. C. and MUSGRAVE, A. J. 1964. Effect of DDT and starvation on the antigenic composition of Sitophilus granarius (L.) (Coleoptera), the GO strain, and a comparison with other strains and species using the Ochterlony technique. *Can. Journ. Zool.* 42:1041p.
- O'BRIEN, R. D. 1967. *Insecticides; action and metabolism*. New York, Academic Press, 332 p.
- O'DONNELL, A. E. 1965. The effectiveness of grain fumigant formulations. III. Sorption studies. *Kans. Entomol. Soc. J.* 38:355-358.
- OSTOYA, P. 1968. Insect hormones as insecticides. (Fr.) *Sci. Progr. Natur.* 3396:137-138.
- OTT, D. E. and GUNTHER, F. A. 1965. DDD as a decomposition product of DDT. *Residue Rev.* 10:70-84.
- PANEL, MODERATOR: DOWNEY, A. C. Where do we stand on insect losses information? *Entomol. Soc. Amer. N. Cent. Br. Proc.* 21:62-68.
- PARKIN, E. A. 1966. The relative toxicity and persistence of insecticides applied as water-dispersible powders against store-product beetles. *Ann. Appl. Biol.* 57:1-14.
- PEARSON, F. B. 1966. Insects cost us money. *S. Australia J. Agr.* 70:143.
- PENCE, R. J. and VIRAY, M. S. 1965. Test with Kepone and mirex for the control of carpet beetle larvae in fabric. *J. Econ. Entomol.* 58: 916-920.
- PEREIRA, J. M. 1965. A convenient chromatographical method of use in the extension work for the detection of Sevin. (Por) *Jornadas Silvo-Agron. Commun.* 6th Sess., No. 18, 10 p.
- PERMYAKOVA, N. M. and MOLCHANOVA, I. G. 1965. On the toxicity of polychloropinene to weevils Tanymecus palliatus F. and Bothynoderes punctiventris Germ, (Rus) *Vses. Nauch. Issled. Inst. Zashch. Raat. Tr.* 24:81-84.
- PRADHAN, S. and JOTWANI, M. G. 1966. Studies on the mixed formulations of insecticides. *ITIS-9*:181 p.
- PRADHAN, S., JOTWANI, M. G., and SARUP, P. 1964. Relative efficacy of different insecticides to the grubs of Singhara beetle, Galerucella birmanica JACOBY (Chrysomelidae: Coleoptera). *Indian Journ. Ent.* 26: 92 p.
- PRESS, A. F. and HAREIN, P. K. 1967. Mortality of Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae) in simulated peanut storages purged with carbon dioxide and nitrogen. *J. Stored Prod. Res.* 3:91-96.

- PURDUE UNIVERSITY, DEPT. OF AGRICULTURAL EXTENSION. 1967. Dilution and conversion table, Purdue Univ. Ext. Mimeo E-51, 2 p.
- PUNJ, G. K., BHAMBHANI, H. J. and SRIVASTAVA, P. D. 1966. Relative toxicity of some fumigants to Trogoderma granarium (Everts). ITIS-9:181 p.
- QUINTANILLA, R. H. and GONZALEZ, H. E. S. DE. 1966. Behavior of various insecticides usable in the treatment of grain stores. (Sp) Buenos Aires. Univ. Fac. Agron. Vet. Rev. 16:83-95.
- RASMUSSEN, O. E. 1965. Insecticides that are dangerous only to insects. Northern plant protection work. 2. (Ge) Lebendige Erde 5:210-213.
- RASMUSSEN, S. 1967. Fumigation of houses with methyl bromide against the house longhorn beetle (Hylotrupes bajulus L.) Material and Organismen 2:65-78.
- RAZNATOVIC, V. 1966. Handling insecticides-fungicides. (Se) Glasnik 15: 50-56.
- REDLINGER, L. M. and WOMACK, H. 1966. Evaluation of four dusts for the protection of shelled corn in Georgia from insect attack. U. S. Agr. Res. Serv. ARS 51-7, 25 p.
- REYNOLDS, E. M., ROBINSON, J. M. and HOWELLS, C. 1967. The effect on Sitophilus granarius (L.) (Coleoptera, Curculionidae) of exposure to low concentrations of phosphine. J. Stored Prod. Res. 2:177-186.
- RICHARDSON, H. H. 1954. Preliminary tests with carbon monoxide against several insects. J. Econ. Ent. 47:182-183.
- ROSLAVTSEVA, S. A. and PAPOV, P. V. 1965. Synergistic effects of organic phosphorus insecticide mixtures. (Rus) Khim. Sel'skom Khoz. 3: 29-33.
- ROWELL, J. O. 1965. 1966 insecticide recommendations: household insect pests Va. Polytech. Inst. Ext. Leaf. 216, 2p.
- ROWELL, J. O. 1966. 1966. 1966 insecticide recommendations: household insect pests. Va. Polytech. Inst. Ext. Circ. 993, 8 p.
- ROWELL, J. O. 1966. 1966 Insecticide recommendations: insect pests of farm-stored grains. Va. Polytech. Inst. Ext. Circ. 993, 8 p.
- ROWLANDS, D. G. 1966. The activation and detoxification of three organic phosphorothionate insecticides applied to stored wheat grains. J. Stored Prod. Res. 2(2):105-116.
- ROWLANDS, D. G. 1966. The metabolism of bromophos in stored wheat grains. J. Stored Prod. Res. 2:1-12.

- STANKOVIC, A., STOJANOVIC, T. and SOVLJANSKI, R. 1965. Efficiency and duration of the residual effect of malathion on the principal pests of stored grain. (Se) Savremena Poljoprivreda 13:247-255.
- STEELMAN, C. D. 1967. Relative toxicity of selected insecticides to bacterial populations in waste disposal lagoons. J. Econ. Entomol. 60:467-468.
- STODDARD, R. B. and DOVE, W. E. 1949. Cinerin I homolog tested. A preliminary evaluation of the insecticidal effectiveness of the completely synthetic allyl homolog of cinerin I. Soap and sanit. Chena 25: 118-121.
- STRONG, R. G. and SHUR, D. E. 1965. Evaluation of insecticides as protectants against pests of stored grain and seeds. II. J. Econ. Ent. 58:18-22.
- STRONG, R. G., SBUR, D. E. and PARTIDA, G. J. 1967. The toxicity and residual effectiveness of malathion and diazinon used for protection of stored wheat. J. Econ. Entomol. 60:500-505.
- SULLIVAN, W. N. and HORNSTEIN, I. 1953. Concentrations and exposure time of lindane vapor required to kill insects. J. Econ. Ent. 46:898-899.
- SUN, Y. P. 1947.. An analysis of some important factors affecting the results of fumigation tests on insects. Minn. Agr. Expt. Sta. Tech. Bull. 177:104p.
- SUN, Y. P. 1966. Correlation between laboratory and field data on testing insecticides. J. Econ. Entomol. 59:1131-1134.
- SWISHER, E. M. 1943. The toxicity and fumigation characteristics of sulphur dioxide, acetone, and ethylene oxide alone and in combination. Abstr. doct. Diss. Ohio Univ. 42:153-162.
- THOMAS, P. M. 1966. Malathion for disinfesting warehouses. Allahabad Farmer 40:19-24.
- THOMPSON, R. H. 1966. A review of the properties and usage of methyl bromide as a fumigant. J. Stored Prod. Res. 1:353-376.
- TILTON, E. W. and COGBURN, R. R. 1967. Laboratory evaluation of fenthion for the protection of rough rice against insect attack. J. Econ. Ent. 60:233-235.
- VALUM, B. 1967. Summer without insects. (No) Norsk Natur 3:65-68.
- VINCENT, L. E. and LINDGREN, D. L. 1965. Influence of fumigation and age on carbon dioxide production of some stored-products insects. J. Econ. Ent. 58:660-664.

- VUKOVIC, Z. 1965. The use of pellets in the control of pests of stored products. (Se) *Agrohenija* 11:643-647.
- WHITE, G. D., BERNDT, W. L., SCHESSER, J. H., and FIFIELD, C. G. 1966. Evaluation of four inert dusts for the protection of stored wheat in Kansas from insect attack. U. S. Agr. Res. Serv. ARS51-8, 21 p.
- WHITNEY, W. K. 1967. Laboratory tests with Dursban^R and other insecticides in soil. *J. Econ. Ent.* 60:68-74.
- WILBUR, D. A. 1967. What causes fumigation failures. *Grain and Feed Jour.* 124: 13-17.
- WILLIAMS, C. M. 1968. Third-generation pesticides. *Sci. Amer.* 217:13-18.
- WILLIAMS, H. E. 1966. Dilution table for pesticides (given in pounds per acre rates). *Tenn. Univ. Ext. Publ.* 554, 6 p.-folder.
- WARE, G. W. and WHITACRE, D. M. 1966. The uptake of lindane from vaporizers by animals and plants. The tolerance of a wire worm on sugar beets *Limonius dubitans*. *ITIS-9*:191 p.
- WATERS, F. L. 1966. Effectiveness of malathion against stored product insects. *ITIS-9* 191 p.
- WOODWELL, G. M. 1967. Toxic substances and ecological cycles. *Sci. Amer.* 21: 24-31.
- YAMAMOTO, I. 1965. Nicotinoids as insecticides. *Adv. Pest. Control Res.* 6: 231-260.
- YAMAMOTO, I. 1966. Nicotinoids as insecticides. *Adv. Pest Control. Res.* 6: 231-260.
- ZAVON, M. R. 1966. Pesticides, people and politics. *CSMA (Chem. Spec. Manufacturers Asso.) Proc.* 53d Annu. Meeting:148-151.
- ZELENY, J. 1966. A contact effect of Metation on aphids and their natural enemies. *ITIS-9*:192 p.
- ZHIGALTSEVA, M. I. and CHERNOBROVINA, S. M. 1966. Use of ultraviolet ray to control insect pests. (Rus) *Zool. Zhur.* 45:375-382.

IRRADIATION AND USE OF ISOTOPES

- ANDREEV, S. V. and MARTENS, B. K. 1965. Calculation of distribution of dosage in gammasterilizer of grain products and determination of its basic parameters under line production method of disinfection. (Rus) Radiobiologiya 5:605-611.
- ANDREEV, S., MARTENS, G., and MOLCHANOVA, V. 1965. Radioactive tracers and radiation in the control of agricultural pests. Mezhdunar. Selskokhoz.
- BAILEY, S. W. and MCCABE, J. B. 1965. The detection of immature stages of insects within grains of wheat. J. Stored Prod. Res. 1:201-212.
- BAILEY, S. W. 1966. Review of the Entomology of Radiation Disinfection of Grain, edited by P. B. Cornwell. Pergamon Press., Oxford. J. stored Prod. Res. 2:171-173.
- BAKER, V. H. 1953. Some effects of electromagnetic energy and subatomic, particles on certain insects which infest wheat, flour and beans. Ph.D. Thesis, Dept. of Agric. Engineering. Michigan State College. (Unpublished).
- BAKER, V. H., TABOADA, O., and WIANT, D. E. 1953. Some effects of accelerated electrons or cathodl rays on certain insects and on the wheat and flour which they infest. Quart. Bull. Michigan Agriculture Expt. Sta., Michigan State College, E. Lansing. 36:94-106.
- BAKER, V. H. , TABOADA, O. and WIANT, D. E. 1953. Lethal effects of electrons on insects infesting wheat and flour--Part I. Agricu. Engineering 34:755-758.
- BAKER, V. H., TABOADA, O., and WIANT, D. E. 1954. Lethal effects of electrons on insects which infest wheat, flour and beans--Part II. Agric. Engineering 35:407-410.
- BAKER, V. H., TABOADA, O., and WIANT, D. E. 1955. Effects of electromagnetic energy on plants and animals. Agric. Engineering 36:808-812.
- BARTLETT, A. C. 1968. Behavior of irradiated boll weevils. II. Reproduction and mortality in cages with untreated boll weevils. J. Econ. Ent. 61:1680-1684.
- BARTLETT, A. C. , HOOKER, P. A. and HARDLL, D. D. 1968. Behavior of irradiated boll weevils. I. Feeding, attraction, mating, and mortality. J. econ. Ent. 61:1677-1680.
- BARTLETT, A. C. and MITLIN, N. 1966. Effects of heavy water on reproduction and development of the boll weevil. 139 p.
- BERGEDER, H. E. and BONING, D. 1965. Immediate effects of X-rays on invertebrate animals and frogs. (Ge) Biophysik 2:239-246.

- BULL, J. O. and CORNWELL, P. B. 1966. The effect of culture environment on the susceptibility of Sitophilus granarius (L.) to gamma radiation. In Cornwell, P. B., ed. The entomology of radiation disinfection of grain, p. 57-69.
- BULL, J. O. and CORNWELL, P. B. 1966. A comparison of the susceptibility of the grain weevil Sitophilus granarius (L.) to accelerated electrons and ^{60}Co gamma radiation. In Cornwell, P. B. ed. The entomology of radiation disinfection of grain 157-175 p.
- BURGESS, E. E. and BENNETT, S. E. 1966. Sterilization of the male alfalfa weevil (Hypera postica: Curculionidae) by X-radiation. J. Econ. Entomol. 59:268-270.
- BYCHKOVSKAYA, I. B. and OCHINSKAYA, G. K. 1966. Response system of granary weevils (Calandra granaria) to irradiation. (Rus) Zool. Zhur. 45:134-137.
- CALLAHAN, P. S. 1965. An infrared electromagnetic theory of diapause induction and control in insects. Ent. Soc. Amer. Ann. 58:561-564.
- CHOPRA, V. L. 1965. Tests on Drosophila for the production of mutations by irradiated medium or irradiated DNA. Nature (London) 208:699-700.
- COGBURN, R. R. 1967. Infrared radiation effect on reproduction by three species of stored-product insects. J. Econ. Entomol. 60:548-550.
- COLEMAN, D. C. and MACFADYEN, A. 1966. The recolonization of gamma-irradiated soil by small arthropods, a preliminary study. Oikos 17:62-70.
- CORNWELL, P. B. 1964. Control of insects in stored grain by irradiation. Int. Food. Indus. Congr. Proc. 1964:201-205.
- CORNWELL, P. B. 1965. Radiation disinfection of grain-the last 5 years. Food Irradiation 6($\frac{1}{2}$) A2-A5.
- CORNWELL, P. B. 1966. Susceptibility of the grain and rice weevils, Sitophilus granarius (L.) and Sitophilus zeamais Mots. to gamma radiation. In his Entomology of radiation disinfection of grain, 1-8 p.
- CORNWELL, P. B. 1966. Susceptibility of laboratory and wild strains of the grain weevil Sitophilus granarius (L.) to gamma radiation. In his Entomology of radiation disinfection of grain, 19-26 p.
- CORNWELL, P. B. 1966. Irradiation as a quarantine control measure, Int. Symp. Food. Irradiat. Proc. 1966:381-393.
- CORNWELL, P. B. Ed. 1966. The entomology of radiation disinfection of grain. Pergamon Press.

- CORNWELL, P. B. 1966. Status of irradiation control of insects in grain. Int. Symp. Food Irradiat. Proc. 455-471.
- CORNWELL, P. B., BULL, J. O. and PENDLEBURY, J. B. 1966. Control of weevil populations (Sitophilus granarius) (L.) with sterilizing and substerilizing doses of gamma radiation. In Cornwell, P. B., ed. The entomology of radiation disinfection of grain, 71-95 p.
- CORNWELL, P. B., CROOK, I. J. and BULL, J. O. 1957. Lethal and sterilizing effects of gamma radiation on insects infesting cereal commodities. Nature 179:670-672.
- COSTA, A. G. 1958. Contribution to the use of X-rays in the discovery of hidden attacks of insects on cereals. 3p. Transl. 14807. 27: 117-120.
- CROSSLEY, D. A. 1966. Radioisotope (Cs^{137}) measurement of food consumption by a leaf beetle species, Chrysomela knabi Brown. Ecology 47: 1-8.
- CURRENT topics in radiation research. Vol. III. Edited by M. Ebert, and A. Howard. New York, 1967. 226 p. Partial contents: Immediate, transient responses to ionizing radiation, by C. K. Levy. 95-137 p.
- CUTKOMP, L. K. 1967. Progress in insect control by irradiation induced sterility. PANS (Pest Articles News Sum.) Sect. A, Insect. 13: 61-70.
- DAFAUCE, C. 1964. Radioactive labeling of insects. (Sp) Spain. Serv. de Plagas Forest. B. 7:102-114.
- DAHM, P. A. 1957. Uses of radioisotopes in pesticide research. Adv. in Pest Control Res. 1:81-116.
- DAVEY, W. P. 1917. The effect of X-rays on length of life of Tribolium confusum J. Exp. Zool. 22:573-592.
- DAVEY, W. P. 1919. Prolongation of life of Tribolium confusum apparently due to small doses of X-rays. J. Exp. Zool. 28:447-458.
- DOCKAL, J., KOLIN, J., and BLAZEK, J. 1965. Control and sterilization of pests of grain storages by gamma rays. (Cz) Sb. UVTI(Ustav Vedeckotech. Inform.) Ochrana Rostlin 1:15-20.
- DUCOFF, H. S. and BOSMA, G. C. 1966. The influence of pupal age on sensitivity to irradiation. Biol. Bull. 130: 151-156.
- ERDMAN, H. E. 1965. Fast neutron effects on productivity of young and old flour beetles, Tribolium castaneum Herbst, and alterations at different temperatures and after exposure of either or both sexes. Internatl. J. Rad. Biol. 9:305-311.

- ERDMAN, H. E. 1966. Effects of Dimethylsulfoxide on productivity of X-irradiated flour beetles. *Biology Bulletin*. 130:157-169.
- ERDMAN, H. E. 1966. X-radiation and temperature modification of reproductive performance of single-species and mixed-species cultures of Tribolium confusum and Tribolium castaneum. *Physiol. Zool.* 39: 160-170.
- ERDMAN, H. E. 1966. Effects of X-rays on metamorphosis and adult life span of flour beetles. *Nature (London)* 211:1427-1428.
- ERDMAN, H. E. 1966. Modification in productivity and mortality of flour beetle species and strains due to X-ray and the insecticide, DDT. Abstract submitted for a paper presentation at the Third International Congress of Radiation Research, Cortina D'Ampezzo, Italy.
- ERDMAN, H. E. 1966. Modification of fitness in species and strains of flour beetles due to X-ray and DDT. *Ecology* 47:1066-1072.
- ERDMAN, H. E. 1966. Reproductive performance of X-rayed single-species and mixed-species cultures of Tribolium confusum and Tribolium castaneum reared at different temperatures. *Physiological Zoology* 39:160-170.
- ERDMAN, H. E. 1968. Ontogeny and comparative radiation sensitivity in the confused flour beetle and strains of the red flour beetle. *J. econ. Ent.* 61:123.
- FAIRBANKS, L. D. and BURCH, G. E. 1968. Whole body turnover of potassium traced by radiorubidium in adult Drosophila (Drosophilidae) and Megaselia (Phoridae). *J. Insect Physiol.* 14:819-830.
- FARKAS, J. 1965. The radiation resistance of Tribolium confusum (DuVal) and Tyrophagus dimidiatus (Hermann). (Hu) Budapest. *Központi Elmészertipari Kutatóintézet Közlem.* 2:10-15.
- FARKAS, J. 1966. Investigations into the radiation resistance of Tribolium confusum. (DuVal) and Tyrophagus dimidiatus (Hermann). *Acta Biol.* 16:207-215.
- FAZIO, C. 1966. Ionizing radiations for the disinfection of stored products. (It) *Agr. Italia* 12:3-6.
- FLINT, H. M., BIBOW, W. R., and LAHREN, C. K. 1966. Radiation studies with the boll weevil: Anthonomus grandis lethal effects on larvae, pupae, and adults; male sterility and dose fractionation. *J. Econ. Entomol.* 59:1249-1255.
- FREEMAN, C. C. 1965. Criteria for radiographic examination of internal insect infestation. *Asso. Offic. Agr. Chem. J.* 48:1183-1185.

- FRINGS, H. and FRINGS, M. 1965. Sound against insects. *New Sci.* 26:634-637.
- GETSOVA, A. B., and VOLKOVA, G. A. 1965. Accumulation of radioactive isotopes of phosphorus, strontium, iodine and mercury by larvae of aquatic insects. *Fed. Amer. Soc. Exp. Biol. Fed. Proc.* 24:T683 T684.
- GOLUMBIC, C. and DAVIS, D. F. 1966. Radiation disinfestation of grain and seeds. *Int. Symp. Food Irradiat. Proc.* 473-488.
- HANFORD ATOMIC PRODUCTS OPERATION. 1964. Differential responses of germ cells in flour beetles, Tribolium castaneum Herbst, due to X-ray dose, hypothermia, sex-exposed and age, by H. E. ERDMAN. Washington, Div. Tech. Inform, U. S. At. Energy Comm. 21 p. Microfiche.
- HOGAN, G. R. 1966. Pyrimidines and the X-ray response of Tribolium confusum. *Diss. Abstr. Sect., B* 27:947 B.
- HOOPINGARNER, R. A., KUMARARAJ, S., and FRENCH, A. L. 1965. Gametogenesis and radiation effects in the cereal leaf beetle, Oulema melanopa. *Entomol. Soc. Amer. Ann.* 58:777-781.
- JAFRI, R. H. 1965. Influence of pathogens on the life span of irradiated insects. *J. Invertebrate Pathol.* 7:66-70.
- JEFFERIES, D. J. 1966. Susceptibility of the saw-toothed grain beetle, Oryzaephilus surinamensis (L.) to gamma radiation. In Cornwell, P. B., ed. *The entomology of radiation disinfestation of grain*, 119-130 p.
- JEFFERIES, D. J. and BANHAM, E. J. 1966. Effects of continuous and fractionated doses of gamma radiation on the survival and fertility of Sitophilus granarius (L.). In Cornwell, P. B., ed. *The entomology of radiation disinfestation of grain*, 41-56.
- JEFFERIES, D. J. and BANHAM, E. J. 1966. The effect of dose rate on the response of Tribolium confusum Duv., Oryzaephilus surinamensis (L.) and Sitophilus granarius (L.) to ^{60}Co gamma radiation. In Cornwell, P. B., ed. *The entomology of radiation disinfestation of grain*, 177-185 p.
- KADOUM, A. M. A. A. G. 1967. Effects of radio-frequency electrical fields on the metabolism of the yellow mealworm, Tenebrio molitor (L.). *Diss. Abstr., Sect. B*, 27:2553B.
- KAMRA, S. K. 1967. Detection of mechanical damage and internal insects in seed by X-ray radiography. *Svensk Bot. Tidskr.* 61:43-48.
- KASTING, R. and MCGINNIS, A. J. 1966. Radioisotopes and the determination of nutrient requirements. *N. Y. Acad. Sci. Ann.* 139:98-107.

- KUMAGAI, M. 1967. Influence of post-treatment humidity on the irradiated rice weevil adult, *Sitophilus zeamais* Motschulsky (Coleoptera: Curculionidae). *Appl. Entomol. Zool.* 2:51-57.
- LAMBREMONT, E. N. and STEIN, C. I. 1965. $C^{14}O_2$ production in the boll weevil, *Anthonomus grandis*, after injection of C^{14} -l-acetate. *Ent. Soc. Amer. Ann.* 58:765-766.
- LARSEN, W. 1965. Survival of irradiated insect heart fragments following treatment with propyl gallate. *Utah Acad. Sci. Arts. Lett. Proc.* 42:53-55.
- LAUDANI, H., TILTON, E. W. and BROWER, J. H. 1965. USDA research program and facilities for the use of gamma irradiation in the control of stored-product insects. *Food Irradiation* 6:A6-A9.
- MARPLES, T. G. 1965. A radionuclide tracer study of arthropod food chains in a *Spartina* salt marsh ecosystem. *Diss. Abs.* 26:2392.
- MAYER, M. S. and BRAZZEL, J. R. 1966. Laboratory studies to sterilize the boll weevil *Anthonomus grandis* with radiation. *Entomol. Soc. Amer. Annu.* 59:284-290.
- MITLIN, M., BARTLETT, A. C. and KELLER, J. C. 1966. Elimination rate and effect on reproduction of ingested radiophosphorus in the boll weevil. *Journ. Econ. Ent.* 58:232 p.
- NAIR, K. S. S. and GEORGE, J. C. 1965. Effects of gamma radiation on the postembryonic stages of a dermestid beetle, *Anthrenus vorax* Waterhouse, *Entomol. Exp. Appl.* 8:241-248.
- NELSON, S. O. 1966. Electromagnetic and sonic energy for insect control. *Amer. Soc. Agr. Eng. Trans. ASAE* 9:398-403, 405.
- NELSON, S. O. and KANTACK, B. H. 1966. Stored-grain insect control studies with radio-frequency energy. *J. Econ. Entomol.* 59:588-594.
- NELSON, S. O. and SEUBERT, J. L. 1966. Electromagnetic energy and sound for use in control of certain pests. *U. S. Agr. Res. Serv. ARS-33-110:177-194.*
- NOORDINK, J. P. W. 1965. Some applications of radioactive isotopes in ecological research. (Du) *Entomol. Ber.* 25:130.
- O'BRIEN, R. D. and WOLFE, L. S. 1966. Radiation, radioactivity and insects. Monograph in AEC-AIBS series on radiation. Academic Press, 211: 238 p.
- PENDLEBURY, J. B. 1966. The influence of temperature upon the radiation susceptibility of *Sitophilus granarius* (L.). In Cornwell, P. B., ed. *The entomology of radiation disinfection of grain*, 27-40 p.

- REDDI, O. S., REDDY, G. M., RAO, J. J., EBENEZER, D. N. and RAO, M. S. 1965. Lack of mutagenic effect of irradiated Drosophila medium. Nature (London) 208:702.
- SCHROEDER, H. M. and TILTON, E. M. 1961. Infrared radiation for the control of immature insects in kernels of rough rice. AMS-445, MQRD, USDA.
- SHIPP, E. 1966. The effect of rearing medium on the susceptibility of Tribolium confusum Duv. and Sitophilus granarius (L.) to gamma radiation. In Cornwell, P. B., ed. The entomology of radiation disinfection of grain 97-105 p.
- SHIPP, E. 1966. Susceptibility of Australian strains of Sitophilus and Tribolium species to gamma radiation. In Cornwell, P. B., ed. The entomology of radiation disinfection of grain, 131-141 p.
- SLATER, J. V., BUCKHOLD, B., and TOBIAS, C. A. 1968. Effect on a flour beetle (Tribolium confusum) of irradiation during space flight. Bio-Science 18:595-597.
- TOBOADA, O. 1953. Some effects of radiant energy on the beetles, Tribolium confusum Duv., Sitophilus granarius (L.) and Acanthoscelides obtectus. (Say). MS Thesis. Dept. of Entomology, Michigan State College (unpublished).
- TILTON, E. W., BURKHOLDER, W. E. and COGBURN, R. R. 1965. The effects of confining confused flour beetles (Tribolium confusum) in gelatin capsules before, during and after gamma irradiation. J. Econ. Ent. 58:175-176.
- TILTON, E. W., BURKHOLDER, W. E., and COGBURN, R. R. 1965. Notes on the effect of preconditioning confused flour beetles (Tribolium confusum) with temperature variations or carbon dioxide prior to gamma irradiation. J. Econ. Ent. 58:179-180.
- TILTON, E. W., BURKHOLDER, W. E. and COGBURN, R. R. 1966. Effects of gamma radiation on Rhyzopertha dominica, Sitophilus oryzae, Tribolium confusum and Lasioderma serricorne. J. Econ. Entomol. 59:1362-1368.
- TILTON, E. W., BURKHOLDER, W. E. and COGBURN, R. R. 1966. Mating competition of gamma-irradiated and nonirradiated male Trogoderma glabrum Herbst. J. Econ. Entomol. 59:168-169.
- TRAUT, H. 1966. Radiation-induced mitotic delay in spermatogenesis of Drosophila melanogaster. Nature (London) 209:92-93.
- VEREECKE, A., and PELERENTS, C. 1965. The influence of gamma rays on the fecundity and the fertility of Tribolium confusum DuVal. (Fl) Ghent. Landbouwhoges. Meded. 30:1017-1027

- VERECKE, A., and PELERENTS, C. 1965. The influence of gamma rays on the longevity of Tribolium confusum Duval. (F1) Ghent. Landbouwhogesch. 30:1824-1835.
- VEREECKE, A., and PELERENTS, C. 1965. The influence of gamma rays on the longevity of Tribolium confusum Duval. Int. Symp, Crop. Protect. (Pap.) 17th Symp:119-120.
- VEREECKE, A., and PELERENTS, C. 1967. The influence of dose-rate of gamma-irradiation on the reproducing capacity of adult females of Tribolium confusum Duval. Ghent. Rijksfac. Landbouwwetensch. Meded. 1967: 890-903.
- WATTERS, F. L. and MACQUEEN, K. F. 1967. The effectiveness of gamma irradiation for control of five species of stored-product insects. J. stored Prod. Res. 3:223-234.
- ZAKLADNOI, G. A. 1966. Effect of dose of gamma rays on longevity of granary weevil (Sitophilus granarius). (Rus) Radiobiologiya 6:478-479.
- ZAKLADNOI, G. A. 1967. Effect of different temperatures on response of granary weevil to radiation. (Rus) Vestnik Sel'skokhoz. Nauk. (Moscow) 3:138-141.

NUTRITION

- APPLEBAUM, S. W. 1966. Digestion of potato starch by larvae of the flour beetle. Tribolium castaneum. J. Nutr. 90:235-239.
- APPLEBAUM, S. W. and KONIJN, A. M. 1966. The presence of a Tribolium-protease inhibitor in wheat. J. Insect Physiol. 12:665-669.
- BONESS, M. 1968. Artificial nutrition in the rearing of insects. (Ge) Umschau 68:562.
- BOTERO, H. 1968. Studies on pathogenicity and fatty acid composition of Raillietina cesticillus (Cestoda) Diss. Abstr. Sect. B., 28 (10): 3948B.
- CARTIER, J. J. 1968. Factors of host plant specificity and artificial diets. Entomol. Soc. Amer. Bull. 14:18-21.
- CLARK, E. W. 1965. An artificial diet for the southern pine beetle (Dendroctonus frontalis) and other bark beetles. U. S. Forest Serv. Res. Note SE-45, 3 p.
- COTHRAN, W. R. and GYRISCO, G. G. 1966. An entomogenous fungus observed attacking alfalfa weevil adults in New York. J. Econ. Entomol. 59:243-244.
- DALE, P. S. 1965. Two new nematodes of the genus Tetleyus (Thelastomatidae) from insect larvae. New Zeal. J. Sci. 8:521-530.
- DAUM, R. J. 1966. Food consumption by boll weevil. 145 p.
- DAVID, J. 1967. Methods of evaluating the nutritional requirements of insects raised on synthetic media. (Fr) Ann. Nutr. Aliment..21(2, revues):25-54.
- DAVIS, G. R. F. 1962. Quantitative L-arginine requirements of larvae of the saw-toothed grain beetle, Oryzaephilus surinamensis (L.) (Coleoptera, Silvanidae). J. Insect Physiol. 8:377.
- DAVIS, G. R. F. 1966. Survival and development of Oryzaephilus surinamensis (L.) (Coleoptera: Silvanidae) on wheat-flour diets and on casein diets supplemented with biotin and ascorbic acid. Can. Entomol. 98:263-267.
- DAVIS, G. R. F. 1967. Reassessment of some amino acid requirements of larvae of Oryzaephilus surinamensis (L.) (Coleoptera; Silvanidae). J. Nutr. 91:255-260.
- DAVIS, G. R. F. 1968. Phagostimulation and consideration of its role in artificial diets. Entomol. Soc. Amer. Bull. 14:27-30.

- DAVIS, G. R. F. 1968. Quantitative dietary requirements of Oryzaephilus surinamensis (L.) (Coleoptera, Silvanidae) for phenylalanine and tyrosine. Can. J. Zool. 46:469-473.
- DEVARAJ URS, K. C. and MOOKHERJEE, P. B. 1966. Effects of oilseed food on the biology of Tribolium castaneum Herbst, Trogoderma granarium Everts. and Carcyra cephalonica Staint. and their susceptibility to pyrethrines. Indian J. Ent. 28:234-240.
- EARLE, N. W., WALKER, A. B. and BURKS, M. L. 1966. An artificial diet for the boll weevil, Anthonomus grandis (Coleoptera: Curculionidae), based on the analysis of amino acids in cotton squares. Entomol. Soc. Amer. Ann. 59:664-669.
- EARLE, N. W., SLATTEN, B. and BURKS, M. I. 1967. Essential fatty acids in the diet of the boll weevil, Anthonomus grandis Boheman (Coleoptera: Curculionidae). J. Insect Physiol. 13:187-200.
- EICHLER, W. and OTHERS. 1964. The effects of hard winter of 1962-63. on some parasites and parasite hosts under special consideration of parasitic and synanthropic insects. (Ge) Angew. Parasitiol. 5:138-150.
- FRENCH, E. W. 1954. The requirements of Tribolium confusum for known and unknown vitamins. Ph.D. Thesis, Univ. of Illinois, Urbana.
- GORDON, H. T. 1968. Quantitative aspects of insect nutrition. Amer. Zool. 8: 131-138.
- GRINYER, I. and MUSGRAVE, A. J. 1966. Ultrastructure and peripheral membranes of the mycetomal microorganisms of Sitophilus granarius (L.) (Coleoptera). J. Cell Sci. 1:181-186.
- GUENNELON, 1967. Artificial nutrition of insects. (Fr) Rev. Zool. Agr. Appl. 66:20-28.
- GUNTHER, S. 1957. A practical method for staining Microsporidia. 2 p.
- HOSSEINIE, S. O. 1965. Effects of nutrition on duration of instars in Tropisternus (Coleoptera:Hydrophilidae). Ind. Acad. Sci. Proc. 74: 195-196.
- HORN, M. J. and WARREN, H. W. 1964. Availability of amino acids to microorganisms. IV. Comparison of hydrolysates of lactalbumin, oatmeal and peanut butter with simulated amino acid mixtures by growth response of microorganisms. J. Nutrit. 83:267.
- HOUSE, H. L. 1965. Insect nutrition. In Rocktein, M. ed. The physiology of Insecta. v. 2:769-813.
- HOUSE, H. L. 1966. The role of nutritional principles in biological control. Can. Entomol. 98:1121-1134.

- HOUSE, H. L. 1967. Artificial diets for insects: a compilation of references with abstracts. Can. Dep. Agr. Res. Inst. Inform. Bull. 5, 163 p.
- HOUSE, H. L., WELCH, H. E. and CLEUGH, T. R. 1965. Food medium of prepared dog biscuit for mass-production of the nematode DDL36 (Nematoda: Steinernematidae). Nature (London) 206:847.
- HSIAO, T. H. and FRAENKEL, G. 1968. The role of secondary plant substances in the food specificity of the Colorado potato beetle (Leptinotarsa decemlineata). Entomol. Soc. Amer. Ann. 61:485-493.
- HSIAO, T. H. and FRAENKEL, G. 1968. Selection and specificity of the Colorado potato beetle (Leptinotarsa decemlineata) for solanaceous and nonsolanaceous plants. Entomol. Soc. Amer. Ann. 61:493-503.
- HUST, L., BERNARD, R. and LEMONDE, A. 1957. Aspects quantitatifs des besoins en mine raux des larves de Tribolium confusum Duval. Canad. J. Zool. 35:513-518.
- HURPIN, B. 1966. Role of microorganisms in the digestive processes of insects. (Fr) Rev. Zool. Agr. Appl. 65:63-77.
- JONSSON, S. 1966. Nutrition ecological studies of pests of various Larix species. Methodological aspects. (Sw) Norsk Entomol. Tidsskr. 13:330-334.
- JURZITZA, G. 1966. The growth of normal and aposymbiotic Lasioderma serri-corne F. (Coleoptera, Anobiidae) under sub-optimum dosage of casein. (Ge) Naturwissenschaften 53:709.
- KLOCHKO, M. D. 1965. Comparative tests with microorganisms entomopathogenic for Epilachna vigintioctomaculata Motsch. (Rus) Vses. Nauch. Issled. Inst. Zashch. Rast. Tr. 24:187-189.
- LECLERCQ, J. 1965. Preliminary tests on use of larvae of Tenebrio molitor to compare the nutritive value of proteins. (Fr) Ann. Nutr. Aliment. 19:47-58.
- LECLERCQ, J., DUYCKAERTS, C. and GASPAR, C. 1967. The use of the larvae of Tenebrio molitor in the evaluation of the nutritive value of proteins of vegetable leaves. (Fr) Ann. Nutr. Aliment. 21:189-197.
- LEVINSON, H. A., BARELKOVSKY, J. and BAR-ILAN, A. R. 1967. Nutritional effects of vitamin omission and antivitamin administration on development and longevity of the hide beetle Dermestes maculatus Deg. (Coleoptera, Dermestidae). J. Stored Prod. Res. 3:345-352.
- LOSCHIAVO, S. R. 1965. The chemosensory influence of some extracts of brewer's yeast and cereal products on the feeding behavior of the confused flour beetle, Tribolium confusum (Coleoptera:Tenebrionidae). Ent. Soc. Amer. Ann. 58:576-588.

- LUCA, Y. DE. 1965. Catalogue of the metazoan parasites and predators of Bruchidae (Coleoptera). (Fr) J. Stored Prod. Res. 1:51-98.
- MCGREGOR, H. E. 1964. Preference of Tribolium castaneum for wheat containing various percentages of dockage. J. econ. Ent. 56:511-513.
- MEDICI, J. C. and TAYLOR, M. W. 1966. Mineral requirements of the confused flour beetle, Tribolium confusum (Duval). J. Nutr. 88:181-186.
- MEDICI, J. C. and TAYLOR, M. W. 1965. Grain beetles aid nutrition research. N. J. Agr. 47:10-11.
- MERKER, E. 1965. The influence of the condition of the food upon the development of the insects. (Ge) Ghent. Landbouwhogeschool. Mededel. 30:1562-1570.
- MILLS, R. B. 1965. Early germ feeding and larval development of the Angoumois grain moth. J. Econ. Entomol. 58:220-223.
- NITSUI, E. 1965. The sterol requirements of several store-food pests originally of a carnivorous nature. (Ja) Jap. J. appl. Ent. and Zool. 9:132-133.
- PANT, N. C. and DANG, K. 1965. Quantitative requirements of vitamins of B complex for the growth and development of larvae of Tribolium castaneum Herbst. Indian J. Entomol. 27:315-322.
- PREVETT, P. F. 1967. The larva of Caryedon serratus (Ol.) the groundnut seed beetle (Coleoptera:Bruchidae). J. stored Prod. Res., 3: 117-123.
- RUSSELL, M. P. 1968. Influence of rice variety on oviposition and development of the rice weevil, Sitophilus oryzae, and the maize weevil, S. zeamais. Entomol. Soc. Amer. Ann. 61:1335-1336.
- SOKOLOFF, A., FRANKLIN, I. R. and LAKHANPAL, R. K. 1966. Comparative studies with Tribolium (Coleoptera, Tenebrionidae) II. Productivity of Tribolium castaneum (Herbst) and Tribolium confusum Duval in natural, synthetic and semisynthetic diets. J. Stored Prod. Res. 1:313-324.
- SOKOLOFF, A., FRANKLIN, I. R., OVERTON, L. F. and HO, F. K. 1966. Comparative studies with Tribolium (Coleoptera, Tenebrionidae) -I. Productivity of T. castaneum (Herbst) and T. confusum Duval. on several commercially available diets. J. Stored Prod. Res. 1:295-311.
- STERLING, W. L., WELLSO, S. G., ADKISSON, P. L. and DOROUGH, H. W. A cottonseed-meal diet for laboratory cultures of the boll weevil (Anthonomus grandis). J. Econ. Entomol. 58:867-869.
- TANAKA, M. and MAETA, Y. 1965. Rearing of some predacious coccinellid beetles by artificial diets. (Ja) Kurume. Hort. Res. Sta. Bull. Ser. D, 3:17-35.

- TANTON, M. T. 1965. Agar and chemostimulant (sinigrin (potassium myronate)) concentrations and their effect on intake of synthetic food by larvae of the mustard beetle, Phaedon cochleariae Fab. Ent. Expt. et Appl. 8:74-82.
- TAYLOR, M. W., and MEDICI, J. C. 1966. Amino-acid requirements of grain beetles. J. Nutr. 88:176-180.
- VEDDER, E. B. and FELICIANO, R. T. 1928. An investigation to determine a satisfactory standard for beriberi-preventing rices. Phillip J. Sci. 35:351-389.

PARASITES AND SYMBIONTS OF COLEOPTERA

- ALICATA, J. E. 1937. The gyzard worm, Cheilosporiara hamulosa, and its transmission to chickens in Hawaii. Hawaii Agric. Exp. Sta. Circ. 11: 1-7.
- ALICATA, J. E. 1940. Life cycle of pinworm Subulura brumpti. Rep. Hawaii Agr. Exp. Sta. 1939. 67 p.
- ASHFORD, R. W. 1965. Lymphotropha tribolii gen. nov., sp. nov., Neogregarinida Schizocystidae, from the haemocoel of Tribolium castaneum (Herbst) J. Protozool. 12:609-615.
- ASHFORD, R. W. 1968. Sporozoan parasites of Tribolium castaneum (Herbst): Triboliocystis garnhami Dissanaïke a synonym of Farinocystis tribolii Weiser. J. Protozool. 15:466-470.
- BACIGALUPO, J. 1928. L'évolution de l'Hymenolepis nana. C. R. Soc. Biol. 99:239.
- BEAUMONT, J. H. 1943. Agricultural science on the war front. Report of the Hawaii agricultural experiment station for the biennium ending June 30, 1942. 149 p.
- BERNTZEN, A. K. 1966. A controlled culture environment for axenic growth of parasites. N. Y. Acad. Sci. Ann. 139:176-189.
- BHATIA, S. K. and PRADHAN, S. 1968. Studies on resistance to insecticides in Tribolium castaneum Herbst. ITIS 11:144.
- BHATIA, S. K. and PRADHAN, S. 1968. Studies on resistance to insecticides in Tribolium castaneum Herbst. I. Selection of a strain resistant to P, P'DDT and its biological characteristics. Indian J. Ent. 30:13-32.
- BICHUK, YU. P. 1965. Morphological properties of the agents of red (Sorospora uvella) and orange (Massospora cleoni and M. bothynoderi) muscardine, fungal parasites of Bothynoderes punctiventris. (Uk) Mikrobiol. Zhur. 27:31-36.
- BOBOVICH, V. T. 1965. Isolation and study of new cultures of Bacillus thuringiensis for possible use in control of insects on agricultural plants. (Rus) Leningrad. Vsesoyuznyi Nauchno-Issledovatel'skii Institut Sel'skokhozyaistvennoi Mikrobiologii. Trudy 19:53-55.
- BREGLIANO, J. C. 1965. Studies on the quantity of virus contained in the ovarian cysts of stabilized and inoculated Drosophila. (Fr) Inst. Pasteur. Ann. 109:639-651.
- BRENIERE, J. 1965. List of parasites and predators of the chief insect pests of crops in Madagascar. (Fr) Agron. Trop. (Paris) 20:344-349.

- BURGDORFER, W. and VARMA, M. G. R. 1967. Trans-stadial and transovial development of disease agents in arthropods. *Ann. Rev. Ent.* 12:347-376.
- BURGES, H. D. 1966. The standardisation of products based on Bacillus thuringiensis. *Meded. rijksfac. Landbouw. wet. Gent.* 31:536-546.
- CANTWELL, G. E. and FRANKLIN, B. A. 1966. Inactivation by irradiation of spores of Bacillus thuringiensis var. thuringiensis. *J. Invertebrate Pathol.* 8:256-258.
- CANTWELL, G. E. and LAIRD, M. 1966. The World Health Organization Kit for the collection and shipment of pathogens and parasites of diseased vectors. *J. Invertebrate Pathol.* 8:442-451.
- COLLINGS, S. B. and HUTCHINS, C. P. 1965. Motility and hatching of Hymenolepis microstoma oncospheres in sera, beetle (Tribolium confusum) extracts, and salines. *Expt. Parasitol.* 16:53-56.
- CROW, W. R., PUTTLER, B. and DAUGHERTY, D. M. 1968. Beauveria bassiana infecting adult clover root curculios (Sitona hispidula). *J. Econ. Entomol.* 61:576-577.
- CZARNOTA, H. 1966. The intestinal microflora of Cetonia aurata L. (Lamellicornia) larvae fed different diets. *Acta Microbiol. Polon.* 15: 53-57.
- DESAI, R. M. 1965. Chromosome cycle in the gregarine Stylocephalus elongatus Devdhar. *Naturwissenschaften* 52:649.
- DESAI, R. N. 1966. Chromosome cycle in the gregarine Stylocephalus mesomorphi Dev. *Parasitology* 56:199-208.
- DOWELL, F. H. and JONES, A. W. 1966. Establishment of Tribolium confusum populations after stress by parasitism with Hymenolepis microstoma. *Exp. Parasitol.* 18:99-108.
- DREA, J. J. 1968. Castration of male alfalfa weevils (Hypera postica) by Microctonus spp. *J. Econ. Entomol.* 61:1291-1295.
- EL-HARIRI, G. 1965. Records of nematode parasites of Adalia bipunctata (L.) (Cole, Coccinellidae). *Entomol. Mon. Mag.* 101:132.
- ELSON, J. A. 1933. Protozoans and beetles. *Amer. Sci. Nat.* 67:283-285.
- EVLAKHOVA, A. and SHVETSOVA, O. 1965. Diseases of grain pests. (Rus) *Zashch. Rast. Vred. Bolezni* 12:36-39.

- FAUST, R. M. and ESTES, Z. E. 1966. Silicon content of the parasporal crystal of several crystalliferous bacteria. *J. Invertebrate Pathol.* 8:141-144.
- FILSHIE, B. K., GRACE, T. D. C., POULSON, D. F. and REHACEK, J. 1967. Virus-like particles in insect cells of three types. *J. Invertebrate Pathol.* 9:271-273.
- FRYE, R. D. 1968. In the laboratory; bacterial disease effective against several insects. *N. Dak. Farm Res.* 25:12-13.
- GAHAN, A. B. 1918. Description of some new parasitic Hymenoptera. *U. S. Natl. Mus. Proc.* 53:195-217.
- GAHAN, A. B. 1922. Report on a small collection of parasitic Hymenoptera from Java and Sumatra. *Trenbia* 3:47-52.
- GAHAN, A. B. 1925. A second lot of parasitic Hymenoptera from the Philippines. *Philippine J. Sci.* 27:83-111.
- GAHAN, A. B. 1931. On certain Hymenopterous parasites of stored grain insects. *J. Wash. Acad. Sci.* 21:213-221.
- GAHAN, A. B. 1930. Synonymial and descriptive notes on parasitic Hymenoptera. *Proc. U. S. Nat. Mus.* 77, 12 p.
- GAST, R. T. 1966. Control of four diseases of laboratory-reared boll weevils (Anthonomus grandis) *J. Econ. Entomol.* 59:793-797.
- GEUS, A. 1968. The gregarines of Cisitidae (Coleoptera). (Ge) *Arch. Protistenkunde* 110:439-451.
- GOODRICH, E. S. 1921. Note on the Hymenoptera parasitic on beetles infesting grain. *Repts. Grain Pests (War) Committee, Royal Society, London* 9:5-7.
- GUPTA, K. S. 1965. Culture of two schizogregarines, Farinocystis tribolii Weiser and Mattesia dispora Naville in vitro. *Cur Sci.* 34:125-126.
- GUSS, V. M. and GRUNDMANN, A. W. 1968. A method for experimental per os infection of insectivorous hosts. *J. Parasitol.* 54:88.
- HALL, H. H., ST. JULIAN, G. and ADAMS, O. L. 1968. Observations of the infection of Japanese beetle (Popillia japonica) larvae with Bacillus popilliae. *J. Econ. Entomol.* 61:840-843.
- HAREIN, P. K. and CASAS, E. de las. 1968. Bacteria from granary weevils (Sitophilus granarius) collected from laboratory colonies and field infestations. *J. Econ. Entomol.* 61:1719-1720.

- HARRY, O. G. 1967. The effect of a eugregarine Gregarina polymorpha (Hammer-schmidt) on the mealworm larva of Tenebrio molitor (L.). J. Protozool. 14:539-547.
- HEDLUND, R. C. and PASS, B. C. 1968. Infection of the alfalfa weevil, Hypera postica, by the fungus Beauveria bassiana. J. Invertebrate Pathol. 11:25-34.
- HEIMPEL, A. M. 1966. Insect pathology, present and future. U. S. Agr. Res. Serv. ARS-33-110:70-75.
- HEIMPEL, A. M. 1967. A critical review of Bacillus thuringiensis Berline and other crystalliferous bacteria. Ann. Rev. Ent. 12:287-322.
- HINMAN, E. H. and FAUST, E. C. 1932. The ingestion of the larvae of Tenebrio molitor L. (mealworm) by man. J. Parasit. 19:119-120.
- HOPKINS, C. A. and CALLOW, L. L. 1965. Methionine flux between a tapeworm (Hymenolepis diminuta) and its environment. Parasitology 55: 653-66.
- HORSFALL, M. W. 1938. Meal beetles as intermediate hosts of poultry tapeworms. Poultry Sci. 17:8-11.
- HOUSER, B. B. and BURNS, W. C. 1968. Experimental infection of gnotobiotic Tenebrio molitor and white rats with Hymenolepis diminuta (Cestoda:Cyclophyllidae). J. Parasitol. 54:69-73.
- HURPIN, B. 1965. Resistance of Rickettsiella melolonthae Krieg to antibiotics. (Ge) Entomophaga 10:311-315.
- HURPIN, B. 1968. The influence of Temperature and larval stage on certain diseases of Melolontha melolontha. J. Invertebrate Pathol. 10: 252-262.
- IGNOFFO, C. M. 1966. Insect viruses. In Smith, C. N., ed. Insect colonization and mass production, 501-530 p.
- JAFRI, R. H. 1964. Influence of pathogens on the life span of irradiated insects. Rev. Path. veg. 43:37-41.
- JAFRI, R. H. 1964 (1965). Prospects of integrated radiation and microbial control of harmful insects. 12th Inter. Congr. Entomol. London 1:747-748.
- KAKULIYA, G. A. and VEREMCHUK, G. V. 1965. New nematode species. Neoaplectana georgica (Nematodes. Steinernematidae) found on June chafer (Amphimallon solstitialis) (Rus) Akad. Nauk Gruz. SSR. Soobshch. 40:713-718.
- KASCHEF, A. H. and ROSHDY, M. A. 1966. A new gregarine, Pyxinia gibbii n. sp. intestinal parasite of Gibbium psylloides Czemp. (Col, Ptinidae). Z. Parasitenk. 27:80-89.
- KELLY, R. J., O'BRIAN, D. M. and KATZ, F. F. 1967. The incidence and burden of Hymenolepis diminuta cysticeroids as a function of the age of the intermediate host, Tribolium confusum N.Y. Ento. Soc. J. 75: 19-23.

- KRIEG, A. 1955. Investigations on the pathogenicity to vertebrates of Rickettsia melolonthae and on the serological detection of the latter in an arthropod host. 2 p. Transl. 16182. Translation from Naturwissenschaften 42:609-610.
- KRIEG, A. 1958. Comparative taxonomic, morphological and serological investigations on rickettsias pathogenic for insects. 3 p. Transl. 16-158. Of the genus Rickettsiella. Translation from Zeitschrift fur Naturforschung 13b:555-557.
- KRIEG, A. 1965. A new Rickettsia from Coleoptera, Rickettsiella tenebrionis nov. spec. (Ge) Naturwissenschaften 52:1114-1115.
- LAIRD, M. 1959. Gregarines from laboratory colonies of flour beetles, Tribolium castaneum Herbst and T. confusum Duval, at Montreal. Can. J. Zool. 37:378-381.
- LANHAM, U. N. 1968. The Blochmann bodies: Hereditary intracellular symbionts of insects. Cambridge Phil. Soc. Biol. Rev. 43:269-286.
- LEONOVA, N. 1937. Influences of external factors on the intestine fauna of Tribolium confusum Duv. Acta. Univ. Asial Medial. Ser. VIII-a fasc. 34 Tashkent, 3-12pp.
- LEWERENZ, H. J. 1967. Vital fluorochrome staining of granular inclusion bodies in Gregarina. (Ge) Naturwissenschaften 54:49-50.
- LIPA, J. J. 1966. Tribolium destructor Uytt as a new host for Didymophyes minuta (Ishii) Watson (Gregarinidae:Didymorphyidae). (Rus) Zool. Zh. 45:1130-1133.
- LIPA, J. J. 1967. Studies on gregarines (Gregarinomorpha) of arthropods in Poland. Acta. Protozool. 5:97-99.
- LIPA, J. J. 1967/1968. Nosema lepturae sp. N., A new microsporidian parasite of Leptura rubra L. (Coleoptera, Cerambycidae). Acta Protozool. 5:269-271.
- LIPA, J. J. 1968. On two microsporidians: Nosema whitei Weiser from Tribolium confusum and Nosema weiseri sp.n. from Rhizopertha dominica. 5:375-382.
- LIPA, J. J. 1968. Nosema leptinotarsae sp.n., a microsporidian parasite of the Colorado potato beetle, Leptinotarsa decemlineata (Say). J. Invertebrate Pathol. 10:111-115.
- MADDOX, J. V. and LUCKMANN, W. H. 1966. A microsporidian disease of the alfalfa weevil, Hypera postica. J. Invertebrate Pathol. 8:543-544.

- MADELIN, M. F. 1963. Diseases caused by hyphomycetous fungi. In Steinhaus, E. A., Ed. Insect Pathology Vol. I, 661 pp. Vol. II., 689 pp. Academic Press, New York.
- MADELIN, M. F. 1966. Fungal parasites of insects. *Annu. Rev. Entomol.* 11: 423-448.
- MANIER, J. F., and THEODORIDES, J. 1965. Apropos an Eccrinales parasite of the Passalidae (Coleoptera) in Laos. (Fr) *Ann. de Parasitol. Humaine et Compar.* 40:497-504.
- MARTIN, J. H. D. and CHAMP, B. R. 1964. Records of protozoan parasites from insect pest of stored products in Queensland. *J. Ent. Soc. Queensland* 3:83.
- MASSEY, C. L. 1966. The nematode parasites and associates of Dendroctonus adjunctus (Coleoptera: Scolytidae) in New Mexico. *Entomol. Soc. Amer. Ann.* 59:424-440.
- MCLAUGHLIN, R. E. 1965. Mattesia grandis n. sp., a sporozoan pathogen of the boll weevil, Anthonomus grandis Boheman. *J. Protozool.* 12:405-413.
- MCLAUGHLIN, R. E. 1965. Some relationships between the boll weevil, Anthonomus grandis Boheman, and Mattesia grandis McLaughlin (Protozoa: Neogregarinida). *J. Invertebrate Pathol.* 7:464-473.
- MCLAUGHLIN, R. E. 1966. Laboratory techniques for rearing disease-free insect colonies: elimination of Mattesia grandis McLaughlin, and Nosema sp. from colonies of boll weevils (Anthonomus grandis) *J. Econ. Entomol.* 59:401-404.
- METTRICK, D. F. and PARNELL, J. R. 1967. Exposure of Tribolium confusum to thio-TEPA, and its effect upon development of Hymenolepis diminuta cysticercoids. *Exp. Parasitol* 20:17-26.
- MOMMA, K. 1928. On a case of Hymenolepis diminuta Rud., 1819. *Ann. Trop. Med. Parasit.* 22:1-3.
- MULLER-KOGLER, E. and HUGER, A. and FERRON, P. 1965. Representation of fungus attack in insects by staining. (Ge) *Naturwissenschaften* 52: 543.
- MUSGRAVE, A. J. and GRINYER, I. 1968. Membranes associated with the disintegration of mycetomal micro-organisms in Sitophilus zeamais (Mots.) (Coleoptera). *J. Cell Sci.* 3:65-70.
- MUSGRAVE, A. J., MONRO, H. A. U., and UPITIS, E. 1965. Apparent elimination of symbiotes in successive generations of Sitophilus granarius (Coleoptera) fumigated with methyl bromide. *J. Invertebrate Pathol.* 7:506-511.

- NETTLES, W. C. and BETZ, N. L. 1966. Surface sterilization of eggs of the boll weevil with cupric sulfate. *J. Econ. Entomol.* 59:239.
- OLDHAM, J. N. 1931. On the arthropod intermediate hosts of Hymenolepis diminuta (Rudolphi, 1819) *J. Helminth* 9:21-28.
- OKAFOR, N. 1965. Micro-organisms associated with dead insect larvae in Nigeria. *Nature (London)* 208:1015-1016.
- ORMIERES, R. 1966. New or little known Eugregarina parasites of Coleoptera. (Fr) *Vie Milieu, Ser. C. Biol. Terrestre* 17:765-774.
- POINAR, G. O. and THOMAS, G. M. 1966. Significance of Achromabacter nematophilus Poinar and Thomas (Achromobacteraceae: Eubacteriales) in the development of the nematode, DD-136. (Neoaplectana sp. Steinernematidae). *Parasitology* 56:385-390.
- PRASERTPHON, S. 1967. Circulation of hyphal bodies in the insect host and mycotoxin production in entomophthoraceous fungi. *Diss. Abstr., Sect. B*, 28:1563B-1564B.
- PYE, A. E. and YENDOL, W. G. 1968. Bacteria in the digestive tract of alfalfa weevil (Hypera postica) larvae. *Entomol. Soc. Amer. Ann.* 61:791-792.
- RAO, B. R. S., MATHUR, S. B. and SRIVASTAVA, R. P. 1968. The susceptibility of Hypera postica (Gyll.) to Beauveria densa (Link) Picard. *Acta Phytopathol.* 3:51-57.
- REID, W. M. 1965. Broiler tapeworm problems are preventable by beetle control. *Ga. Agr. Res.* 6:3-5.
- RHODES, R. A. 1966. Characteristics of vegetative growth of Bacillus popilliae. *Appl. Microbiol.* 14:189-195.
- RHODES, R. A., ROTH, M. S. and HRUBANT, G. R. 1965. Sporulation of (insect pathogen) Bacillus popilliae on solid media. *Canad. J. Microbiol.* 11:779-783.
- RIZVANOV, K. and BUROV, D. 1966. Contribution to microbiology of certain insects. (Bu) *Gradinarska Lozarska Nauk.* 3:457-466.
- RUBTSOV, I. A. 1965. Antagonistic and mutualistic relations between host and parasite in nature. (Rus) *Zhur. Obshch. Biol.* 26:166-175.
- RUHM, W. 1965. The host range extension of a nematode species (Micoletzkyia sp.) associated with Scolytidae (Coleoptera). (Ge) *Naturwissenschaften* 52:167-168.
- RYABOV, M. A. 1926. The possibilities of applying the parasitic method of control in the case of granary pests. *Bull. N. Caucasian Plant Prot. Sta.* 1:19-50.

- SCHIMITSCHEK, E. 1967. Results of rearing parasites 1961-1965. (Ge) Z. Angew. Entomol. 59:64-73.
- SINGER, E., GOODMAN, N. S. and ROGOFF, M. H. 1966. Defined media for the study of bacilli pathogenic to insects. N. Y. Acad. Sci. Ann. 139:16-23.
- SLATTEN, B. H. and LARSON, A. D. 1967. Mechanism of pathogenicity of Serratia marcescens. I. Virulence for the adult boll weevil (Anthonomus grandis). J. Invertebrate Pathol. 9:78-81.
- SLIWINSKI, K. E. The intestinal microflora of Oryctes nasicornis L. larvae. Acta Microbiol. Polon. 15:59-65.
- SLUSS, R. 1968. Behavioral and anatomical responses of the convergent lady beetle (Hippodamia convergens) to parasitism by Perilitus coccinellae (Schrank) (Hymenoptera: Braconidae). J. Invertebrate Pathol. 10:9-27.
- SMIRNOFF, W. A. 1965. Observations on the effect of virus infection on insect behavior. J. Invertebrate Pathol. 7:387-388.
- SMIRNOFF, W. A. and PERRON, J. M. 1965. A method of determining the rate of development of Bacillus thuringiensis var. thuringiensis Berliner. J. Invertebrate Pathol. 7:320-324.
- SMITH, K. M. 1967. Insect pathogenic viruses. in Maramorosch, K. and Koprowski, H., ed. Methods in virology, v. 1, p. 411-477. Ref. 445-447.
- SMITH, K. M. 1967. Insect virology. New York, Academic Press, 1967. 256 p.
- ST. JULIAN, G., PRIDHAM, T. G. and HALL, H. H. 1967. Preparation and characterization of intact and free spores of Bacillus popilliae Dutky. Can. J. Microbiol. 13:279-285.
- SUTTER, G. R. and KIRK, V. M. 1968. Rickettsia-like particles in fat-body cells of Carabid beetles. J. Invertebrate Pathol. 10:445-449.
- SYMPOSIUM ON MICROBIAL INSECTICIDES. I-V. Bacteriol. Rev. 29:364-405.
- TAN, B. D. and JONES, A. W. 1966. X-ray induced abnormalities and recovery in Hymenolepis microstoma. Exp. Parasitol 18:355-373.
- TELENGA, N. A. and LAPPA, N. V. 1965. Protective reactions of insect hemolymph to parasites and pathogenic microorganisms. (Rus) In Akademiya Nauk Ukrayins'koyi RSR. Parazity i parazitozy cheloveka i zhyvotnykh, 68-77 p.
- THEODORIDES, J. and DESPORTES, I. 1965. A new Gregarina from Egypt, Didymophyes jolivetii n. sp. (Didymophyidae). (Fr) Ann. Parasitol. Humaine Comp. 40:513-515.

- THOMPSON, P. H. 1966. Arthropods from nests of the house sparrow. Entomol. Soc. Wash. Proc. 68:44-48.
- THONTADARYA, T. S. 1966. Influence of temperature and humidity on the longevity of the spores of the entomogenous fungus, Beauveria bassiana (Bals.) Vuill., (Fungi Imperfecti), and the potentialities of utilizing this fungus for the control of some coleopterous stored grain pests. Diss. Abstr., Sect. B. 27:849 B.
- TOUMANOFF, C. 1967. Antagonistic action between entomophagous fungi and certain crystalliferous (Bacillus) cereus strains pathogenic to insects. (Fr) Ann. Parasitol. Humaine Comp. 42:353-365.
- TUZET, O. and OTHERS. 1965. Adelina melonothae n. sp., coccidian parasite of Melonlotha melontha larvae. (Fr.) Arch. Zool. Exp. Gen. 106:513-521.
- VAGO, C. 1966. Views on the classification of invertebrate viruses. (Fr) Entomophaga 11:347-353.
- VAGO, C., DUTHIOT, J. L. and ROBERT, P. 1967. A new type of invertebrate virus demonstrated in Coleoptera. (Fr) Acad. Sci. Compt. Rend. Ser. D 265:721-723.
- VAGO, C., MONSARRAT, P., DUTHOIT, J. L., AMARGIER, A., MEYANDIER, G. and VAN WAEREBEKE, D. 1968. A new spindle virus observed in Lucanidae (Figulus) (Coleoptera) from Madagascar. (Fr) Acad. Sci. C. R. Ser D. 266:1621-1623.
- VELITSKAYA, I. S. 1964. Toxic properties of culture media of fungi pathogenic to insects. (Rus) In Issled. po biol. metodu bor'by s vredit. sel'sk i lesn kh-va. 1964:26-27.
- VOGE, M. 1968. The post-embryonic developmental stages of cestodes. Adv. in Parasitology 5:247-297.
- WALLACE, F. G. 1966. The trypanosomatid parasites of insects and arachnids. Exp. Parasitol. 18:124-193.
- WATSON, M. E. 1916. Studies on gregarines. III. Biol. Monogr. 2:215-468.
- WELCH, H. A. 1956 (1958). A review of recent work on nematodes associated with insects with regard to their utilization as biological control agents. Proc. Internat. Congr. Ent., Tenth. Congr. 4:863-868.
- WELCH, H. E. 1965. Entomophilic nematodes. Annu. Rev. Ent. 10:275-302.
- WHITBECK, L. 1965. The horsehair snake (Nematomorpha). Frontiers 29:104-106.
- WHITE, G. F. 1919. Nosema disease USDA Bull, 780:59, p.

PESTS

- ABDEL-MALEK, A. A., TANTAWY, A. O. and WAKID, A. M. 1967. Studies on the eradication of Anopheles pharoensis by the sterile-male technique using cobalt-60. III-IV. J. Econ. Entomol. 60:20-26.
- ADAMS, R. W., WOLFE, J. E., MILNER, M. and SHELLENBERG, J. A. 1953. Aural detection of grain infested internally with insects. Sci. 118: 163-164.
- ADAMS, R. E., WOLFE, J. E., MILNER, M. and SHELLENBERG, J. A. 1954. Detection of internal insect infestation of grain by sound amplification. Cereal Chem 31:271-276.
- ADEYEMI, A. O. 1967. Storage pests of cereals (maize, millet, guinea corn) and their control in Nigeria. Sols Afr. 12:159-166.
- ADOLPHI, H. 1965. Chemosterilants in pest control. (Ge) z. Angew. Zool. 52: 133-143.
- AHLSWEDE, G. 1965. Grain care in storage through pest control and cell ventilation. (Ge) Mullerei 18:429-431.
- AKADEMIYA, NAUK SSSR. Zoologicheskii Institut, 1967. Vrednye i poleznye nasekomye Dal'nego Vostoka SSSR (Harmful and beneficial insects of the USSR Far East). Akad. Nauk SSSR. Zool. Inst. Tr. 41, 241 p.
- ALKAN, B. 1965. The most important storage pests in Turkey and their control. (Ge) Ankara Univ. Fac. Agr. Yearbook 1964:121-130.
- ALLENBERG, 1966. Pest control. (Ge) Mullerei 19:494-495.
- ANDERSON, P. M. 1968. Alfalfa weevil control by use of flame needs further testing. Sci. Farmer (Penn. Sta.) 15:10.
- ANDREEV, S. V. and OTHERS. 1965. On the possibility of the use of electric accelerators of charged particles to sterilize grain storage pests. (Rus) Vses. Akad. Sel Skokhoz. Nauk V I Lenina Dokl 8:12-15.
- ANDRES, L. A., HAWKES, R. B. and RIZZA, A. 1967. Apion seed weevil (Apion fuscirostre) introduced for biological control of Scotch broom (Cytisus scoparius). Calif. Agr. 21:13.
- ANTONOVA, V. P. 1965. The character of harmful fauna formation in grain crops in the lagoons of Transvolga. (Rus) Vses. Entomol. Obshch. Tr. 50:240-271.
- ASHMAN, F. 1966. Inspection methods for detecting insects in stored produce. Trop. Stored Prod. Inform. 12:481-494.
- ASHPOLE, E. 1966. Sex scents to control insect pests. Sci. Chron. 5:30-32.
- ASTAUROV, B. L. and OTHERS. 1967. Pest and insect control in Soviet agriculture. Joint Publ. Res. Serv. Transl. USSR Agr. 199:20-23.

- AZEVEDO, J. 1966. A good solution against curculio. (Por) Lav. Arrozeira 20:29-30.
- BACK, E. A. and COTTON, R. T. 1922. Stored grain pests. U. S. Dept. Agr. Farmers Bull. 1260, 47 pp.
- BACK, E. A. and COTTON, R. T. 1925. The use of vacuum for insect control. J. Agric. Res. 31:1035-1041.
- BADAWY, A. 1964. Some factors affecting the fecundity and longevity of Trogoderma granarium Everts (Coleoptera: Dermestidae). Soc. Entomol. Egypte. Bull. 48:281-290.
- BADAWY, A., and HASSAN, H. M. 1964. Studies on a natural infestation of the khapra beetle, Trogoderma granarium granarium Everts, in stored wheat in the-Sudan (Coleoptera:Dermestidae). Soc. Entomol. Egypte. Bull. 48:273-280.
- BAGGA, H. S. and LASTER, M. L. 1968. Relation of insects to the initiation and development of boll rot of cotton. J. Econ. Entomol. 61:1141-1142.
- BAILEY, S. W. 1965. The absorption of atmospheric oxygen by wheat. J. Stored Prod. Res. 1:197-199.
- BAILEY, S. W. 1965. Air-tight storage of grain; its effect on insect pests. IV. Rhyzopertha dominica (F.) and some other Coleoptera that infest stored grain. J. Stored Prod. Res. 1:25-33.
- BAILEY, S. W. and MCCABE, J. B. 1965. The detection of immature stages of insects (Sitophilus granarius) within grains of wheat. J. Stored Prod. Res. 1:201-202.
- BARYSHNIKOVA, Z. P. 1968. Comparative susceptibility to injuries of different plants in herbarium. (Rus) Bot. Zhur. (Moscow) 53:380-382.
- BATEMAN, P. 1966. Five per cent goes to grain pests. Milling 147:522-523.
- BEAUMONT, J. H. 1943. Agricultural science on the war front. Report of the Hawaii agricultural experiment station for the biennium ending June 30, 1942. 149 p.
- BEIRNE, B. P. 1962. Trends in applied biological control of insects. Annu. Rev.Ent. 71:387-400.
- BEIRNE, B. P. 1966. Present and future role of parasites and predators for insect control. U. S. Agr. Res. Serv. ARS-33-110:65-70.
- BEIRNE, B. P. 1967. The future of integrated controls. Mushi 39:137-140.

- BERESNEVA, R. F. 1964. Beetles-storage pests of southern Kazakhstan. (Rus) *Kazakhskii Nauch. Issled. Inst. Zashch. Rast. Trudy* 9:92-98.
- BEROZA, M. 1964. Insect sex attractants and their use. *Int. Congr. Endocrinol. Proc. 2d Congr. pt. 1*:203-208.
- BEROZA, M. 1966. The future role of natural and synthetic attractants for pest control. *U. S. Agr. Res. Serv. ARS-33-110*:34-41.
- BETZ, N. L. 1966. Improved laboratory methods for rearing the boll weevil (*Anthonomus grandis*) *J. Econ. Entomol.* 59:374-376.
- BHAMBHANI, H. J. 1966. Control of *Tribolium confusum* Jacq, du Val and *Tribolium destructor* Uyttenb. (Coleoptera:Tenebrionidae) by vacuum treatment. *Indian J. Ent.* 28:171-175.
- BILLS, G. T. 1966. Equipment for indoor pest control. *Int. Pest Contr.* 8:6-11.
- BINDRA, O. S. 1968. Insect pests of pulse crops. *Indian Farming* 17:12-15.
- BISHARA, S. I. 1965. The oviposition preference of the granary and the rice weevils on some wheat varieties in U. A. R. *Agr. Res. Rev.* 43:47-54.
- BLACKMAN, R. L. 1965. Studies on specificity in Coccinellidae. *Ann. Appl. Biol.* 56:336-338.
- BODOR, J. 1964. The occurrence of a storage pest in Hungary. (Hu) *Rovartani Kozlemenyek (n. s.)* 17:525-526.
- BORDEN, J. H. 1967. Laboratory investigations of certain phenomena associated with the response of *Ips confusus* (Le Conte) (Coleoptera:Scolytidae) to male attractant. *Diss. Abstr., Sect. B* 28:219B.
- BORKOVEC, A. B. 1966. Insect chemosterilants. *Advances Pest Contr. Res.* 7,143p.
- BORKOVEC, A. B., NAGASAWA, S. and SHINOHARA, H. 1968. Sterilization of the azuki bean weevil, *Callosobruchus chinensis*, by metepa and hempa. *J. Econ. Entomol.* 61:695-698.
- BORKOVEC, A. B., NAGASAWA, S., NAKAYAMA, I. and TERRY, P. H. 1968. Sterilization of *Callosobruchus chinensis* by hexamethylphosphorothioic triamide. *J. Econ. Entomol.* 61:1295-1298.
- BOUSH, G. M., DUNKEL, F. V. and BURKHOLDER, W. 1968. Progeny suppression of *Attagenus megatoma* and *Trogoderma parabile* by dietary factors. *J. Econ. Entomol* 61:644-646.
- BRADLEY, J. R., CLOWER, D. F. and GRAVES, J. B. 1968. Field studies of sex attraction in the boll weevil (*Anthonomus grandis*). *J. Econ. Entomol.* 61:1457-1458.
- BRIDWELL, J. C. 1920. Some notes on Hawaiian and other Bethyilidae (Hymenoptera) with the description of a new genus and species second paper. *Proc. Hawaiian Entom. Soc. Honolulu* 4:291-314.

- BROOKE, J. P. 1967. Insect infestation and its prevention in stored grain. Kenya Farmer 12:14-15.
- BRUEL, W. E., VAN DEN and BOLLAERTS, D. 1966. Method of rearing and observation applicable to Pediculoides ventricosus Newpt and other acarid species or small insects. (Fr) Ghent. Rijksfac. Landbouwwetensch. Meded. 31:747-757.
- BUCK, F. D. 1965. Tribolium castaneum Herbst. (Col. Tenebrionidae) in a Brazil nut. S. London Entomol Natur. Hist. Soc. Proc. Trans. 1:13.
- BURKHOLDER, W. E. 1967. Response of the male black carpet beetle, Attagenus megatoma (Fabricius) to the female-produced pheromone, with notes on other species. Diss. Abstr., Sect. B. 28:725B.
- BUSVINE, J. R. 1966. Insects and Hygiene. The biology and control of insect pests of medical and domestic importance. Methuen and Co. Ltd. London. XI 467 p.
- BUTLER, C. G. 1967. Insect pheromones. Cambridge Phil. Soc. Biol. Rev. 42 42-87.
- BUTLER, R. L. and MICKEL, C. E. 1955. Insect and rodent contamination of grain in Minnesota, North Dakota, South Dakota and Montana. Univ. of Minnesota Agr. Expt. Sta. Bull. 431:1-20.
- BYRNE, H. D., STEINHAEUER, A. L., and MENZER, R. E. 1966. Attractiveness of alfalfa extracts to the alfalfa weevil, Hypera postica, in relation to water. Entomol. Soc. Amer. Ann. 59:1013-1014.
- CALDERON, M. 1967. Insect pests of stored food. Agr. Israel 11:50.
- CARTWRIGHT, O. L. 1930. The rice weevil and associated insects in relation to shuck length and corn varieties. Bull. S. Carolina Agric. Expt. Sta. 266:28 p.
- CHAMP, B. R. 1965. Protecting stored cereal seed from pests. Queensland Agr. J. 91:449-453.
- CHAMP, B. R. and CRIBB, J. N. 1965. An investigation of peanut storage pests in Queensland. 1-2. Queensland J. Agr. Anim. Sci. 22:227-257.
- CHAO, Y. C. 1966. Chung Kuo ts'ang k'u hai ch'ung (Storage pests of China) Peking, K'o Hsueh Ch'u Pan Hse, 156 p.
- CHAO, C. C. 1965. Chung'kuo ching chi k'un ch'ung chih. 4. Ch'iao ch'ih mu. Ni pu hsing ch'ung k'o (A record of Chinese economic insects. 4. Coleoptera. Tenebrionidae) Peking, Sci. Press, 1965. 423 p.
- CHITTENDEN, F. H. 1895. Insects affecting cereals and other dry vegetable foods. U. S. Div. Ent. Bul. 4:112-131.
- CHITTENDEN, F. H. 1896. Insects affecting cereals and other dry vegetable foods, Chap. 8 in the principal household insects of the U. S. USDA Bull 44:112-131.

- CHITTENDEN, E. H. 1911. A list of insects affecting stored cereals. U. S. Bur. Ent. Bul. 96:1-7.
- CHRISTENSON, L. D. 1966. Application of sterilization techniques for controlling and eradicating insect pests. U. S. Agr. Res. Serv. ARS-33-110:95-102.
- CHURCHWARD, J. G. 1967. Get rid of insects in stored grain. (Condensed.) Power Farming Australia New Zeal. Better Farming Dig. 76:37, 39.
- CHURCHWARD, J. G. 1967. Control of insects of stored grain on the farm. Pybuthrin Dig. 4:3-5, 14.
- CLAUSER, F., PAVAN, M. and RONCHETTI, G. 1965. New national activities in increasing avi-fauna for biological control of insects. (It) Collana Verde 16:38-47.
- COLORADO, STATE UNIVERSITY, COOPERATIVE EXTENSION SERV. 1967. Insect control guide for Colorado; cereal crops, field crops, forage crops, stored grain. Colo. State Univ. Ext. Gen. Ser. 812:22p.
- COMMON SMALL GRAIN INSECTS. 1968. Minn. Univ. Ext. Ext. Folder 241, 2 p.
- CORBETT, H. H. 1915. Undesirable insect aliens at Doncaster, Naturalist 701:209.
- COTTON, R. T. and GOOD, N. E. 1937. Annotated list of the insects and mites associated with stored grain and cereal products, and of their arthropod parasites and predators. U. S. Dept. Agr. Misc. Pub. 258:1-81.
- CROUZEL, I. S. DE. 1966. Biological control. (Sp) Soc. Rural Agent. Ann. 100:16-24, 71.
- DANG, K. and PANT, N. C. 1965. Studies on the relative resistance of some maize varieties to Tribolium castaneum Hbst. Indian J. Ent. 27: 106-108.
- DANON, M. 1966. Protection of stored corn. (Se) Biljna Zastita 10:158-163.
- DANON, M. 1967. The control of stored wheat pests. (Se) Biljna Zastita 11: 192 - 197.
- DAUM, R. J. 1966. Feeding stimulants for cotton boll weevil. ITIS 145 p.
- DAVEY, P. M. 1965. Insect pests of stored products in the Tropics and the commodities and conditions in which they occur. Trop. Stored Prod. Inform. 10:377-386.
- DAVIDSON, A. 1893. The nests and parasites of Xylocopa orpifex. Smiths. Ent. News. 4:151-153.
- DAY, M. F. 1965. The use of pathogens in insect control. Aust. J. Sci. 28: 241-243.

- DEAN, G. A. 1913. Mill and stored-grain insects. Kansas Agr. Exp. Sta. Bull 189.
- DEBACH, P. 1964. The scope of biological control. In: Biological control of insect pests and weeds. DeBach, P. and Schlinger, E. I., eds. Chapman, and Hall Ltd., London.
- DE FARIA ESTÁCIO, F. L. 1956. A entomofauna dos produtos armazenados. Os Tribolium spp. (Coleoptera, Tenebrionidae). Ministerio do ultramar. Junta de Investigações do ultramar. Estudos, Ensaios e Documentos. 18. 96 pp Lisbon.
- DELUCCHI, V. L. 1967. The significance of biotaxonomy to biological control Mushi 39:119-125.
- DENMEAD, O. T. and BAILEY, S. W. 1966. The effects of temperature rise and oxygen depletion on insect survival in stored grain. J. Stored Prod. Res. 2:35-44.
- DIEUZEIDE, R. and TEMPERRE, G. 1924. Surquelques insectes des entrepots. Rev. Zool. Agric. et appl. 23:116-119.
- EDEN, W. G. 1967. Insect damage to corn in three Southeastern States at time of harvest and in farm storage. U. S. D. A. Marketing Res. Rep. 792, 9 p.
- EICHLER, W. 1967. The future of insect control. (Ge) Prakt. Schadlingsbekämpfer 19:59-60, 62-66.
- EIGHME, L. F. 1966. Relationships of insects to hot spots in stored wheat. J. Econ. Entomol. 59:564-569.
- ENTRUDO, M. M. and GUIMARAES, A. M. 1964. On some of the principal pests of granaries in Portugal. (Por) Agric. (Lisboa) 22:33-35.
- EVLAKHOVA, A. A. 1966. Increase of virulence of entomopathogenic fungi (Beauveria bassiana) due to chemical and physical factors. (Rus) Moskov. Obshch. Ispytatelei Prirody. Tr. Otd. Biol. 22:257-262.
- EVLAKHOVA, A. A. and SHVETSOVA, O. I. 1966. Investigations of the microbiological method of insect-pest control. 15 p. Ref. (JPRS 38, 114:TT 66-34541) Transl. 16351.
- EVLAKHOVA, A. A. and SHVETSOVA, O. I. 1966. Studies on microbiological method of insect pest control. (Rus) Zhur. Obshch. Biol. 27:448-456.
- EZUEH, M. I. and HOOPINGARNER, R. A. 1967. Apholate chemosterilization of the cereal leaf beetle (Oulema melanopus). J. Econ. Entomol. 60:907-910.

- FABER, W. 1963. Das osterreichische Debut des Australischen Diebkafers (*Ptinus tectus* Boield) Pflangerarzt 16:97-99.
- FABER, W. 1963. Die Reismehlkafer eine artenreiche Sippschaft. Teil 1. Die Gattungen *Gnathocerus*, *Palorus* and *Latheticus*, Pflanze Arzt. 16:8-11.
- FABER, W. 1963. Feinde der Vorratsschadlinge und ihr Nutzeffert Pflanze Arzt 16:53-56.
- FABER, W. 1964. Rice flour beetles, a species rich kindred. (Ge) Pflanzenarzt. 16:8-11, 23-25.
- FABRIANI, G. 1963. Nozioni di entomologia merceologica. II. Consegnenze degli attacchi parassitani sulle caratteristiche tecnologiche dei cereali e derivati, Molini d'Italia 14:218-222.
- FERNIE, L. M. and LANGLEY, C. J. 1966. Arabica coffee storage, II. A review of the problem in Tanganyika. Kenya Coffee 31:297, 299.
- FICHTER, G. S. 1966. Insect pests; a guide to more than 350 pests of home, garden, field, and forest. NY, Golden Press. 160 p.
- FINGER, A., STANIC, V., and SHULOV, A. 1965. Attracting substance (pheromone) produced by virgin females of *Trogoderma granarium* Everts (Col. Dermestidae). Riv. Parassitol. 26:27-29.
- FISHER, R. C. 1965. Insect parasitism and biological control. Sci. Progr. (London) 53:567-581.
- FLOYD, E. H., OLIVER, A. D. and POWELL, J. D. 1959. Damage to corn in Louisiana caused by stored grain insects J. Econ. Ent. 52:612-615.
- FOLTYN, J. Ed. 1965. Ochrana rostlin. Statni zemědělské nakladatelství, Praha, Ve spolupráci s Vstavem vedeckotech-nických informaci MZLVH.
- FONSECA, J. P. C. da. 1960. Phytiatry II. (In Portuguese) Agros (Lisboa) 43:71-78.
- FRANZ, J. M. 1966. Practical aspects of microbiological control of insect pests. (Ge) Ghent. Rijksfac. Landbouwwetensch Meded. 31 :512-525.
- FRANZ, J. M. and SIMON, H. R. 1967. Bibliography of biological control of insect pests XI. (Ge) Entomophaga 12:5-80.
- FREEMAN, J. A. 1966. Pest control of farm products. FATIS (Food Agr. Tech. Inform. Serv.) Rev. 4:124-126.
- FREEMAN, J. G. 1964. Problems of food infestation. Int. Food. Indus. Congr. Proc. 1964:196-200.

- FREY, W. 1966. The appearance of Trogoderma glabrum (Herbst) as a stored food pest in Germany and the appearance of other pest Trogoderma species. (Ge) Anz. Schadlingskunde 39:177-183.
- GAST, R. T. and DAVICH, T. B. 1966. Boll weevils (Anthonomus grandis). In Smith, C. N., ed. Insect colonization and mass production, 405-418 p.
- GEIER, P. 1965. The philosophy of pest control. Australian J. Sci. 28:203.
- GEIER, P. W. 1966. Management of insect pests. Annu. Rev. Entomol. 11: 471-490.
- GHOURI, A. S. K. 1966. Introduction of insects from foreign lands. West Pakistan J. Agr. Res. 4:157.
- GILES, G. H. 1965. Control of insects infesting stored sorghum in Northern Nigeria. J. Stored Prod. Res. 1:145-154.
- GILES, P. H. 1965. A record of stored product insects associated with Northern Nigerian food-stuffs. Samaru, Institute for Agricultural Research, Ahmadu Bello University, 7 p.
- GILLILAND, F. R. 1967. Mating behavior and population dynamics of the boll weevil (Anthonomus grandis) as related to the sterile-male-technique of insect control. Diss. Apstr., Sect. B, 28:1269B-1270B.
- GILLILAND, F. R. and DAVICH, T. B. 1968. Sexual competitiveness of male boll weevils (Anthonomus grandis) sterilized with apholate unaffected diet. J. Econ. Entomol. 61:852-853.
- GIVEN, B. B. 1967. Biological control of weeds and insect pests in New Zealand. Mushi 30:17-22.
- GLEN, R. 1966. The need for interdisciplinary research in pest control. U. S. Agr. Res. Serv. ARS-33-110: 4-9.
- GOLEBIEWSKA, Z. 1966. Attempts to apply biological and physical methods for control of granary pests. (Pol) Zeszyty Probl. Postepow Nauk Roln. 60:341-347.
- GREAT BRITAIN. 1968. Agricultural Research Council. Pest Infestation Laboratory. Pest Infestation Research 1967. Report. London, 1968. 80 p.
- GREAT BRITAIN, MINISTRY OF AGRICULTURE, FISHERIES AND FOOD 1966. Insect and mites in farm-stored grain. Great Brit. Min. Agr. Fish. Food. Adv. Leaflet. 368, rev. , 8 p.
- GUDKOV, YU. P. 1965. Relationship between population and species composition of insects, and grain contamination and moisture. (Rus) Kazak-hskii Nauch. Issled. Inst. Zashch. Rast. Trudy 9:106-107.

- GUIMARÃES, J. A. 1964. Efeitos de factores desfavoráveis sobre Carpoglyphus lactis (L.) Agricultura 23:21-24.
- GUNDU RAO, H. R. and MAJUMDER, S. K. 1966. Repellency of Kaempferia galanga Linn. (Zingiberaceae) to adults of Tribolium castaneum (Hbst) Sci and cult. 32:461-462.
- GUNDU RAO, H. R. and MAJUMDER, S. K. 1965. Repellency of spices, asomatic plant materials and essential oils to adults of Tribolium castaneum. Proc. Symp. utilization of Medicinal Plants. R. R. L. Jammu, India.
- GUPTA, F. D. and SINHA, R. N. 1960. Excretion and its products in some stored grain infesting beetles. Ann. Ent. Soc. Amer. 53:632-638.
- GURNEY, W. B. 1918. The insect pests of maize. Agric. Gaz. N. S. W. Sydney 29:641-650.
- HABERMAN, H., 1967. A new insect pest (Tribolium destructor) in the Estonian fauna. Eesti Loodus 10:504.
- HACKMAN, W. 1966. Anthrenus olgae Kalik (Coleoptera Dermestidae) a new arrival among pests in Finland. (Sw) Notulae Entomol. 46:121.
- HANNA, A. D. 1965. The prospect of modern insect control agents. World Rev. Pest Contr. 4:174-186.
- HANSBERRY, R. 1968. Prospects for nonchemical insect control-an industrial view. Bull. Ent. Soc. Amr. 14:229-235.
- HARDA, T. 1967. Stored pests and their control. Agr. Asia (spec. issue no. 5, 99-106.
- HARAGSIN, O. 1965. Potemnici (Tribolium sp.) jako škudci pylových zásob (Tribolium species as pests of pollen supplies. Ved. pr. výzk. Úst. včelář CSAZV 4:61-65. (Rev. appl. Ent. (A) 1967, 55, 66.
- HARDEE, D. D., MITCHELL, E. B. and HUDDLESTON, P. M. 1966. Effect of age, nutrition, sex, and time of day on response of boll weevils (Anthonomus grandis) to an attractant from cotton. Entomol. Soc. Amer. Ann. 59:1024-1025.
- HAREIN, P. K. and SODERSTROM, E. L. 1966. Coleoptera infesting stored products In Smith, C. N., ed. Insect colonization and mass production, 241-257 p.
- HATCH, M. 1942. The biology of stored grain pests. Bull. Assoc. Oper. Millers. 1207-1211 p.
- HERFORD, O. V. B. 1961. Losses resulting from the infestation of stored products by insects. Proc. Nutr. Soc. 20:11-15.

- HEIKKENEN, H. J. and HRUTFIORD, B. F. 1965. Dendroctonus pseudotsugae: a hypothesis regarding its primary attractant. *Science* 150:1457-1459.
- HEIMPEL, A. M. 1965. Microbial control of insects. *World Rev. Pest Contr.* 4:150-161.
- HEITOR, F. 1965. Biological control, method of controlling insect pests. (Por) *Agricultura (Lisboa)* 26:46-47.
- HIGHLIGHTS of the occurrence of insects and other arthropods in Canada, 1965. *Can. Insect Pest Rev.* 43:93, 125.
- HINTON, H. E. and CORBET, A. S. 1963. Common insect pests of stored food products, a guide to their identification. *Brit. Mus. (Natur. Hist.) Econ. Ser.* 15, 61 p.
- HODGSON, S. C. 1967. Grain protection in retrospect. *Pybuthrin Dig.* 4:12-14.
- HOGUE, C. L. 1967. Museum entomology and the pest control industry. *Pest Contr. Oper. News* 27:7-8.
- HOKURYUKAN HENSHUBU. 1966. *Konchu 1. Gaichu to ekichu (Insects, 1. Insect pests and beneficial insects.)* Tokyo, 1966. 252 p. (Genshoku Zukan: Seibutsu Hyakka Raiburari No. 6, 1966).
- HOUGH, W. S. 1966. Insects and resistant problems. *Mountaineer Grower* 262: 22-24.
- HOWE, R. W. 1965. Losses caused by insects and mites in stored foods and feedingstuffs. *Nutr. Abs. and Rev.* 35:285-303.
- HOWE, R. W. 1965. Sitophilus granarius breeding in acorns. *J. Stored Prod. Res.* 1:99-100.
- HUECK, H. J. 1968. Standardized rearing of storage and textile pests. (Du) *Entomol. Ber.* 28:82-83.
- HYDE, M. B. 1966. Grain storage; with special reference to the control of infestation. *Milling* 46:381-383.
- HYDE, M. B. and PARKIN, E. A. 1967. Recent developments in the field of insect prevention and control in stored grain. (Ge) *Getreide Mehl* 17:41-44.
- INOUE, Y. 1965. Attractants and repellents. (Ja) In Yamamoto, R., and Noguchi, T., ed. *Shin noyaku sosei-ho* 356-383.
- JACKSON, D. J. 1956. Dimorphism in the metasternal wings in Agabus raffrayi Sharp and A. labiatus Brahm (Col. Dytiscidae) and its relation to capacity for flight. *Rvy. Ent. Soc. London Proc. Ser. A Gen. Ent.* 31:1-11.

- JACOBSON, M. 1966. Chemical insect attractants and repellents. *Annu. Rev. Entomol.* 11:403-422.
- JACOBSON, M. 1965. Insect sex attractants. New York, 154 p.
- JERMY, T. 1966. Feeding inhibitors and food preference in chewing phytophagous insects. *Entomol. Exp. Appl.* 9:1-12.
- JOHANSEN, C. A. 1965. Bee poisoning versus Clover seed weevil control in white Dutch clover grown for seed. *Journ. Econ. Ent.* 58:587.
- JOTWANI, M. G. and SIRCAR, P. 1965. Neem (*Azadirachta indica*) seed as a protectant against stored grain pests infesting wheat seed. *Indian J. Entomol.* 27:160-164.
- JOUBERT, T. C. 1965. The insects in grain. 2. Control them early! *Farming S. Afr.* 41:49, 51, 53, 56.
- JOUBERT, P. C. 1966. Field infestations of stored products insects in South Africa. *J. Stored Prod. Res.* 2:159-162.
- KABIR, S. M. H. 1968. Insect pests of rice in East Pakistan and their control. *PANS (Pest Articles News Sum)*. Sect. A, *Insect Contr.* 14: 244-248.
- KAJITA, H. 1966. Studies on the utilization of natural enemies as "Biotic insecticides;" on the number of eggs deposited by *Pseudaphycus malinus* Gahan and its host selection. (Ja) *Kyushu Univ. Fac. Agr. Sci. Bull.* 22:319-324.
- KASCHEF, A. H. 1964. The effects of high temperature on the stored-products beetles, *Stegobium paniceum* L. and *Gibbium psylloides* Czemp. (Coleoptera:Anobiidae and Ptinidae). *Soc. Entomol. Egypte. Bull.* 48:269-272.
- KELIMBETOV, P. K. 1966. Insect species of stored-grain pests and the extent of infestation of storehouses in central and south-western Tadshikistan. (Rus) *Akad. Nauk Tadzh. SSR. Otd. Biol. Nauk. Izv.* 2: 69-75.
- KILGORE, W. W. and DOUTT, R. L., Eds. 1967. *Pest Control. Biological, Physical and Selected Chemical Methods.* Acad. Press. NY. 477 p.
- KIRTANI, K. 1964. Insect infestation of stored rice in Japan. *Proc. XII. Int. Congr. Ent.* London 1:630-631.
- KIRITANI, K. 1965. Biological studies on the *Sitophilus* complex (Coleoptera: Curculionidae) in Japan. *J. Stored Prod. Res.* 1:169-176.
- KIRITANI, K., NURAMATU, T. and YOSHIMURA, S. 1963. Characteristics of mills in faunal composition of stored products pests; their role as a reservoir of new imported pests. *Jap. Jour. Appl. Ent. Zool.* 7:49-58.

- KIRKPATRICK, R. L. and WILBUR, D. A. 1965. The development and habits of the granary weevil, Sitophilus granarius within the kernel of wheat. J. Econ. Entomol. 58:979-985.
- KLASSEN, W. 1966. Chemosterilization of the boll weevil. ITIS-9, 164 p.
- KLEIN, J. 1965. Some problems of grain pest control (Hu) Nalomipar Termeny-forgalom 12:58-61.
- KNIPLING, E. F. 1955. Possibilities of insect control or eradication through use of sexually sterile males. J. Econ. Ent. 48:457-462.
- KNIPLING, E. F. 1959. Sterile male methods of population control. Sci. 130: 902-904.
- KNIPLING, E. F. 1960. Use of insects for their own destruction. J. econ. Ent. 53:415-420.
- KNIPLING, E. F. 1964. The potential role of the sterility method for insect population control with special reference to combining this method with conventional methods. U. S. Agr. Res. Serv. ARS-33-98, 54 Pp.
- KNIPLING, E. F. 1965. The sterility method of pest population control. Conf. Res. Needs Approaches Use Agr. Chem. Public Health Viewpoint. Res. Pesticides. Proc. 1964:233-249.
- KNIPLING, E. F. 1966. Some basic principles in insect population suppression. Ann. Entomol. Soc. Amer. 12:7-15.
- KNIPLING, E. F. 1966. Population models to test theoretical effects of sex attractants used for insect control. USDA. Agric. Inform Bull. 308:1-20.
- KNIPLING, E. F. 1968. The role of chemicals in the general insect control picture. Bull. Ent. Soc. Amer. 14:102-107.
- KNIPLING, E. F. and MCGUIRE, J. U. 1966. Populations models to test theoretical effects of sex attractants used for insect control. USDA Agr. Inform Bull. 308, 20 p.
- KOSOLAPOVA, G. YA. 1964. On the outside breeding places of pests of grain products. (Rus) Vest. Sel'skokhoz.Nauki (Alma-Ata) 11:82-87.
- KOSOLAPOVA, G. YA. 1965. Rodent burrows as reservoirs of grain and grain product pests. (Rus) Kazakhskii Nauch.-Issled. Inst. Zashch. Rast. Trudy 9:202-207.
- KOSOLAPOVA, G. YA. 1965. Grain storage pests in nests of birds. (Rus) Kazakhskii Nauch.-Issled. Inst. Zashch. Rast. Trudy 9:99-105.
- KOTINSKY, J. 1907. Tribolium ferrugineum (Fab) (Col) an enemy of Megachile palmarum Perkins (Hymen.) Hawaiian Ent. Soc. Proc. 1:85.

- KULKARNY, H. L. 1967. General entomology for agricultural students. New York, Asia Publishing House, 1967, 291 p.
- KURTZ, O. L. and HARRIS, K. L. 1965. Micro-analytical entomology for food sanitation control. Assoc. Off. Agric. Chemists. Box 540, Benjamin Franklin Station, Washington 4, D. C.
- KURTZ, O. D. L. and HARRIS, K. L. 1962. Micro-analytical entomology for food sanitation control. Absoc. of Official Agricultural Chemists. Washington, D. C. XV 576 pp.
- LACHANCE, L. E. 1967. The induction of dominant lethal mutations in insects by ionizing radiation and chemicals-as related to the sterile-male technique of insect control. In Wright, J. W., and Pal, R., ed. Genetics of insect vectors of disease, 617-650 p.
- LAMAS, J. M. 1964. Cooperative campaigns for control of insect pests: their organization and management. (Sp) Reunion Latinoamer. Fitotec. Actas, 6th Reunion, v. 1:101-104.
- LANDA, V. and REZABOVA, B. 1966. Problems of chemosterilization of pests. (Cz) Agrochemica (Bratislava) 6:150-152.
- LAVABRE, E. M. 1965. Insect pests of stored cacao and coffee. (Fr) Cafe, Cacao, The 9:193-205.
- LEA, A. M. 1905. On Nepharis and other ants nest beetles taken by Mr. J. C. Goudie at Birchip. Roy. Soc. Victoria Proc. 17:371-385.
- LEAN, C. B. 1924. The treatment of small batches of cotton seed against pink bollworm. Bull. Ent. Res. 15:37-40.
- LECLERCQ, J. 1948. Enquête biogéographique sur le genre Tenebrio (Linne) 1758, (Coleoptera, Tenebrionidae) Bull. Mus. Hist. Nat. Belg. 24:16 pp.
- LEECH, A. B. 1943. Black flour beetle, Tribolium madens Charp., in British Columbia. Canad. Ent. 75:40.
- LEPELLEY, P. 1944. Les coleoptères des denrées alimentaires et des produits industriels entreposés. Encycl. ent. (A), 22:1-335.
- LEPELLEY, R. H. 1959. Agricultural Insects of East Africa. East African High Commission, Nairobi.
- LINSLEY, E. G. 1942. Insect food caches as reservoirs and original sources of some stored products pests. J. Econ. Ent. 35:434-439.
- LINSLEY, E. G. and MCSWAIN, J. W. 1942. The parasites, predators, and inquiline associates of Anthophora linsleyi. Amer. Midl. Nat. 27: 402-417.

- LINSLEY, E. G. 1943. The dried fruit moth breeding in the nests of the mountain carpenter bee in California. *J. Econ. Ent.* 36:122-123.
- LINSLEY, E. G. 1944. Natural sources habitats, and reservoirs of insects associated with stored food products. *Hilgardia* 16:187-224.
- LINSLEY, E. G. and MICHELbacher, A. E. 1943. Insects affecting stored food products. *U. of Calif. Coll. Agric. Agric. Exp. Sta. Bull* 676:1-44.
- LLOYD, E. P., DAUM, R. J., MCLAUGHLIN, R. E., TINGLE, F. C., MCKIBBEN, G. H., BURT, E. C., MCCOY, J. R., BELL, M. R., and CLEVELAND, T. C. 1968. A red dye to evaluate bait formulations and to mass mark field populations of boll weevils (*Anthonomus grandis*). *J. Econ. Entomol.* 61:1440-1444.
- LOSCHIAVO, S. R. 1966. Food lures for stored product insects. *Jour. of the Canada Dept. of Agric.* 11:8-9.
- LUCK, S. 1967. Pest control in grain and flour storage. (Ge) *Getreide Mehl* 17:49-52.
- LUFF, M. L. 1965. A list of Coleoptera occurring in grass tussocks. *Entomol. Mon. Mag.* 101:240-245.
- LYAISTER, YU. A. 1967. The fauna of insects in the burrows of the Caucasian endemic, mole vole. (Rus) *Entomol. Obozrenie* 46:185-200.
- MACNAY, J. G. 1965. Summary of important insect infestations, occurrences, and damage in agricultural areas of Canada in 1965. *Can. Insect Pest Rev.* 43:163-184.
- MANUILOV, A. 1967. Protection of grain reserves from pests. (Rus) *Mukomol'no-Elevat. Promysh.* 33:19.
- MASKEV, S. 1920. Quarantine Division, Report for the months of April and May 1920. *Mthly Bull. Cal. State Dept. Agric. Sacramento* 9: 298-302.
- MASON, R. C., HENNEBERRY, T. J., SMITH, F. F. and MCGOVERN, W. L. 1968. Suppression of *Drosophila melanogaster* in tomato field pests by the release of flies sterilized by apholate. *J. econ. Ent.* 61:166-167.
- MATHUR, C.S. and VIAS, U. K. 1965. Insects that make inroads into your stored feeds and fodders. *Indian Livestock* 3:8-10.
- MAXWELL, F. G. 1965. A boll weevil (*Anthonomus grandis*) feeding deterrent from the calyx of an alternate host, *Hibiscus syriacus*. *J. Econ. Ent.* 58:985-988.
- MCLAUGHLIN, J. R. and SIMPSON, R. G. 1968. Chemosterilant effects of Tepa, apholate, and metepa on the alfalfa weevil (*Hypera postica*). *J. Econ. Entomol.* 61:1730-1733.

- MEHROTRA, K. N. and SETHI, G. R. 1966. Advances in insect population control by the sterile-male technique. *J. Sci. Indus. Res.* 25:539-543.
- MENDOZA DE RAMIREZ, M. DE. 1965. Insect attractants. (Sp) *Fitofilo* 18:5-13.
- MICZULSKI, B. 1966. New trends in the control of insect pests in the USA. (Pol) *Pol Pismo Entomol. Ser. B*:103-107.
- MILLS, H. B. and PEPPER, J. H. 1939. The effect on humans of the ingestion of the confused flour beetle. *J. Econ. Ent.* 32:874-875.
- MILNE, A. 1965. Pest ecology and integrated control *Ann. Appl. Biol.* 56: 338-341.
- MINX, A. K. 1967. Are hormone preparations our future insecticides?(Du) *Loonbedrijf Land-Tuinbouw* 20:627, 629, 631.
- MONTE, G. B. 1964. oviposition and development of some species of grain-eating Coleoptera in milled products for paste manufacture. (It) *Molini Ital.* 15:302-306.
- MONTE, G. D. 1965. Studies on the origin of grain weevils in food pastes. (It) *Agricoltura* 14:102-110.
- MONTE, G. D. 1966. Ricerche sulla sopravvivenza degli insetti granivori durante la fabbricazione delle paste alimentari (Research on the survival of granivorous insects during the manufacture of food pastes). Roma, Ministero dell'rale dell'Alimentazione, 71 p.
- MONTEDAL, G. 1957. I nemici dei cereali in granella. Insetti: i guasti provocati, le principali specie dannose. *Inform. Filopat.* 24 pp.
- MULLER, F. 1967. Concerning foreign research. IX. (Ge) *Prakt. Schadlings bekampfer* 19:69-70.
- MUNIR, M. 1966. Disinfestation of stored grain. *Sci. Chron.* 4:11-13.
- MUNRO, J. W. 1966. Pests of stored products. London, Hutchinson, 234 p.
- MUTTRIE, M. P. 1965. Insect pests in farm-stored grain. *Scot. Agr.* 44: 292-296.
- MYBURGH, A. C. 1967. Entomological aspects of food. *Food Indus. S. Afr.* 19::61.
- NAGASAWA, S. 1965. Chemosterilants. (Ja) In Yamamoto, R., and Noguchi, T., ed. *Shin noyaku sosei-ho*, 288-355 p.
- NAKANE, T. 1966. On the insect pests of books. (Ja) *Natur. Sci. Mus.* 33: 1-12.
- NATIONAL PEST CONTROL ASSOCIATION. 1968. USDA cancels registrations for certain uses of 269 pesticides. 6:68, 3 p.

- NELSON, R. W. 1940. Identification of insect fragments in adulterated canned food products. Thesis in Entomology, Washington State College. Pullman, Washington.
- NEW SOUTH WALES, DEPT. OF AGRICULTURE, ENTOMOLOGY BR. 1965. Household insect pests and their control. New S. Wales Dep. Agr. Insect Pest Leaflet 47, ed. 11, 31 p.
- NEWMAN, L. H. 1965. Man and insects. London, Aldus Books, 252 p.
- NININGER, H. H. 1916. Studies in the life histories of two carpenter bees of California with notes on certain parasites. Pomona Col. Jour. Ent. and Zool. 8:158-165.
- NOSKOV, I. G. 1967. Control of storage pests. (Rus) Zashch. Rast. 6:15-16.
- O'BRIEN, R. D. 1965. Target enzymes and insecticidal action. Conf. Res. Needs Approaches Use agr. Chem Public Health Viewpoint. Res. Pesticides. Proc. 1964:35-39.
- OSMUN, J. V. 1966. The role of pest control operators in developing new insecticides. CSMA (Chem. Spec. Manufacturers Asso.) Proc, 52d Mid-year Meeting:163-164.
- OSMUN, J. V. and BUTTS, W. L. 1966. Pest control. Annu. Rev. Entomol 11:515-548.
- PALUT, D. 1965. Repellents-chemical means of repulsing animals. (Pol) Przemysl Chem 44:606-611.
- PARKIN, E. A. 1965. The onset of insecticide resistance among field populations of store-product insects Journ. Stored Prod. Res. 1:3.
- PARKIN, E. A. 1967. Problems of grain storage. Ann. Appl. Biol 59:224-236.
- PARKIN, E. A. 1967, 1968. Food and Health the value of pest control. Proc. 2nd. Br. Pest Control. Conf. Nottingham 1967, 1968. 2nd Session, 5-8.
- PEI, H. L. 1968. List of important injurious insects instorage. (Ch) Chien Yen 1:21-30.
- PENCE, R. J. and VIRAY, M. S. 1966. Inhibition versus excessive use of vitamin K and other nutrients for the control of carpet beetles. Residue Rev. 12:45-64.
- PEPPER, J. H. and STRAND, A. L. 1935. The importance of surface temperatures in heat sterilization. J. Econ. Ent. 28:242-244.
- PHAFF, H. L., MILLER, M. W. and MRAK, E. M. The life of yeasts. Their nature, activity, ecology, and relation to mankind. Harvard Univ. Press. Cambridge, Mass. 193 pp.

- PINHEIRO, M. F. V. 1964. O interesse da inspecção de árvores próximas de celeiros em Portugal. *Agriculture* 23:11-14.
- PIXTON, S. 1965. Detection of insect infestations in cereals by measurement of uric acid. *Cereal Chem* 42:315-322.
- PODKOPAI, I. E. 1968. Pests of rice. (Rus) *Zashch. Rast.* 5:27-29.
- POLYKOV, L. and KONTAR, V. 1967. Controlling agricultural pests. Allahabad *Farmer* 41:51-53.
- POPOV, K. P. 1964. Contribution to the problem of pest control in herbariums. (Uk) *Ukr. Bot. Zhur.* 21:103-104.
- PRESS, A. F., MARZKE, F. O. and PEARMAN, G. C. 1967. Mortality of Trogoderma glabrum larvae in simulated wheat storages pruged with CO₂ or N₂ *J. Econ. Entomol.* 60:415-416.
- PREVETT, P. F. 1967. The field occurrence of Caryedon serratus (ol.) the groundnut seed beetle (Coleoptera, Bruchidae) in Uganda, *J. stored Prod. Res.*, 3:267-268.
- PRISTAVKO, V. 1966. Consecutive pathological processes in the action of Beauveria bassiana Bals. Vuill. combined with weak doses of DDT in Leptinotarsa decemlineata Say. (Fr) *Entomophaga* 11:311-324.
- PULKKI, L. H. 1966. Pests in flour mills. II. Milling 147:417.
- PULPAN, J. and VERNER, P. H. 1965. Control of tyroglyphoid mites in stored grain by the predatory mite Cheyletus eruditus (Schrank). *Can. J. Zool.* 43:417-432.
- RACE, S. R. 1967. Control pests in farm-stored malting barley. Rutgers State Univ. Ext. Leaflet. 424.2 p.
- RAMIREZ, G. 1960. Infestación de campo por insectos de granosal macenados. *Agric. tec. Mex.* 10:32-35.
- RAMIREZ, R. 1921. Plagas de la agricultura en el Distrito Federal *Rev. Agric. San Jacinto.* D-r 9:662-663.
- RAO, V. P. and MANJUNATH, T. M. 1965. DD-136 Nematode that can kill many insect pests.. *Indian Farming* 16:43-44.
- RATANOVA, V., and KUREP-KO, I. 1967. Confused flour beetle. (Rus) *Zashch. Rast.* 2:39.
- RAYMENT, T. 1935. A cluster of bees. 752 p. Endeavour Press, Sydney, Aust.
- REDDY, D. B. Protect your produce. *Intensive Agr.* 2:14-15.

- REDTENBACHER, L. 1858. Fauna Austriaca. Die. Kafer 1017 p. Gerold's Sohn. Vienna, Austria.
- RIVARD, I. 1965. Research on predators of insects at the Institute of Research (Institut de Recherches) Belleville, Ontario. (Fr) Phytotoprotection 46:135-146.
- RIVERO, J. M. DEL, and PLANES, S. 1967. Possibilities of controlling the resistant potato beetle. (SP) Inst. Agr. Catalan San Isidro. Rev. 116:171-173.
- RING, W. M. 1965. Report to the Government of Turkey on a survey of Khapra beetle (*Trogoderma granarium*) infestation in stored products. Food Agr. Organ. UN. Expanded Tech. Assistance Program. FAO Rep. 2038, 28 p.
- ROBAUD, E. 1916. Les insectes et la dégénérescence des arachides au Senegal. (Ann et Mem. Com Etude Hist. et Sci. Africa Occidental Franc.) 76 pp.illus.
- ROSSEM, G. VAN, BURGER, H. C. and BUND, C. F. VAN DE. 1965. Injurious insects in 1964. (Du) Entomol. Ber. 25:148-150.
- RUKAVISHNIKOV, B. I. 1964. Chemical sexual sterilization of harmful insects and ticks. U. S. Joint Publ. Res. Serv. (Transl.) Chem. Agr. USSR 1:86-104.
- SAILER, R. I. 1967. Revival in biological control. Agr. Chem. 22:23-25.
- SANCHEZ-RIVIELLO, M. and SHAW, J. G. 1967. Sexing of Mexican fruit flies. J. econ. Ent. 60:1759-1760.
- SARMIENTO, J. A. V. and ALZUET, A. D. V. DE. 1965. Insectos y otros artropodos que atacan productos elaborados y almacenados de origen animal (Insects and other arthropods which damage processed stored food of animal origin). La Plata, Univ. Nac. Mus. Rev. Zool. 8:47-49.
- SCHAEFFER, C. H. and TIEMAN, G. H. 1967. 4-Imidazolin-2-one: an insect growth-inhibitor and chemosterilant. J. Econ. Entomol 60:542-546.
- SCHAERFFENBERG, B. 1966. Can fungus diseases be produced artificially in insects? (Ge) Z. Angew. Entomol 58:362-372.
- SCHNELLBACHER, K. 1965. Feed storagepests. (Ge) Genossensch. Ratschlage Bauernhof.
- SCHUMAKAW, E. M. 1968. Main directions in the research on sterilization of insects. (Ge) Pflanzenschutzberichte 38:157-165.
- SCOGNAMIGLIO, A. 1966. The world of insects. (It) Agr. Napoletana 33:3-16.

- SHORLEY, H. H. and PAYNE, T. L. 1966. Evaluation of sound for insect control. ITIS-9, p. 187.
- SILVEIRA-GUIDO, A. 1965. Control integrado, nueva filosofia en la lucha contra las plagas. Integrated control, new philosophy in pest control. Montevideo. Univ. Fac. Agron. Bol 82, 43 p.
- SILVEIRA-GUIDO, A. 1966. Integrated control a new philosophy in the fight against pests. (Sp) Argent. Dir. Gen. Sanid. Veg. Bol. Fito-Sait. 22:3-17.
- SILVERSTEIN, R. M. and OTHERS. 1967. Sex attractant of the black carpet beetle (Attagenus megatoma). Science 157:85-87.
- SIMMONS, W. 1965. Survey of pest hazards at Wisconsin lake ports. Entomol. Soc. Amer. N. Cent. Br. Proc. 20:126-128.
- SIMON, H. R. 1967. Are trends of biological insect pest control reflected in a bibliography? (Ge) Entomophaga 12:81-84.
- SINHA, B. P. and MOOKHERJEE, P. B. 1967. Studies on the effect of airtightness on the development of Tribolium castaneum Herbst (Coleoptera: Tenebrionidae) in wheat and wheat flour. Indian J. Entomol. 29: 79-83.
- SINHA, R. N. 1965. Insects associated with stored products in Canada. Canad. Insect Pest Rev., Suppl. 2, 33 figs. 47pp.
- SINHA, R. N., ROBERTSON, D. R. and WONG, H. R. 1966. Common names of insects and mites associated with stored products in Canada. Manitoba Dept. of Agriculture and Conservation, Winnipeg. Publication No. 424, 12 pp.
- SINHA, R. N. and WALLACE, H. A. H. 1966. Ecology of insect-induced hot spots in stored grain in Western Canada. Res. Pop. Ecol. 8:107-132.
- SMITH, E. H. 1967. Man vs insects; new strategy in an old war. Res. Farming (N. C. Sta.) 25:8-9.
- SOLOMON, M. E. 1965. Archeological records of storage pests: Sitophilus granarius (L.) (Coleoptera, Curculionidae) from an Egyptian Pyramid tomb. J. Stored Prod. Res. 1:105-107.
- SØMME, L. 1966. Pest of grain in storage. (No) Norsk Landbruk 18:6-7.
- STAAL, G. B. 1966. Insect hormones as means of control (Du) Groenten Fruit 22:969, 971.
- STEBBING, E. P. 1914. Indian forest insects of economic importance. Coleoptera, XVI 648 p.
- STICKA, R. 1965. Important considerations for flour millers. Pybuthrin Dig. 3:11, 14-15.
- SUNDBY, R. 1965. Nature protection problems in connection with chemical control. (No) Norsk Natur. 1:66-69.

- SUPARE, N. R. 1966. Present food crisis and stored grain pests. Nagpur Agr. Coll. Mag. 40:17-22.
- SYMPOSIUM ON PEST CONTROL BY CHEMICAL, BIOLOGICAL, GENETIC, AND PHYSICAL MEANS, MONTREAL. 1964. Papers. U. S. Agr. Res. Serv. ARS-33-110, 214 p.
- TRIPLEHORN, C. A. 1965. Insects found in Ohio grain elevators and flour mills, J. Econ. Ent. 58:578-579.
- U. S. AGRICULTURAL RESEARCH SERV. MARKET QUALITY RESEARCH DIV. 1966. Insects in farm-stored wheat; how to control them U. S. D. A. Leaflet. 345, slightly rev., 8 p.
- U. S. AGRICULTURAL RESEARCH SERV. 1966. Finding hidden insects; student or classroom science project No. 1. U. S. D. A. PA-786, 4 p.
- U. S. AGRICULTURAL RESEARCH SERV. ENTOMOLOGY DIV. Controlling household pests. U. S. D. A. Home Gard. Bull. 96, slightly rev, 32 p.
- U. S. AGRICULTURAL RESEARCH SERV. MARKET QUALITY RESEARCH DIV. 1966. Control of insects that attack dry beans and peas in storage. U. S. D. A. Agr. Inform. Bull. 303, 8 p.
- U. S. DEPT. OF AGRICULTURE. OFF. OF INFORMATION. 1966. The war that never ends; facts about pest control. Washington. 1966.
- VAN EMDEN, F. 1929. Ueber die Rolle der Feuchtigkeit im Leben der Speicherschädlinge Anz. Schädlingsk 5:58-60.
- VAPPULA, N. A. 1966. Finnish entomological literature published in 1964, including economic entomology and control of insect pests. Suomen Hyönteistieteellinen Aikakauskirja Ann. Entomol. Fenn. 32:20p.
- VARMA, B. K. and GURWARA, S. P. 1965. Insect attacks on and disinfestation of some edible fungi in India. Bombay Natur. Hist. Soc. J. 62:313-315.
- VEEN, K. H. and FERRON, P. 1966. A selective medium for the isolation of Beauveria tenella and of Metarrhizium anisopliae. J. Invertebrate Pathol. 8:268-269.
- VENKATRO, S., KRISHNAMURTHY, K., SWAMINATHAN, M. and SUBRAHMANYAN, V. 1960. Determination of uric acid in wheat flour infested by Tribolium castaneum Duval. using paper chromatography. Cereal Chem 37:93-96.
- VENKATRAO, S., NUGGEHALLI, R. M., PINGALE, S. V., SWAMINATHAN, M. and SUBRAHMANYAN, V. 1960. The effect of infestation by Tribolium castaneum Duv. on the quality of wheat flour. Cereal Chem 37:97-103.

- VITE, J. P. and OTHERS. 1967. Sex attractants in frass from bark beetles (*Ips confusus*) Science 156:105.
- WADA, K., ENOMOTO, Y., MATSUI, K and MUNAKATA, K. 1968. Insect antifeedants from Parabenzoin Trilobum. I-II. Tetrahedron Lett. 45:4673-4680.
- WALKER, D. W. 1959. An evaluation of various methods of controlling insects infesting stored grain. Unpublished Ph.D. dissertation Dept. of Zool. State College of Washinton, Pullman, Wash. 150 p p.
- WALKER, D. W. 1960. Population fluctuations and control of stored grain insects. Wash. State. Univ. Agr. Exp. Sta. Tech. Bull. 31, 65 p p.
- WALKER, D. W. and QUINTANA, V. 1968. Inherited partial sterility among survivors from irradiation-eradication experiment. J. econ. Ent. 61:318-319.
- WATER RESEARCH ASSOCIATION (GREAT BRITAIN). 1967. Twelfth annual report for the year ended December 31st, 1966. Medmenham, England. 48p.
- WATT, M. J. 1965. Notes on pests of stored grain; Liposcelis bostrychophilus and Sitophilus spp. Agr. Gaz. New S. Wales 76:693-696.
- WATTERS, F. I. 1965. Physical methods of insect control. Entomol. Soc. Manitoba. Proc. 21:18-27.
- WATTERS, F. L. 1967. Excellent measures can stop infested grain. Good Farming 18:20-22.
- WAVE, H. E. and HENNEBERRY, T. J. 1967. Sterile-male releases control populations of Drosophila melanogaster in cage tests. J. econ. Ent. 60:1758-1759.
- WEILER, M. G. 1965. Control of pests of stored grains. (Sp) Bolsa Com. Rosario. Rev. 53:9-11.
- WEINGARTHNER, H. 1967. Foundations of biological pest control in the Soviet Union. (Ge) Lebendige Erde 3:128-129.
- WEISS, M. G. 1966. Pest control by genetic means. U. S. Agr. Res. Serv. ARS-33-110:116-117.
- WHITLOCK, R. 1966. The alternatives to toxic chemicals. Agr. Merchant 46:66-68.
- WHITTEN, M. J. and NORRIS, K. R. 1967. Body-trapping as an alternative to sterile males for insect control. NATURE 216:1136.
- WRIGHT, R. H. 1966. Some quantitative aspects of insect attraction. Can. Entomol. 98:1114-1117.
- WRIGHT, R. H. 1966. Primary odors and insect attraction. Can. Ent. 98:1083-1093.

- YAMANE, N. 1967. Technique of greenhouse culture 22. XIX. Pest and pest control. (Ja) Agr. Hort. 42:117-119.
- YEARLIAN, W. C., WILSON, G. R. and WINGFIELD, M. T. 1966. Controlling insects with diseases. Ark. Farm Res. 15:4.
- YINON, U. 1968. Mass breeding of the Khapra beetle (Trogoderma granarium). J. Econ. Entomol. 61:1738-1739.
- YINON, U., and SHULOV, A. 1969. Response of some stored-product insects to Trogoderma granarium pheromones. Ann. Ent. Soc. Amer. 62:172-175.
- YORK, G. T. 1967. Insect pests of cereal crops in west Africa. Sols Afr. 12: 145-151.
- YUKASOVIĆ, P., STOJANOVIĆ, T., and KOSOVAC, V. 1966. Les insectes attaquant aux graines de tournesol (Héilanthé, Helianthus annuus L.) en Yougoslavie. J. stored prod. Res. 2:69-74.
- ZASLAVSKII, V. A. 1967. Reproductive self-destruction as an ecological factor (ecological results of the genetic interaction of populations). (Rus) Zhur. Obshch. Biol. 28:3-11.
- ZASLAVSKII, V. A. and SUGONYAEV, E. S. 1967. Biological control of pests as a problem of modern ecology. (Rus) Zool. Zh. 10:1536-1550.

PHYSIOLOGY AND BIOCHEMISTRY

- ABRAHAM, A. 1965. The endocrine system of brain of Dytiscus marginalis. (Ge) Acta Biol. (n. s.) 11:245-255.
- ABRAHAM, A. 1966. Neurosecretory activity in the brain of the water-beetle, Dytiscus marginalis. Acta Ant. 65:435-446.
- AERTS, F. E. and VERCAUTEREN, R. E. 1964. Specificity and mode of action of phenoloxidase from larvae of Tenebrio molitor. Enzymologia 28: 1-20.
- AKESON, W. R., MANGLITZ, G. R., GORZ, H. J. and HASKINS, F. A. 1967. A bioassay for detecting compounds which stimulate or deter feeding by the sweetclover weevil (Sitona cylindricollis). J. Econ. Ento. 60:1082-1084.
- ALLMANN, K. and DUSPIVA, F. 1966. Variations of carbohydrase during the development stages of Melolontha melolontha L. (Ge) Experientia 22: 231-232.
- AMER, N. M. 1966. Effects of homogeneous magnetic fields, ambient gas composition, and temperature on the metamorphosis of Tribolium confusum. Diss. Abstr., Sect. Bm 27:926B.
- ANNUAL review of Physiology, volume 28, edited by V. E. HALL, A. C. GIESE, and R. R. SONNENSCHN. Palo Alto, 571 p.
- APPLEBAUM, S. W. 1963. Proteolytic digestive enzymes of larvae of the yellow mealworm (Tenebrio molitor L.) and of the rust red flour beetle (Tribolium castaneum Herbst). Ph.D. Thesis, The Hebrew University Jerusalem, 101 p.
- ARDENNE, M. 1965. Sterols and triterpenoids. X. On the sterols of the Colorado potato beetle, Leptinotarsa decemlineata Say. 11 p. Transl.
- ATKINS, D. T., FLOWER, N. E. and KENCHINGTON, W. 1966. Studies on the oothecal protein of the tortoise beetle, Aspidimorpha. Roy. Microscop. Soc. J. 86:123-135.
- AUTRUM, H. and METSCHL, N. 1963. (The mode of action of insect ocelli). 21 P. Ref. Transl. 15049.
- AWILLING, H. 1968. Development of endopeptidases. IV α and β protease from Tenebrio molitor. (Ge) Hoppe-Seyler's Z. Physiol. Chem 349:326-332.
- BALIGA, B. S., SRINIVASAN, P. R. and BOREK, E. 1965. Changes in the t-RNA methylating enzymes during insect metamorphosis. Nature (London) 208:555-557.
- BARGMANN, W. 1966. Neurosecretion. Int. Rev. Cytol. 19:183-201.

- BARLOW, C. A. and PERTTUNEN, V. 1966. Some effects of desiccation on locomotion of the grain beetle, Sitophilus granarius L. (Coleoptera; Curculionidae). Can. J. Zool. 44:825-837.
- BARTLETT, A. C. and MITLIN, N. 1967. Developmental and reproductive effects of heavy water (D₂O) in the diet of the boll weevil (Anthonomus grandis) J. Econ. Entomol. 60:647-655.
- BAUNGARNER, J. E. and LAMBREONT, E. N. 1966. The lipid-class spectrum and fatty-acid content of the boll weevil egg. Compar. Biochem. Physiol. 18:975-981.
- BEAUDOIN, A. R., VILLENEUVE, J. L. and LEMONDE, A. 1968. Variation of phospholipides during the metamorphosis of Tribolium confusum (Coleoptera). (Fr) J. Insect Physiol. 14:831-840.
- BERRUER, P. 1965. Effects of the molting hormone on the synthesis of nucleic acids in imaginal discs of Calliphora erythrocephala Meif. (Insecta, Diptera). (Fr) Acad. des Sci. Compt. Rend. 260:2914-2916.
- BESSE, N. DE, and CAZAL, M. 1968. Effect of extracts of perisymphatic organs and of corpora cardiaca on diuresis of some insects. (Fr) Acad. Sci. C. R., Ser. D., 266:615-618.
- BETZ, N. L. 1966. Physicochemical properties and molecular structure determination of glycogen from Anthonomus grandis Boheman. Diss. Abstr., Sect. B, 27:71B-72B.
- BHAKTHAN, N. M. G. and GILBERT, L. I. 1968. Effects of some vertebrate hormones on lipid mobilization in the insect fat body. Gen. Compar. Endocrinol. 11:186-197.
- BHATTACHARYA, A. K. and PANT, N. C. 1965. Qualitative estimation of free amino acids of different developmental stages of khapra beetle, Trogoderma granarium Everts (Coleoptera: Dermestidae). Indian J. Entomol. 27:131-136.
- BIER, K. 1967. Origin and place of synthesis of macromolecular reserve materials in eggs. (Ge) Umschau 67:494.
- BIOCHEMICAL SOCIETY, LONDON. 1965. Symposium on biochemistry of insects. Biochem. J. 95:35P-39P.
- BIRUKOW, G. 1964. The effect of barometric air pressure fluctuations on the phototaxis of the grain weevil, Calandra granaria L. (Ge) Akad. Wiss. Gottingen. II. Math.-Phys. Kl. Nachr. 18:247-254.
- BLETHEN, S. L. and KAPLAN, N. O. 1968. Characteristics of arthropod arginine kinases. Biochemistry 7:2123-2135.

- BORDON, J. H., SILVERSTEIN, R. M. and BROWNLEE, R. G. 1968. Sex pheromone of Dendroctonus pseudotsugae (Coleoptera, Scolytidae) production, bio-assay, and partial isolation. *Can. Entomol.* 100:597-503.
- BOWERS, W. S., THOMPSON, M. J. and UEBEL, E. C. 1965. Juvenile and gonadotropic hormone activity of 10,11-epoxyfarnesenic acid methyl ester. *Life Sci.* 4:2323-2331.
- BRACHA, P. 1967. Interaction of an amiton analog with true cholinesterase. *Israel J. Chem.* 5:121-124.
- BRAUN, B. H., JACOBSON, M., SCHWARZ, M., SONNET, P. E., WAKABAYASHI, N., and WATERS, R. M. 1968. A convenient synthesis of mixed isomers of juvenile hormone. *J. Econ. Entomol.* 61:866-869.
- BROSEMER, R. W. and VEERABHADRAPPA, P. S. 1965. Pathway of proline oxidation in insect flight muscle. *Biochim. Biophys. Acta* 110:102-112.
- BROWER, L. P. 1969. Ecological chemistry. *Sci. Amer.* 220:22-29.
- BRUNET, P. C. J. 1965. The metabolism of aromatic compounds. *Biochem. Soc. Symp.* 25:49-77.
- BUDOWSKI, P., ISHAAYA, I. and KATZ, M. 1967. Growth inhibition of Dermestes maculatus by phytosterols. *J. Nutr.* 91:201-207.
- BURKHOLDER, W. E. and DICKE, R. J. 1966. Evidence of sex pheromones in females of several species of Dermestidae. *J. Econ. Entomol.* 59:540-543.
- BURSELL, E. 1967. The excretion of nitrogen in insects. *Advances Insect Physiol.* 4:33-67.
- BUTLER, J. E. and LEONE, C. A. 1966. Antigenic changes during the life cycle of the beetle, Tenebrio molitor. *Compar. Biochem. Physiol.* 19:699-711.
- BYCHKOVSKAYA, I. B. and OCHINSKAYA, G. K. 1965. Absence of "oxygen aftereffect" in granary weevils (Calandra granaria) during hibernation induced by low temperature. (Rus) *Radiobiologiya* 5:700-702.
- CALDESON, M., NAVARRO, S. and DONAHAYE, E. 1966. The effect of low pressures on the mortality of six store-product insect species. *J. Stored Prod. Res.* 2:135-140.
- CALLAHAN, P. S. 1967. Insect molecular bioelectronics: a theoretical and experimental study of insect sensillae as tubular waveguides, with particular emphasis on their dielectric and thermoelectric properties. *Entomol. Soc. Amer. Misc. Publ.* 5:313-347.
- CARDANI, C., GHIRINGHELLI, D., QUILICAO, A. and SELVA, A. 1967. The structure of pederone a novel substance from Paederus (fuscipes) (Coleoptera Staphylinidae). *Tetrahedron Lett.* 41:4023-4025.

- CARLSON, S. D. 1966. Respiration measurement of Tribolium confusum by gas chromatography. J. Econ. Entomol. 59:335-338.
- CARLSON, S. D. 1967. Fumigation of the confused flour beetle with methyl bromide at high and low rates of respiration. J. Econ. Ent. 60: 684-687.
- CARLSON, S. D. 1967. Paraquinone secretion by confused flour beetles after carbon dioxide or nitrogen anesthesia. J. Econ. Entomol. 60: 878-879.
- CARLSON, S. D. 1968. Respiration of the confused flour beetle in five atmospheres of varying CO₂:O₂ ratios. J. econ. Ent. 61:94-96.
- CARLSON, S. D. 1968. Respiration of confused flour beetle adults in CO₂ of N₂ and after sublethal fumigation. J. econ. Ent. 61:125²-131.
- CASE, J. 1966. Sensory mechanisms. New York, Macmillan, 1966. 113 p.
- CASSIER, P. 1967. Reproduction of insects and regulation of corpora allata activities. (Fr) Ann. Biol. 6:595-670.
- CERMAKOVA, A. 1957. Biochemical changes during the development of the Colorado beetle (Leptinotarsa decemlineata Say) 5p.
- CHAKRABORTY, J., SISSONS, C. H. and SMITH, J. N. 1967. Inhibitors of microsomal oxidations in insect homogenates. Biochem. J. 102:492-497.
- CHAKRABORTY, J., and SMITH, J.N. 1967. Enzymic oxidation of some alkylbenzenes in insects and vertebrates. Biochem. J. 102:498-503.
- CHANSLER, J. F. 1966. Cold hardiness of two species of Ips beetles. J. Forest. 64:622-624.
- CHAUDHARY, K. D. and LEMONDE, A. 1966. In vivo synthesis and breakdown of deoxyribonucleic acid in Tribolium confusum Duval. Can. J. Biochem. 44:1571-1575.
- CHAUDHARY, K. D., LESCAULT, A. and LEMONDE, A. 1966. Kinetic studies on alkaline phosphatase in Tribolium confusum Duval. Rev. Can. Biol. 25:245-249.
- CHAUDHARY, K. D., MOORJANI, S., SRIVASTAVA, U. and LEMONDE, A. 1967. Pentose phosphate cycle enzymes in Tribolium confusum Duval. Biochim. Bioph. Acta. 148:569-571.
- CHAUDHARY, K. D., RICHARD, C., TANGUAY, R. and LEMONDE, A. 1967. Nucleic acids in Tribolium confusum Duval (Coleoptera) 7th Intern. Cong. Biochem., Abstracts. V, 1001.

- CHAUDHARY, K. D., SRIVASTAVA, U. and LEMONDE, A. 1966. Aldolase activity in confused flour beetle Tribolium confusum Duval, (Tenebrionidae, Coleoptera). Can. J. Biochem. 44:155-159.
- CHAUDHARY, K. D., SRIVASTAVA, U. and LEMONDE, A. 1966. Acetylcholinesterase in Tribolium confusum Duval Arch. intern. Physiol. Biochim. 74:416-428.
- CHAUDHARY, K. D., SRIVASTAVA, U. and LEMONDE, A. 1967. Monoamine oxidase in Tribolium confusum Duval (Coleoptera). Biochim. Biophys. Acta. 132:290-299.
- CHINO, H. 1968. Energy metabolism in insects. (Ja) Zool. Soc. Jap. Zool. Mag. 77:1-11
- GIBULA, A. G., FISK, F. W. and DAVIDSON, R. H. 1966. Comparative studies of free amino acids of potato beetle (Leptinotarsa decemlineata) hemolymph. Entomol. Soc. Amer. N. Cent. Br. Proc. 20:74-75.
- COHEN, C. F., LOULOUES, S. J. and THOMPSON, M. J. 1967. Synthesis of Δ^7 -coprosterol and its identity with the sterol formed by the reduction of 7-dehydrocholesterol by intestinal microorganisms. Steroids. 9:591-600.
- CORRAL, C. and OTHERS. 1966. Anticholinesterases; influence of electronic and steric factors on the biological activity of dialkylaryl phosphates. Soc. Espan. Fis. Quim. An. Ser. B., Quim. 62:503-514.
- CORRIVAUT, G. W. and HUOT, L. 1965. Neuroleptic agents and insect behavior. IV. Influence on oxygen consumption in Tribolium confusum. Duval. J. Insect Physiol. 11:195-199.
- COUTURE, G. and HUOT, L. 1967. Etude biochimique de Plodia interpunctella (HBN) (LEPIDOPTERE) I-Variations du poids corporel, de la teneur en eau et de la matière sèche. Naturaliste Can., 94:437-445.
- COUTURE, G. and HUOT L. 1967. Etude biochimique de Plodia interpunctella (Hbn) (LEPIDOPTERE) II-Le phosphore total chez les larves, les chrysalides et les adultes. Arch. Intern. Physiol. Bioch. 75:609-613.
- DAHM, K. H., ROLLER, J., and TROST, B. M. 1968. The juvenile hormone. IV. Stereochemistry of juvenile hormone and biological activity of some of its isomers and related compounds. Life Sci. 7:129-137.
- DAJOZ, R. 1967. Androgen hormone in the glowworm (Lampyrus noctiluca). The first sex hormone discovered in insects. (Fr) Sci. Progr. Natur. 3387:253-257.
- DAVIS, G. R. F. 1966. Putrescine and spermidine as growth-promoting substances for the sawtoothed grain beetle, Oryzaephilus surinamensis (L). (Coleoptera, Silvanidae) Compar. Biochem. Physiol. 19:619-627.

- DAVIS, G. R. F. 1966. Replacement of RNA in the diet of ORYZAEPHILUS SURINAMENSIS (L.) (Coleoptera; Silvanidae) by purines, pyrimidines, and ribose. Can. J. Zool. 44:781-785.
- DELEURANCE, S. 1967. Neurosecretion of cavernicolous Coleoptera imago. (Fr) Acad. Sci. Compt. Rend. Ser. D. 26:392-394.
- DE MIRANDA, P. M. S. 1967. Studies on the biological disposition of cholinesterase reactivating oximes. Diss. Abstr., Sect. B, 27:4052B
- DENUCE, J. M. and RABAËY, M. 1958. The separation of hemolymph proteins by ultramicro-electrophoresis on agar. 3 p.
- DEVI, A. 1966. Polyphenolase activity in Tribolium confusum Duval. Cur. Sci. 35:463-464.
- DUTRIEU, J. and ROLLAND, N. 1967. Trehalose in Tenebrio molitor. (Fr) Paris. Soc. Biol. Compt. Rend. 161:604-606.
- EARLE, M. W., WALKER, A. B. and BURKS, M. L. 1965. Storage and excretion of steroids in the adult boll weevil (Anthonomus grandis). Compar. Biochem. Physiol. 16:277-288.
- EL-HARIRI, G. 1966. Studies of the physiology of hibernating Coccinellidae (Coleoptera): changes in the metabolic reserves and gonads. Roy. Entomol. Soc. London. Proc. Ser. A, Gen. Entomol. 41:133-144.
- EL-IBARSHY, M. T. 1965. A comparative study of metabolic effects of the corpus allatum in two adult Coleoptera, in relation to diapause. Wageningen. Landbouwhogeschool. Mededel. 65, 65 p.
- ELIZAROV, YU, A. 1965. Study of chemoreception of insects and ticks. Physiology of the contact chemoreceptory sensilla in ixodid ticks. (Rus) Zool. Zhur. 44:1461-1472.
- ENGLEHARD, N., PRCHAL, K. and MENNER, M. 1967. Acetylcholinesterase. (Ge) Angew. Chem. 79:604-616.
- ENGLEHARDT, M., RAPOPORT, J. and SOKOLOFF, A. 1965. Comparison of the content of the odoriferous gland reservoirs in normal and mutant Tribolium confusum. Science 150:632-633.
- ENGELMANN, F. 1968. Endocrine control of reproduction in insects. Annu. Rev. Entomol. 13:1-26.
- FALKNER, F. 1965. The isolation, characterization, and synthesis of some insect sex attractants. III. Univ. Dep. Chem. Chem. Eng. Org. Seminar Abstr. 2:63-70.
- FAST, P. G. 1966. A comparative study of the phospholipids and fatty acids of some insects. Lipids 1:209-215.
- FAVIS, G. R. F. 1968. Glutamic acid requirements of the saw-toothed grain beetle, Oryzaephilus surinamensis (L.) (Coleoptera, Silvanidae) Compar. Biochem. Physiol. 24:395-401.

- FLITTERS, N. E. 1968. Insect body temperatures determined with microthermoelectric thermometry. *Entomol. Soc. Amer. Ann.* 61:36-38.
- FLORKIN, M. and STOTZ, E. H. 1967. *Comprehensive Biochemistry. Volume 28: Morphogenesis, Differentiation and Development.* Amsterdam, Elsevier Publishing Company, 1967, 276 p.
- FRISTROM, J. W. 1968. Hexosamine metabolism in imaginal disks of Drosophila melanogaster. *J. Insect Physiol.* 14:729-240.
- GABE, M. 1967. Evolution of protocephalic neurosecretion products of pterygote insects during axonal passage. (Fr) *Acad. Sci. Compt. Rend. Ser. D*, 264:943-945.
- GERBER, G. H. 1967. A possible mechanism for the regulation of the female reproductive cycle in Tenebrio molitor (Coleoptera:Tenebrionidae) *Can. Entomol.* 99:1298-1303.
- GERSCH, M. 1965. Facts and ideas on evolution of the hormone system in the animal kingdom. (Ge) *Naturwissenschaften* 52:73-82.
- GEYER, A., HERDA, G., and SCHMIALEK, P. 1968. The effect of rejuvenating hormone isoprenoid on the metamorphosis of Tenebrio molitor L. (Ge) *Acta Entomol. Bohemoslov.* 65:161-165.
- GILBERT, L. I. 1967. Lipid metabolism and function in insects. *Advances insect Physiol.* 4:69-211.
- GUPTA, A. P. and SUTHERLAND, D. L. 1966. In vitro transformations of the insect plasmatocyte in some insects. *J. Insect Physiol.* 12:1369-1375.
- HAPP, G. M. 1967. Benzoquinones in the defensive secretion of Leichenum canaliculatum variegatum (Coleoptera:Tenebrionidae). *Entomol. Soc. Amer. Ann.* 60:279.
- HARMSSEN, R. 1966. The excretory role of pteridines in insects. *J. Exp. Biol.* 45:1-13.
- HAYES, D. K., SCHECHTER, M. S., SULLIVAN, W. N. 1968. A biochemical look at insect diapause. *Entomol. Soc. Amer. Bull.* 14:108-111.
- HAYES, J. T., and WHEELER, A. G. 1968. Evidence for a sex attractant in Hemicrepidius decoloratus (Coleoptera: Elateridae). *Can. Ento.* 100:207-208.
- HEYNEMAN, R. A. 1965. Final purification of a latent phenolase with mono- and diphenoloxidase activity from Tenebrio molitor. *Biochem. Biophys. Res. Commun.* 21:162-169.

- HEYNEMAN, R. A. and VERCAUTEREN, R. E. 1964. Activation of the latent phenoxidase of Tenebrio molitor. *Enzymologia* 28:85-88.
- HEYNEMAN, R. A. and VERCAUTEREN, R. E. 1968. Evidence for a lipid activator of prophenolase in Tenebrio molitor. *J. Insect. Physiol.* 14:409-415.
- HIDAKA, T. 1967. Endocrine control of coloration in insects. (Ja) *Zool. Soc. Jap. Zool. Mag.* 76:175-180.
- HOCKS, P. and WIECHERT, R. 1966. 20-Hydroxyecdysone isolated from insects. (Ge) *Tetrahedron Lett.* 29:2989-2993.
- HOCKS, P., JAGER, A., KERB, U. and WIECHERT, R. 1966. Synthetic steroids with moulting hormone activity. *Angew. Chem. Int. Edition Engl.* 5:673.
- HOFFMANN-OSTENHOF, O. 1947. Die Biochemie der Chinone. *Experientia* 3:137-148.
- HOFFMEISTER, H. 1966. Ecdysterone, a new molting hormone of insects. (Ge) *Angew. Chem.* 78:269-270.
- HOFFMEISTER, H. 1966. Ecdysterone, a new metamorphosis hormone of insects. *Angew. Chem. Int. Edition Engl.* 5:248-249.
- HOFFMEISTER, H., RUFER, C., and AMMON, H. 1965. Excretion of ecdysone by insects. (Ge) *Z. f. Natforsch* 20b:130-133.
- HOPE, J. A., HORLER, D. F. and ROWLANDS, D. G. 1967. A possible pheromone of the bruchid, Acanthoscelides obtectus (Say). *J. Stored Prod. Res.* 3:387-388.
- HOPPE, W. 1965. The chemistry of ecdysone. II-VII. (Ge) *Chem. Ber.* 98:2353-2424.
- HORRIDGE, G. A. 1968. Pigment movement and the crystalline threads of the firefly (Photuris versicolor) eye. *Nature* 218:778-779.
- HOWE, R. W. 1967. Temperature effects on embryonic development in insects. *Ann. Rev. Ent.* 12:15-42.
- HSIAO, T. H. and FRAENKEL, G. 1968. Isolation of phagostimulative substances from the host plant of the Colorado potato beetle (Leptinotarsa decemlineata). *Entomol Soc. Amer. Ann.* 61:476-484.
- HUOT, L. and CORRIVAUULT, G. W. 1967. Les substances neuroleptiques et le comportement des Insectes. V-Etude comparative de l'action de la réserpine et de quelques-uns de ses dérivés sur le Tribolium confusum. *Duval. Arch. Intern. Physiol.* 75:sous presse.
- HUBBY, J. L. and THROCKMORTON, L. H. 1968. Protein differences in Drosophila. IV. *Amer. Natur.* 102-193-205.

- HUEFER, W. C. 1965. Experimental studies on 8-hydroxyquinoline in rats and mice. *Arch. Path.* 79:245-250.
- ILAN, J. and QUASTEL, J. H. 1966. Effects of colchicine on nucleic acid metabolism during metamorphosis of Tenebrio molitor L. and in some mammalian tissues. *Biochem. J.* 100:448-457.
- ILAN, J., ILAN, J and QUASTEL, J. H. 1966. Effects of actinomycin D on nucleic acid metabolism and protein biosynthesis during metamorphosis of Tenebrio molitor L. *Biochem. J.* 100:441-447.
- ITO, T. and FRAENKEL, G. 1966. The effect of nitrogen starvation on Tenebrio molitor L. *J. Insect Physiol.* 12:803-817.
- JACOBSON, M., LILLY, C. E., HARDING, C. 1968. Sex attractant of sugar beet wireworm (Limonijs californicus), identification and biological activity. *Sci.* 159:208-209.
- JENNY, N. A. 1965. Part I. Sterol metabolism in the confused flour beetle. Part II. An investigation of insect factors in corn plants. *Diss. Abs* 26:110
- JESO, F. DI, MALCOVATI, J. M., GAETANI, M. T. and SPERANZA, L. 1967. The identification and determination of phosphagen in insects and their eggs. *Compar. Biochem. Physiol.* 20:607-618.
- JOLY, P. 1966. The correlation between the nutrition and the endocrine functions of insects. (*Fr. Ann. Biol.* 5:173-192.
- KALMUS, H. and WILKINS, B. R. 1965. Physiological control systems. In Kalmus, H., ed *Regulation and control in living systems*, p. 81-136.
- KAMIENSKI, F. X., NEWBURGH, R. W. and BROOKES, V. J. 1965. The phospholipid pattern of Tenebrio molitor larvae. *J. Insect Physiol* 11:1533-1540.
- KARLSON, P. 1966. Ecdysone the molting hormone of insects. (*Ge*) *Naturwissenschaften* 53:445-452.
- KARLSON, P. 1967. The chemistry of insect hormones and insect pheromones. *Pure Appl. Chem.* 14:75-87.
- KARLSON, P. and HERRLICH, P. 1965. Zum Tyrosinstoffwechsel der Insekten-XVI. Der Tyrosinstoffwechsel der Heuschrecke Schistocerca gregaria. *Forsk. J. Insect Physiol.* 11:79.
- KARLSON, P. 1965. On the chemistry of ecdysone. VI. Reactions of the ecdysone Molecule. 11 p. Ref. Transl.
- KELLY, R. P. 1966. Distribution of nitrogen during the embryonic development of the mealworm Tenebrio molitor Linnaeus. *Diss. Abstr., Sect. B.* 27:2108B-2109B.
- KENNINGTON, G. S. 1966. Quantitative aspects of maximum oxygen deficiency in Tribolium confusum Duval. *Physiol. Zool.* 39:77-80.

- KERB, U. 1966. The synthesis of ecdysone. (Ge) Tetrahedron. Lett. 13:1387-1391.
- KRYSAN, J. L. 1965. Studies on soluble and particulate cholinesterase from the house fly (Musca domestica L.) Diss. Abs. 26:2838-2839.
- KRZYMANSKA, J. and ZWOLINSKA-SNIATALOWA, Z. 1966. The influence of linoleic and linolenic acids and the interdependence between these acids and alpha-tocopherol on the Colorado potato beetle (Lepidotarsa decemlineata Say) development and on the lipid metabolism of this insect. (Pol) Poznan. Inst. Ochrony Roslin. Prace Nauk. 8:183-196.
- LADISCH, R. K. 1953. Quinones as food contaminants and carcinogens. Dept. Pioneering Res. Labs. U. S. Quartermaster Corps. Biochem. Ser 4:1-6.
- LADISCH, R. K. 1963. Isolation and characterization of certain insect secretions. Proc. Penna. Acad. Sci. 37:127-136.
- LADISCH, R. K. 1964. Quinone toxins and allied synthetics in carcinogenesis. Proc. Penna. Acad. Sci. 38:144-149.
- LADISCH, R. K. 1965. Assay of tetrtoxoin in flour beetles Tribolium and method of detecting the toxin on cereal foods. Proc. Penna. Acad. Sci. 39:36-41.
- LADISCH, R. K. 1965. Tetrtoxoin: binding with amino acids. Assessment of the resultant redox systems. Proc. Penna. Acad. Sci. 39:48-56.
- LADISCH, R. K. and LADISCH, S. K. 1967. Quinoid secretions in Tribolium confusum. Tribolium Inform. Bull. 10:108-111.
- LADISCH, R. K. and MCQUE, B. 1953. Methods of obtaining quinones from flour beetles. Sci. 118:324-325.
- LADISCH, R. K. and SUTER, SISTER M. ST. AGATHA. 1965. Tetrtoxoin: synthesis and toxicity rating Proc. Penna. Acad. Sci. 39:42-47.
- LADISCH, R. K. and SUTER, SR. ST. A., "Affinity of Tetrtoxoin to Animal Protein," Proc. Penna. Acad. Sci.
- LADISCH, R. K., LADISCH, S. K. and HOWE, P. M. 1967. "Quinoid Secretions in Grain and flour beetles" Proc. Pa. Acad. Sci. 41:213-219.
- LADISCH, R. K., LADISCH, S. K. and HOWE, P. M. 1967. "Quinoid Secretions in Grain and Flour Beetles," Nature 215:939-940.
- LADISCH, R. K., SUTER, SR. ST. A., and DEMER, G. "Antibacterial Properties of Ethylquinone," Proc. Penna. Acad. Sci. 41:94-96.
- LADISCH, R. K., SUTER, SISTER, M. ST. A. and PREIZEN, S. 1967. Affinity of tetrtoxoin to animal protein. Proc. Penna. Acad. Sci. 41:206-212.

- LAMB, N. J. and MONROE, R. E. 1968. Studies of complex lipids synthesized from acetate- $1-C^{14}$ by the cereal leaf beetle, Oulema melanopus. Entomol. Soc. Amer. Ann. 61:1167-1169.
- LAMB, N. J. and MONROE, R. E. 1968. Lipid synthesis from acetate- $1-C^{14}$ by the cereal leaf beetle, Oulema melanopus. Entomol. Soc. Amer. Ann. 61:1164-1166.
- LAMBREMONT, E. N., STEIN, G. I. and BENNETT, A. F. 1965. Synthesis and metabolic conversion of fatty acids by larval boll weevil (Anthonomus grandis). Compar. Biochem. Physiol. 16:289-302.
- LANGER, H. 1966. Absorption spectrum of a single rhabdomere in insects eyes. (Ge) Umschau 66:296.
- LANGER, H. 1966. Spectrometric study of absorption characteristics of individual rhabdomeres in faceted eye. (Ge) Deut. Zool. Ges. Verhandl. 1965:329-338.
- LANGER, H. and GRASSMADER, H. 1965. Free tryptophan in wild and eye color mutants of Calliphora erythrocephala during imaginal development. (Ge) A. f. Natforsch. 20b:172-177.
- LASSER, M. L. 1966. The function of steroids in insects. Diss. Abstr., Sect. B, 27:1781B-1782B.
- LAVERDURE, A. M. 1967. Mode of action of Corpora allata during vitellogenesis in Tenebrio molitor (Coleoptera). (Fr) Acad. Sci. C. R., Ser. D, 265:1450-146.
- LAVERDURE, A. M. and HUET, C. 1965. Action of the cephalic complex and prothoracic glands on the development of the ovariole in Tenebrio molitor pupa (Coleoptera). (Fr) Paris. Soc. Biol. Compt. Rend. 159:60-62.
- LAVIOLETTE, P. and BONNOT, G. 1966. Etude de la transamination chez Galleria mellonella-- Influence d'une infection virale. Ann. Biol. Anim. Bioch. Biophys. 6:5-12.
- LEE, J. and KNOWLES, F. G. W. 1965. Animal hormones. London, Hutchison, 192 p.
- LEGARY, J. M. 1965. Direct microcalorimetry in insects. (Fr) Ann. Nutr. Aliment. 20:388-391.
- LEGAY, J. and COULON, J. 1965. Toward the definition of basal metabolism in insects. (Fr) Acad. Sci. Compt. Rend. 261:1908-1909.

- LEMONDE, A. and CHAUDHARY, K. D. 1966. Iron during the growth and metamorphosis of Tribolium confusum Duval. Rev. Can. Biol. 25:21-24.
- LEMONDE, A. and VILLENEUVE, J. L. 1966. The glucides in Tribolium confusum Duval (Tenebrionidae, Coleoptera). II. Variations during metamorphosis. (Fr) Rev. Can. Biol. 25:11-19.
- LENDER, T. and LAVERDURE, A. M. 1965. Role of the cephalic complex in the course of vitellogenesis in Tenebrio molitor, (Coleoptera). (Fr). Aca. Sci. Compt. Rend. 261:557-559.
- LUDWIG, D., RAJENDRAM, G. F. and RAMAZZOTTO, L. J. 1968. Changes in reducing carbohydrates and trehalose during development of eggs from young and old Tenebrio molitor L. N. Y. Entomol. Soc. J. 76:27-31.
- MAJUMDER, S. K. and BANO, A. 1966. Reversion of the toxicity of tricalcium phosphate to insects by trehalose. Nature (London) 210:1052-1053.
- MARCUZZI, G. 1964. Application of the autoradiographic technique to the study of the excretion in the Coleopterous insect Tenebrio molitor L. ITIS 229 p.
- MARCUZZI, G. 1966. Ricerche sperimentali sui malpighiani dei Coleotteri Tenebrionidi. ITIS 229 p.
- MCCANN, G. D. and MACGINITIE, G. F. 1965. Optomotor response studies of insect vision. Roy. Soc. Proc. Ser. B. Biol. Sci. 163:369-401.
- MCCULLOUGH, T. 1967. Compounds found in the defensive scent fluid of Dicaelus splendidus and D. dilatatus (Coleoptera:Carabidae). Entomol. Soc. Amer. Ann. 60:861.
- MCELROY, W. D., SELIGER, H. H. and DELUCA, M. 1965. Enzyme catalysis and color of light in bioluminescent reactions. In Bryson, V., and Vogel, H. J., ed. Evolving genes and protein, 319-340 p.
- MEDNIKOV, B. M. 1965. The correlation between development rate in insects and the nucleotide composition of their ribosome RNA. U.S. Joint Publ. Res. Serv. (Transl). Correl. Develop. Rate Insects Nucleotide Composition Ribosome RNA, USSR, 1965:1-6.
- MEHROTRA, K. N. 1965. Property of glycyglycine dipeptidase from Sitophilus oryzae. Journ. Insect. Physiol. 11, 1179.
- MESSNER, B. 1966. Occurrence of lysosomes in relation to the unspecific immunity of insects. (Ge) Deut. Zool. Ges. Verhandl. 1965:511-521.
- MICHELIELI, S. 1965. A contribution to the study of temporary loss of vision of insects. (Ge) Cons. Acad. RSF Yugoslavie. Bull. Sci. Sect. A. Sci. Natur. Tech. Med. 10:180.

- MILES, P. W. 1966. A modification of Wigglesworth's model for the excretion of uric acid in insects, in the light of modern hypotheses of ion transport. *J. Theor. Biol.* 12:130-132.
- MIN, H. S. 1966. Effects of inhibitor, competitors and temperature on transport of carbohydrate in Crithidia luciliae, *J. Cell. Physiol* 68: 237-240.
- MITLIN, N. and VICKERS, D. H. 1964. Guanine in the excreta of the boll weevil. *Nature* 203, 1403.
- MITLIN, N., MAULDIN, J. K. and HEDIN, P. A. 1966. Free and protein-bound amino acids in the tissues of the boll weevil. *ITIS*. 173 p.
- MITLIN, N. and VICKERS, D. H. and GAST, R. T. 1966. Estimation of Nitrogenous compounds in the feces of boll weevils, Anthonomus grandis, fed different diets. 232 p.
- MITLIN, M. , VICKERS, D.H. and HEDIN, P. A. 1966. End products of metabolism in the boll weevil, Anthonomus grandis BOH: Non-protein amino acids in the faeces. *ITIS*, 233.
- MITLIN, N, WIYGUL, G. and MAULDIN, J. K. 1968. The free amino acids in the haemolymph of thematuring adult boll weevil, Anthonomus grandis Boheman. *Compar. Biochem. Physiol.* 25:
- MOORE, B. P. 1965. Pheromones and insect control. *Australian J. Sci.* 28:243-245.
- MOORE, B. P. 1967. Chemical communication in insects. *Sci. J.* 3:44-49.
- MOORJANI, S. and LEMONDE, A. 1967. Dehydrogenases during postembryonic development of Tribolium confusum Duval (Coleoptera) I, Malate dehydrogenase and malic enzyme in the particulate and soluble fractions. *Can. J. Biochem.*, 45:1393-1400.
- MORIYAMA, H, and NAKANISHI, K. 1968. Insect hormones. VI. Confirmation of the skeletal structure of ponasterone A. *Tetrahedron Lett.* 9: 1111-1112.
- MOUNTFORD, M. D. 1966. Relation of temperature to the duration of the development of insects, *Nature (London)* 211:993-994.
- MURRAY, D. R. P. 1968. The importance of water in the normal growth of larvae of Tenebrio molitor. *Entomologia experimentalis et applicata.* 11:149-179.
- NARAHASHI, T. 1965. The physiology of insect axons. In Treherne, J. E., and Beaumont. J. W. L., ed. *The physiology of the insect central nervous system.* 1-20 p.

- NARAYANAN, E. S. and BHAMBHANI, H. J. 1956. Effect of reduced pressures on Tribolium castaneum. Herbst. (Tenebrionidae: Coleoptera) and Trogoderma granaria Everts. Indian J. Ent. 181:196-198.
- NATON, DR. E. 1967. Die Auswirkungen der Carnitinblockade durch-Butyrobetain bei den Larven von Tribolium destructor Nytténb. (Col., Tenebrionidae) und einigen anderen Vorratsschädlingen. J. stored Prod. Res. 3:49-63.
- NEIDINGER, J. W., BARATZ, R. A. and MOOS, W. S. 1965. Oxygen uptake of three life stages of Tenebrio molitor prior and subsequent to massive doses of low energy x-rays. Atompraxis 11:564-568.
- NEVILLE, A. C. 1967. Chitin orientation in cuticle and its control. Adv. Insect Physiol. 4:213-286.
- NOVAK, J. A. 1966. Insect hormones. London, Methuen. 478 p.
- NUESCH, H. 1968. The role of the nervous system in insect morphogenesis and regeneration. Annu. Rev. Entomol. 13:27-44.
- OTAKI, T. 1965. Insect pheromones. (Ja) Biol. Sci. 17:97-104.
- PAJANI, H. R. 1966. Structure and metamorphic changes in the fat body of Callosobruchus maculatus (F.) (Bruchidae; Coleoptera). Panjab Univ. Res. Bull. (n. s.) 17:315-317.
- PANTELOURIS, E. M. 1967. Introduction to animal physiology and physiological genetics. Oxford, Pergamon Press. 497p. (International Series of Monographs on Pure and Applied Biology. Div. Zool. v. 32.
- PERRON, J. M., HUOT, L. and SMIRNOFF, W. A. 1966. Toxicité comparée des éléments Al, As, B, Co, Cu, F, Fe, I, Li, Mg, Mo, Zn pour Plodia interpunctella (Hon.) Lépidoptère). Compt. Biochem. Physiol. 18:869-879.
- PERRON, J. M., SMIRNOFF, W. A. and HUOT, L. 1967. Effets de certains éléments sur la relation hôte-pathogène Plodia interpunctella (hbn) et Bacillus thuringiensis var thuringiensis Berliner. Naturaliste Can., (sous presse).
- PERRON, J. M., SMIRNOFF, W. A. and HUOT, L. 1967, Comparaison de toxicité de quelques éléments pur Bacillus thuringiensis var. thuringiensis-BERL. Can. J. Microbiol. 13:81-91.
- PETERSON, L. G. 1968. Cellular immune responses of insects to foreign tissue implants. Diss. Abstr., Sect. B 29:646B.
- PFLEIDERER, G. and ZWILLING, R. 1966. On a physiological native protein hydrolizing endopeptidase from the gut of Tenebrio molitor. (Ge) Biochem. Z. 344:127-140.

- PLOTNIKOVA, S. I. 1965. Sympathetic elements of supralaryngeal ganglia of insects. (Rus) Zh. Evolyuts. Biokhimii i Fiziol. 1:307-310.
- POKROVSKII, E. A. 1967. Sex attractants. (Rus) Zashch. Rast. 5:54-55.
- RADTVE, A. 1942. Hemmung des verpuppung beim mehlkafer Tenebrio molitor L. Naturwissenschaften 30:451-452.
- RAZET, P. 1966. Terminal elements of the nitrogen catabolism in insects. (Fr) Ann. Biol. 70:43-73.
- REISER, R., WILLIAMS, M. C. and SORRELS, M. F. 1960. The transport and dynamic state of exogenous glycerol and palmitic acid labelled tripalmitin. J. Lipid.Res. 1:241-247.
- RHINE, J. J. and STAPLES, R. 1968. Effect of high-amylose field corn on larval growth and survival of five species of store-grain insects. J. econ. Ent. 61:280-282.
- ROBBINS, W. E., KAPLANIS, J. N., THOMPSON, M. J., SHORTINO, T. J., COHEN, C. F. and JOYNER, S. C. 1968, Ecdysones and analogs: Effects on development and reproduction of insects. Sci. 161:1158-1160.
- ROCKSTEIN, M., ed. 1964. The physiology of Insecta, volume I. New York, Acad. Press.
- ROCKSTEIN, M. 1964. Aging in insects in "Physiology of Insecta." Academic Press. ITIS-9, 243 p.
- ROCKSTEIN, M. 1964. Physiological-biochemical correlates of aging and motor ability in vertebrates and invertebrates. Proc. Seminars, Duke Univ. Center for Aging. ITIS-9, 243 p.
- ROCKSTEIN, M. 1967. Cellular age changes in insects. Soc. Exp. Biol. Symp. 21:337-349.
- ROGERS, J. E. 1967. Studies on the biogenesis of p-benzoquinones in the defensive secretion of a tenebrionid beetle (Eleodes longicollis). Diss. Abstr., Sect. B, 28:1399B-1400.
- ROMER, F. 1966. Cytophotometric studies on DNA content in the various tissues of the larvae and imago of Oryzaephilus surinamensis L. (Cucujidae, Coleoptera). (Ge) Biol. Zentralbl. 85:409-438.
- RUEGG, J. C. 1967. ATP-driven oscillation of glycerol-extracted insect fibrillar muscle: mechano-chemical coupling. Amer. Zool. 7:457-464.
- SALT, R. W. 1968. Location and quantitative aspects of ice nucleators in insects. Can. J. Zool. 46:329-333.
- SAZONOVA, I. N. 1966. Activity of cholinesterase in homogenates of tissues of insects. (Rus) Entomol. obozrenie 45:793-797.

- SCHILDKNECHT, H., BIRTINGER, H. and MASCHWITZ, U. 1967. Testosterone as protective agent of the water beetle, *Ilybius*, *Angew. Chem. Int. Edition Engl.* 6:558-559.
- SCHILDKNECHT, H., and HOTZ, D. 1967. Identification of secondary steroids of the thorax scent glands of the yellow edge beetle *Dytiscus marginalis*. (Ge) *Angew. Chem.* 79:902-903.
- SCHILDKNECHT, H., SIEMERDT, R. and MASCHWITZ, U. 1966. A vertebrate hormone as protective material of the yellow-banded beetle (*Dytiscus marginalis*). (Ge) *Angew. Chem.* 78:392.
- SCHMIDT, G. H. 1966. The biochemistry of insect sterols. (Ge) *Fette, Seifen, Anstrichmittel*, 68:311-313.
- SCHWARTZKOPFF, J. 1967. *Hearing. Annu. Rev. Physiol.* 29:485-512.
- SEKERIS, C. E. 1967. The effect of ecdysone on RNA and protein metabolism in insects. *Int. Symp. Regul. Mech. Nucl. Acid protein Biosyn. Proc.* 1966:388-394.
- SEKERIS, C. E. 1967. The tyrosine metabolism of *Tenebrio molitor* and *Drosophila melanogaster*. (Ge) *Hoppe-Seyler's Z. Physiol. Chem.* 344:267-275.
- SEKERIS, C. E., DUKES, P. P., and SCHMID, W. 1965. Influence of ecdysone on the epidermis cell nucleus of *Calliphora* larvae in vitro. (Ge) *Hoppe-Seyler's Z. f. Physiol. Chem.* 341:152-154.
- SERKERIS, C. E., and KARLSON, P. Biosynthesis of catecholamines in insects. *Pharmacol. Rev.* 18:89-94.
- SEKERIS, C. E., LANG, N. and KARLSON, P. 1965. The mechanism of hormones. V. The influence of ecdysone on RNA metabolism in the epidermis of the blowfly *Calliphora erythrocephala*. (Ge) *Hoppe-Seyler's Z. Physiol. Chem.* 341:36-43.
- SIDDALL, J. B. Synthetic studies on insect hormones. I. Synthesis of the tetracyclic nucleus of ecdysone. *Amer. Chem. Soc. J.* 88:379-380.
- SILVERSTEIN, R. M. and RODIN, J. O. 1966. Insect pheromone collection with absorption columns. I. Studies on model organic compounds. *J. Econ. Entomol.* 59:1152-1154.
- SMISSMAN, E. E. 1965. Some aspects of insect chemistry. *J. Pharm. Sci.* 54:1395-1405.
- SMITH, D. S. 1965. Synapses in the insect nervous system. In Treherne, J. E. and Beament J. W. L. ed. *The physiology of the insect central nervous system* p. 38-57.
- SMME, L. 1966. Importance of glycerol and other substances on cold hardiness of insects. (No) *Norsk Entomol. Tidsskr.* 13:339-344.
- STANLEY, M. S. M. and GRUNDMANN, A. W. 1966. Heat sensitivity of developing embryos of *Tribolium confusum*. *Nature (London)* 212:737-738.

- SUTER, SISTER, N. ST. AGATHA and LADISCH, R. K. 1963. Toxicity of insect quinones to mice. Proc. Penna Acad. Sci. 37:137-141.
- SUZUKI, A., 1966. Structural elucidation of destruxin A. Agr. Biol. Chem. 30:517-518.
- TACHIBANA, K. 1966. Study of the dorsal vessel in insects. I. Electrocardiographic study. (Ge) Appl. Entomol. Zool. 1:157-165.
- TAKEMOTO, T., OGAWA, S., NISHIMOTO, N., ARIHARA, S., and BUE, K. 1967. Insect moulting activity of crude drugs and plants. I. (Ja) Pharm. Soc. Jap. J. 87:1414-1418.
- TAMARINA, N. A. 1966. Hormones of insects. (Rus) Usp. Sovrem. Biol. 62: 415-429.
- TOMBES, A. S. 1966. Aestivation (summer diapause) in Hypera postica (Coleoptera:Curculionidae). I. Effect of aestivation, photoperiods, and diet on total fatty acids. Entomol. Soc. Amer. Ann. 59:376-380.
- TOMIDA, I. 1966. Further studies on insect molting hormones; synthesis of ecdyson and new steroid hormones. (Ja) BotyuKagaku 31:167-172.
- TREHERNE, J. E. and BEAMENT, J. W. L. 1965. The physiology of the insect central nervous system; papers from the 12th International Congress of Entomology held in London, 1964. London, Acad. Press. 277 p.
- TSCHINKEL, W., WILLSON, G and BERN, H. A. 1967. Sex pheromone of the mealworm beetle (Tenebrio molitor). J. Exp. Zool. 164:81-85.
- VAN HANDEL, E. 1968. Utilization of injected maltose and sucrose by insects: evidence for non-intestinal oligosaccharidases. Compar. Biochem. Physiol. 24:537-541.
- VAN TASSELL, E. R. 1965. An audiospectrographic study of stridulation as an isolating mechanism in the genus Berosus (Coleoptera:Hydrophilidae). Ent. Soc. Amer. Ann. 58:407-413.
- VERSCHUREN J. 1965. Little known mortality factor, asphyxia by natural toxic gas in the Albert National Park, Congo. (Fr) Terre Vie 112:216-237.
- VICKERS, D.H. and MITLIN, N. 1966. Changes in nucleic acid content of the boll weevil Anthonomus grandis Boheman during its development. Physiol. Zool. 39:70-76.
- VILLENEUVE, J. L. and LEMONDE, A. 1965. Les glucides de Tribolium confusum. Duval. I. Identification. Arch. intern. Physiol. Biochem. 73: 681-688.
- WADA, S. and SCHNEIDER, G. 1967. Pupilla reaction in the ommatidium of Tenebrio molitor. (Ge) Naturwissenschaften 54:542.

- WADA, S. and SCHNEIDER, G. 1968. Circadian rhythm of pupillary diameter in the ommatidium of Tenebrio molitor. (Ge) Z. Vergleichende Physiol. 58:395-397.
- WIECHERT, R. 1966. Insect hormones. II-IV. Synthesis of ecdysone. (Ge) Helv. Chim. Acta. 49:1591-1606.
- WILDE, J. DE., BRIER, B. M. T. and BOER, J. A. DE. 1965. Brain operations on the Colorado potato beetle. (Du) Ent. Ber. 25:18-19.
- WIGGLESWORTH, V. B. 1965. Hormones controlling growth and development in insects. Biochem. Soc. Symp. 25:79-82.
- WIGGLESWORTH, V. B. 1965. Metamorphosis and body form. In Bell, E., ed. Molecular and cellular aspects of development. 447-458. p.
- WIGGLESWORTH, SIR V. B. 1965. The principles of insect physiology. Ed. 6. London, Methuen, 741 p.
- WIGGLESWORTH, SIR V. B. 1966. Insect physiology. Ed. 6, rev. London, Methuen, 134 p.
- WIGGLESWORTH, V. B. 1966. Hormonal regulation of differentiation in insects. In Wageningen. Landbouwhoogeschool. Cell differentiation and morphogenesis, p. 180-209.
- WILLIAMS, J. H. 1966. An analysis of respiratory atmospheres in laboratory cultures of insects infesting stored grain. Diss. Abstr., Sect. B, 27:1664B-1665 B.
- WINTERINGHAM, F. P. W. 1965. Some distinctive features of insect metabolism. Biochem. Soc. Symp. 25:29-37.
- WOOD, D. L. 1966. Sex pheromones of bark beetle. I. Massproduction, bio-assay, source, and isolation of the sex pheromone of Ips confusus (LeC.) J. Insect Physiol. 12:523-536.
- WYATT, G. R. 1967. The biochemistry of sugars and polysaccharides in insects. Advances Insect Physiol. 4:287-360.
- YOON, S. B. and FOX, A. S. 1965. Permeability of premature eggs from Drosophila collected with the "ovitron". Nature (London) 206:910-913.
- YOUNG, R. G. 1967. Fatty acids of some arthropods. N. Y. (Cornell) Agr. Exp. Sta. Mem. 401, 14 p.
- ZALOKAR, M. 1965. Studies on the formation of ribonucleic acid and of proteins in the insects. (Ge) Rev. Suisse de Zool. 72:241-261.
- ZIELER, I. 1965. Pterin as hormone and pigment. (Ge) Ergeb. Physiol. Biol. Chem. Exp. Pharmacol. 56:1-113.

SPACE AND AERIAL ECOLOGY

- HOLZAPFEL, E. P. and HARRELL, J. C. 1968. Transoceanic dispersal studies of insects. *Pacific Insects* 10:115-153.
- TAYLOR, L. R. 1967. The effect of weather on the height of flight of insects. *Int. Biometeorol. Congr. Proc.*, 3d Congr:583-584.
- TAYLOR, L. R. 1963. The mode of action of weather on insect flight. *Int. Biometeorol. Congr. Proc.*, 3d Congr.:579-582.

SPECIATION

- ABDULLAH, M. 1967. Palaeoasemum crowsoni and P. duffyi, a new genus and two new species of the Asemini (Coleoptera, Cerambycidae) from the Baltic amber. Deut. Entomol. Z, (n. s.) 14:147-151.
- ANDERSON, D. M. 1968. Observations on the pupae of Anthonomus grandis grandis Boheman and A. grandis thurberiae Pierce (Coleoptera:Curculionidae). Entomol. Soc. Amer. Ann. 61:125-129.
- ANGELOV, P. 1965. Systematic and ecologic relations in the family Curculionidae (Coleoptera, Insecta). (Bu) Priroda (Sofia) 14:72-77.
- BALL, G. E. 1966. Bembidion (Amerizus) oblongulum Mannerheim in New Mexico (Coleoptera:Carabidae) with notes on transcontinental dispersal in Pleistocene time. Coleopt. Bull. 20:30-32.
- BERKKER, E. G. 1966. Teoriya morfologicheskoi evolyutsii nasekomykh (Theory of morphological evolution in insects). Moskva, Izdatel'stvo Moskovskogo Universiteta. 327 p.
- BELL, R. T. 1967. Coxal cavities and the classification of the Adephaga (Coleoptera). Entomol. Soc. Amer. Ann. 60:101-107.
- BIRCH, L. C. 1965. Evolutionary opportunity for insects and mammals in Australia. In International Union of Biological Sciences Symposia on General Biology, 1, Asilomar, Calif., 1964. The genetics of colonizing species, proceedings. 197-213.
- BROWN, W. L. 1965. Numerical taxonomy, convergence and evolutionary reduction. Syst. Zool. 14:101-109 p.
- BROWN, W. J. 1967. Notes on the extralimital distribution of some species of Coleoptera, Can. Entomol. 99:85-93.
- CARPENTER, F. M. 1966. The lower Permian insects of Kansas. II. The orders Protorthoptera and Orthoptera. Psyche. 73:46-88.
- CARPENTER, F. M. 1967. The structure and relationships of Stefanomioptera Guthorl (Miopoptera-Palaeomanteidae). Psyche. 74:224-227.
- CARPENTER, F. M. 1967. Studies on North American carboniferous insects. 5. Palaeodictyoptera and Megasecoptera from Illinois and Tennessee, with a discussion of the order Sypharopteriidea. Psyche 74:58-84.
- CARVALHO, J. C. M. 1966. A new fossil genus and species of Miridae from the Baltic amber (Hemiptera). rev. Brasil. Biol. 26:199-201.
- CHERNOVA, O. A. 1965. Some fossil mayflies (Ephemeroptera, Mithodotidae) from Permian beds of the Urals. (Rus) Ent. Obozr. 44:353-361.
- COOPE, G. R. 1965. Fossil insect fauna from late Quaternary deposits in Britain. Advance. Sci. 21:565-575.

- DOBERENZ, A. R., MATTER, P., and WYCKOFF, R. W. G. 1966. The microcomposition of some fossil insects of Miocene age. Southern Calif. Acad. Sci. Bull. 65:229-236.
- ESPANOL, F. 1965. On the distribution of Tenebrionidae in the northern half of the Spanish levant littoral (Coleoptera). (Sp) Graeclisia 21: 65-77.
- EVERS, A. M. J. 1966. Problems of geographic distribution and species formation on the islands of the Atlantic. (Ge) Deut. Entomol. Z. (n. s.). 13:299-305.
- FLORKIN, M. A. 1966. A molecular approach to phylogeny. Amsterdam, Elsevier. 176 p.
- FREEMAN, T. N. 1965. A lepidopterous leaf-mine from the Tertiary Period. Canad. Entomol. 97:1069-1070.
- FREY, D. G. 1964. Remains of animals in Quarternary lake and bog sediments and their interpretation. Ergeb. Limnol. 2:114. p.
- GHILAROV, M. S. 1966. The evolution of insects, change to passive dispersal, and the feed-back principle in relation to phylogenetic development. (Rus) Zool. Zhur. 45:3-23.
- IABLOKOFF-KHNZORIAN, S. M. 1966. Considerations of sex organs of Chrysomelidae and their phylogenic importance. (Fr) Entomologiste (Paris) 22:115-137.
- JANDER, R. 1966. The phylogeny of orientation mechanism of arthropods. (Ge) Deut. Zool. Ges. Verhandl. 1965:266-306.
- KREKELER, C. M. and WILLIAMS, E. C. 1966. Cave fauna. In Lindsey, A. A., ed. Natural features of Indiana, a symposium, 390-400 p.
- LAMEERE, A. 1938. Evolution des Coléoptères. Bull. Ann. Soc. Ent. Belgrigne. 78:355-362.
- LARSSON, S. G. 1965. Reflections on the Baltic amber inclusions. Entomol. Meddelelser 34:135-142.
- LENDER, T. and LAVERDURE, A. M. 1964. Evolution of ovary, vitellogenesis and the secretion of corpora allata of nymph and adult Tenebrio molitor (Coleoptera). (Fr) Soc. Zool. France. Bull. 89:495-509.
- LINDROTH, C. H. 1968. Distribution and distributional centers of North Atlantic insects. Entomol. Soc. Amer. Bull. 14:91-95.
- MACKERRAS, I. M. 1967. Grades in the evolution and classification of insects. Aust. Entomol. Soc. J. 6:3-11.
- MASON, L. G. 1967. Allomorhosis and geography in insect populations. Syst. Zool. 16:90-94.

- PANFILOV, D. V. 1965. The sub-fossil insect remnants from Serebryany bor. (Rus) Moskov. Obshch. Isp. Prirody. B. Otd. Biol. 70:115-116.
- PEARSON, R. 1966. The origins of the British insect fauna. Entomologist (London) 99:69-71.
- PONOMARENKO, A. G. 1966. New beetles of the family Cupedidae (Coleoptera) from Mesozoic deposits of Transbaikalia. (Rus) Entomol. Obozrenie 45:139-143.
- RASNITSYN, A. P. 1965. Some aspects of interrelationships between morphogenesis and growth in the evolution of ontogenesis in insects. (Rus) Entomol. Obozr. 44:476-485.
- RIEK, A. F. 1967. A fossil cockroach (Blattodea: Poroblattinidae) from the Mt. Nicholas coal measures, Tasmania. Aust. Entomol. Soc. J. 6:73.
- RODENDORF, B. B. 1968. Trends in phylogenetic development of pterygote insects. (Rus) Zhur. Obshch. Biol. 29:57-67.
- RODENDORF, B. B. 1968. Phylogeny of insects and Palaeontology. (Rus) Entomol. Obozrenie 47:322-342.
- SCHWEIGER, H. 1966. The importance of Asia Minor as a center of evolution. (Ge) Deut. Entomol. Z. (n. s.). 13:473-495.
- STRAUS, A. 1968. Petrified paradise. Kosmos 64:78-81.
- TSHERNOVA, O. A. 1967. May fly of the recent family in Jurassic deposits of Transbaikalia (Ephemeroptera, Siphonuridae). (Rus) Entomol. Obozrenie 46:322-326.
- VERMA, K. K. 1967. A new fossil insect from the Lower Gondwanas of Kashmir. Cir. Sci. 36:338-340.
- WATT, J. C. 1964. The influence of pleistocene glaciation on the distribution of some Tenebrionidae (Coleoptera) in New Zealand. Internat'l Congr. Ent. London. XII Congr. Proc. 1.

STATISTICAL METHODS

- BARNETT, V. D. 1962. The Monte Carlo solution of a competing species problem. *Biometrics* 18:76-103.
- BARTTETT, M. S. 1957. On theoretical models for competitive and predatory biological systems. *Biometrika*. 44:27-42.
- BARTTETT, M. S. 1960. Stochastic population models. Methmen. Co., London.
- BERRYMAN, A. A. 1967. Mathematical description of the sterile male principle. *Can. Entomol.* 99:858-865.
- CLARKE, F. M. M. 1965. Some elementary statistics for the entomologist. IV. *Entomologist*. 98:7-9.
- CLARKE, F. M. M. 1967. Some elementary statistics for the entomologist. VI. The analysis of variance. *Entomologist London* 100:181-183.
- DAUM, R. J. 1966. Probit analysis. ITIS-9-145 p.
- DAUM, R. J., GIVENS, C. and KILLCREAS, W. 1966. rotency probit analysis. ITIS-9-213.
- FUJII, K. 1965. A statistical model of the competition curve. *Res. Popul. Ecol.* 7:118-125.
- GHENT, A. W. 1965. Number triangles yielding the numerators for exact solutions of the Wilcoxon rank sum test. *Can. Entomol.* 97:701-715.
- HOLT, W. R., KENNEDY, B. H. and PEACOCK, J. W. 1967. Formulae for estimating sample size for chi-square test. *J. Econ. Entomol.* 60:286-288.
- LAWSON, F. R. 1967. Theory of control of insect populations by sexually sterile males. *Entomol. Soc. Amer. Ann.* 60:713-722.
- MAYRAT, A. 1965. The law of allometry and allometries. (Fr) *Paris. Soc. Biol. Compt. Rend.* 159:544-548.
- MOUNTIER, N. S. 1967. Why bring in statistics? *New Entomol.* 4:28-30.
- POLYAKOV, I. and VINKLER, N. 1965. Methods of evaluation of population dynamics of insects. (Rus) *Zashch. Rast. Vred. Boleznei* 11:30-31.
- ROHLF, F. J. 1965. A randomization test of the nonspecificity hypothesis in numerical taxonomy. *Taxon.* 14:262-267.
- SOLOMON, M. E. 1968. Logarithmic regression as a measure of population density response: Comment on a report by G. W. Salt. *Ecology* 49: 357-358.

- STANLEY, J. 1966. A mathematical theory of the growth of populations of the flour beetle Tribolium confusum, Duval. IX. The persistence of tunnels in the flour mass . J. Theor. Biol. 13:379-411.
- TALLIS, G. M. 1959. Sampling errors of genetic correlation coefficients calculated from the analysis of variance and covariance. Aust. J. of Stat. 1:35-43.
- WATT, K. E. F. 1961. Mathematal models for use insect pest control. Can. Entomol. Suppl. 19. 61 pp.

TAXONOMIC STUDIES

- ABDULLAH, M. 1965. Protomeloe crowsoni a new species of a new tribe (Protomeloini) of the blister beetles (Coleoptera, Meloidae), with remarks on a postulated new pheromone (cantharidin). Entomol. Tidskr. 86:43-48.
- ARDOIN, P. 1964. Contribution to the study of the genus Enicmosoma Geb. (Col., Tenebrionidae). (Ge) Munich. Mus. G. Frey. Entomol. Arb. 15:686-690.
- ARDOIN, P. 1965. The genus Ozaenimorphus Fairmaire (Coleoptera, Tenebrionidae). (Fr) Soc. Entomol. France. Bull.
- ARDOIN, P. 1965. Description of new African Gonocephalum (Col. Tenebrionidae). (Fr) Inst. Franc. Afr. Noire. Bull. Ser. A, Sci. Natur. 27:1321-1325.
- ARDOIN, P. 1965. Attempt at a revision of the African Amarygmini. 9. (Fr) Inst. Franc. Afr. noire. Bull. Ser. A, Sci. Natur. 27:632-723.
- ARDOIN, P. 1965. A new African genus of Strongyliini (Col. Tenebrionidae). (Fr) Inst. Franc. Afr. Noire. Bull. Ser. A, Sci. Natur. 27:1326-1328.
- ARDOIN, P. 1966. Revision of African Amarygmini. 11. (Fr) Inst. Fondamental Afr. Noire. Bull., Ser. A, Sci. Natur. 28:643-709.
- ARDOIN, P. 1966. The genus Gabonisca Fairmaire (Col., Tenebrionidae) (Fr) Inst. Fondamental Afr. Noire. Bull., Ser., A. Sci. Natur. 28: 989-993.
- ARDOIN, P. 1966. New African species of the genus Pachypterus Lucas (Tenebrionidae-Coleoptera.) (Fr) Munich. Mus. G. Frey. Entomol. Arb. 17:333-337.
- ARDOIN, P. 1966. Study of the revision of Amarygmini africanis. 2. (Fr) Inst. Natur. 28:157-201.
- ARDOIN, P. 1966. A new species of Diaclina from Gabon (Col., Tenebrionidae). (Fr) Soc. Entomol. France. Bull. 71:34-35.
- ARNETT, R. H. 1967. Present and future systematics of the Coleoptera in North America. Entomol. Soc. Amer. Ann. 60:162-170.
- ARNETT, R. H. 1968. The beetles of the United States (A manual for identification). 1112 XII pp. American Entomological Institute, Ann. Arbor, Michigan.
- BARBOSA, M. A. F. 1965. A new species of Neocosmospora found in stored peanut. Garcia de Orta. 13:15-18.

- BOGACHEV, A. V. 1967. Darkling beetles of the genus *Epitrichia* Gebl. (Coleoptera, Tenebrionidae). (Rus) Entomol. Obozrenie 46:348-352.
- BROWN, W. J. 1967. The Mexican forms of *Coccinella* (Coleoptera:Coccinellidae) Can. Entomol. 99:107-108.
- BUTLER, J. E. 1966. Serological investigations of beetle ontogeny and taxonomy. Diss. Abstr. Sect. B. 27:2179B.
- BUTLER, J. E. and LEONE, C. A. 1967. Immunotaxonomic investigations of the Coleoptera. Syst. Zool. 16:56-63.
- BUTLER, J. E. and LEONE, C. A. 1968. Reply to R. A. Crowson. Syst. Zool. 17:97-98.
- CHAO, C. C. 1965. Chung-kuo ching chi k'un ch'ung chih. 4. Ch'iao ch'ih. mu. Ni pu hsing ch'ung K'O. (A record of Chinese economic insects 4. Coleoptera. Tenebrionidae). Peking Sci. Press. 1965. 423 p.
- CHEMSAK, J. A. and LINSLEY, E. G. 1965. A revised key to the species of *Elytrolepus* with notes on variation and geographical distribution (Coleoptera; Cerambycidae). Pan-Pacific Ent. 41:193-199.
- CHUJO, M. 1966. Taxonomic study on the Tenebrionidae (Coleoptera) of the Ryukyu Islands. Kyushu Univ. Fac. Agr. J. 14:1-32.
- COLLESS, D. H. 1967. The phylogenetic fallacy. Syst. Zool. 16:289-295.
- CROWSON, R. A. 1965. Observations on the constitution and subfamilies of the family Melandryidae (Coleoptera). Eos. 41:507-513.
- CROWSON, R. A. 1968. Concerning immunotaxonomy of Coleoptera. Syst. Zool. 17:95-97.
- DECU, V., and PAPACOSTEA, P. 1964. Anatomical and microbiological studies of some genera of Coleoptera living in caves in Oltenia (Rumania). (Ge) Rovartani Kozlomenyek (n. s.). 17:87-112.
- DOYEN, J. T. 1966. The skeletal anatomy of *Tenebrio molitor* (Coleoptera: Tenebrionidae). Entomol. Soc. Amer. Mics. Publ. 5:103-150.
- DOYEN, J. T. 1968. The phylogenetic position of *Edrotes* and a new species (*E. leechi*) of the genus (Coleoptera:Tenebrionidae). Pan-Pacific Entomol. 44:218-227.
- DUPORTE, E. M. 1965. The role of morphology in taxonomy. Entomol. Soc. Quebec. Ann. 10:91-97.
- GIRARD, C. 1966. A contribution to the study of the genus *Tentyria* Latreille (Col. Tenebrionidae) II. (Fr) Soc. Entomol. France. Bull. 71:84-86.

- GIRARD, C. 1966. Note on some Tentyriini from the Near East (Col. Tenebrionidae). (Fr) Soc. Entomol. France. Bull. 71:203-206.
- GIRARD, C. 1967. Tenebrionid Coleoptera, Erodiini, Tentyriini and Adesmiini collected by J. Mateu in the Ennedi Massif. (Fr) Inst. Fondamental Afr. Noire. Bull., Ser. A, Sci. Natur. 29:945-953.
- GIRAD, C. and PIERRE, F. 1966. The Adesmia collected by P. Jolivet in Sudan (Col. Tenebrionidae). (Fr) Inst. Franc. Afr. Noire. Bull. Ser. A. Sci. Natur. 28:1487-1493.
- GREAT BRITAIN. Ministry of Agriculture, Fisheries and Food. 1968. Wingless weevils. Great Britain Min. Agr. Fish. Food. Adv. Leaflet. 57, rev., 8 p.
- GRESSITT, J. L. and KIMOTO, S. 1965. Second supplement to "The Chrysomelidae, (Coleopt.) of China and Korea." Pacific Insects. 7:799-806.
- HALSTEAD, D. G. H. 1967. A revision of the genus Palorus (sens. lat.) (Coleoptera; Tenebrionidae). Brit. Mus. (Natur. Hist.) Bull. Entomol. 19:59-148.
- HALSTEAD, D. G. H. 1967. A new genus and species of Lathridiini (Herfordia elegans) (Coleoptera:Lathridiidae) from farm stores in Kenya. Roy. Entomol. Soc. London. Proc. Ser. B, Taxonom. 36:177-180.
- HALSTEAD, D. G. H. 1967. Notes on the systematics and distribution of some Tribolium species (Coleoptera:Tenebrionidae); J. Stored Prod. Res. 3:269-272.
- HALSTEAD, D. G. H. 1969. A new species of Tribolium from North America previously confused with Tribolium madens (Charp.) (Coleoptera: Tenebrionidae). J. Stored Prod. Res. (in press).
- HART, R. A. 1965. Hemolymph proteins as taxonomic characters in beetles (Coleoptera) Diss. Abs. 26:1836.
- HAYASHI, N. 1966. A contribution to the knowledge of the larvae of Tenebrionidae occurring in Japan (Coleoptera:Cucujoidea). Insecta Matsumurana (sup. 1), 41 p.
- HERBST, J. F. W. 1792-1797. Natursystem aller bekannten in-und ausländischen Insekten als eine Fortsetzung der vom Buffonschen Naturgeschichte der Käfer. pts 4-7 Berlin.
- HO, F. K. 1967. Identification of Tribolium larvae by the lethal characteristics (Coleoptera:Tenebrionidae). Ent. Soc. Amer. Annals. 60:729-732.
- HOWDEN, H. F. EVANS, H. E. and WILSON, E. O. 1968. A suggested revision of nomenclatural procedure in animal taxonomy. Syst. Zool. 17:188-191.
- KASZAB, Z. 1965. Tenebrionidae (Coleoptera) gesammelt von polnischen Expeditionen in der Mongolei in den Jahren 1962-1963. (Tenebrionidae (Coleoptera) collected by Polish expeditions in the years 1962-1963). Fragmenta Faunistica 11:14 p.

- KASZAB, Z. 1965. Ein neuer Kafer der Familie Tenebrionidae (Coleoptera) aus der Mongolei (A new beetle (*Scythis gobiensis* n. sp.) of the family Tenebrionidae (Coleoptera) from Mongolia). Pol Akad. Nauk. Inst. Zool. Ann. Zool. 23, 4p.
- KASZAB, Z. 1966. Revision of the Tenebrionidae, the genus *Microdera* Eschsch. (Coleoptera). (Ge) Acta Zool. (Budapest) 12:307-321.
- KASZAB, Z. 1966. Survey of species of the genus *Melanesthes* Lacordaire 1859. (Coleoptera, Tenebrionidae). (Ge) Acta Zool. (Budapest) 12:307-321.
- KASZAB, Z. 1967. Coleoptera, Tenebrionidae, of the Mongolia-German biological expedition 1964; Results of the Mongolian-German biological expedition. 19. (Ge) Berlin. Zool. Mus. Mitt. 43:3-33.
- KASZAB, Z. 1967. Tenebrionidae from Western Mongolia (Coleoptera). (Ge) Acta Zool. (Budapest) 13:279-351.
- KASZAB, Z. 1968. Results of zoological research by Dr. Z. Kaszab in Mongolia. 168. Tenebrionidae (Coleoptera). (Ge) Acta Zool. (Budapest) 14: 339-397.
- KELEINIKOVA, S. I. 1966. Descriptions of larvae of some Palaearctic genera of darkling beetles of the tribe Pedinini (Coleoptera, Tenebrionidae). (Rus) Entomol. Obozrenie 45:589-598.
- KISTNER, D. H. 1965. Some new species and new records of Pygostenini from central Africa (Coleoptera:Staphylinidae). Rev. Zool. Bot. Afr. 72:225-233.
- KISTNER, D. H. 1966. A revision of the myrmecophilous tribe Deremini (Coleoptera:Staphylinidae). I. The *Dorylopora* complex and their behavior. Entomol. Soc. Amer. Ann. 59:341-358.
- KOCHER, L. 1963. *Diplocyrtus* in the Escalera collection; (COL. Tenebrionidae) (Fr) Soc. Sci. Natur. Phys. Maroc. Bull. 43:113-116.
- KOCHER, L. 1964. Contribution to the study of *Stenosis* of the group *elvirae* Ant. (Col. Tenebr.) (Fr) Soc. Sci. Natur. Phys. Maroc Bull. 44: 25-27.
- KOCHER, L. 1965. New and interesting *Alphasida* in the Rif region (Col. Tenebr.) (Fr) Soc. Sci. Natur. Phys. Maroc. Bull. 45:43-48.
- KULZER, H. 1964. On new Tenebrionidae species (Coleoptera). (Ge) Munich. Mus. G. Frey. Entomol. Arb. 15:221-276.
- KULZER, H. 1966. New Tenebrionidae from South America (Col.) collected by Mr. L.E. Pena; 28th contribution to the knowledge of the Tenebrionidae. (Ge) Munich. Mus. G. Frey. Entomol. Arb. 17:48-69.

- KULZER, H. 1966. Australian and Papuan Strongyliini; 29th contribution to the knowledge of the Tenebrionidae. (Ge) Munich. Mus. G. Frey. Entomol. Arb 17:338-396.
- LEFKOVITCH, L. P. 1966. Contribution a la faune du Congo (Brazzaville). (Mission A. Descarpentries et A. Villers) (XVIII Coleoptera: Cucujidae et Silvanidae). Bull. Inst. Afr. noire 28:810-814.
- LEFKOVITCH, L. P. 1967. Two new synonyms of species of *Cryptolestes* Ganglbauer (Coleoptera:Cucujidae) J. Stored Prod. Res. 2:245-246.
- LIU, C. L. 1965. Chung-kuo ching chi k'un ch'ung chih. 5. Ch'iao ch'ih mu. P'iao ch'ung k'o (A record of Chinese economic insects. 5. Coleoptera. Coccinellidae). Peking, Sci. Press, 123 p.
- LUCAS, H. 1849. Explorations scientifique de l'Algerie. Sciences physiques. Zoologie. II. Insects. 590 p. Imprimerie Nationale, Paris France.
- MACLEAY, W. S. and HORSFIELD, T. 1825. *Annulosa javanica*, or an attempt to illustrate the natural affinities and analogies of the insects collected in Java by Thomas Horsfield. 50 pp. London.
- MAGIS, 1954. Apercu de l'histoire naturelle des complexes d'especes du genre *Tribolium* (McLeay, 1825) (Coleoptera, Tenebrionidae). Bull. Inst. ray. Sci. nat. Belgique 30:1-10.
- MAHDIHASSAN, S. 1923. Classification of lac insects from a physiological standpoint. J. Sci. Axxoc. Maharajah. Call. Vizianagarami:47-99. Madras.
- MARCUZZI, G. 1965. New forms of Coleoptera Tenebrionidae from the Bahamas. (It) Munich. Mus. G. Frey. Entomol. Arb. 17:125-130.
- MCLAURIN, B. F. and DOWNE, A. E. R. 1966. Serological comparison of three species of grain infesting weevils (Curculionidae:Sitophilus). Kans. Entomol. Soc. J. 39:500-505.
- MEDVEDEV, G. S. 1966. A new genus and species of darkling beetles (Coleoptera, Tenebrionidae) from Turkmenia. (Rus) Akad. Nauk SSSR. Zool. Inst. Tr. 37:98-99.
- NELSON, G. H. 1967. Notes on the Buprestidae (Coleoptera). V. With descriptions of previously unknown sexes. Coleopt. Bull. 21:23-27.
- PALM, T. 1965. Coleoptera study excursion to Corfu. (Sw) Entomol. Tidskr. 86:1-20.
- PENA, G., L. E. 1966. Catalog of the Tenebrionidae (Coleoptera) of Chile. (Sp) Munich. Mus. G, Frey. Entomol. Arb. 17:397-453.
- PREVETT, P. F. 1966. A new genus and species of Pashymerivae (Coleoptera: Bruchidae) from South America. Proc. R. Ent. Soc. London. 35: 81-83.

- RAYNAUD, P. 1965. Coleoptera Carabidae; larvae of *Calosoma*. (Fr) Mus. Roy. Afr. Cent. Ann. Sci. Zool. 8:131-137.
- RIVAS, L. R. 1965. A proposed code system for storage and retrieval of information in systematic zoology. Syst. Zool. 14:131-132.
- SCHULER, L. 1968. The importance of female sex organs in the Coleoptera, Carabidae. (Fr) Entomologiste (Paris) 24:16-22.
- SILVANO, C. 1966. Tenebrionidae from the Lagoon of Venice; 14th contribution to the study of the Tenebrionidae. (It) Venice. Mus. Civico Storia Natur. Boll. 17:57-68.
- SKOPIN, N. G. 1965. Tenebrionidae (Coleoptera) of the tribe Platyscelini of Kazakhstan. (Rus) Kazakhsk. N-I. In-t. Zashchity Rast. Tr. 9:51-74.
- SKOPIN, N. G. 1966. The species of the genus *Tentyria* Latreille from western Central Asia (Coleoptera, Tenebrionidae). (Ge) Munich. Mus. G. Frey. Entomol. Arb. 17:1-6.
- SYMPOSIUM: 1965. Interactions of phyletic and phenetic taxonomies. System Zool. 14:174-236.
- SYMPOSIUM: 1965. The origin of higher levels of organizations. Syst. Zool. 14:245-342.
- TEMPERE, G. and ARDOIN, P. 1966. A misconstrued tenebrionid of the French fauna. (Fr) Entomologist (Paris) 22:1-3.
- THROCKMORTON, L. H. 1968. Biochemistry and taxonomy. Annu. Rev. Entomol. 13: 11-114.
- TRIPLEHORN, C. A. 1965. Revision of Diaperini of America north of Mexico with notes on extralimital species (Coleoptera:Tenebrionidae) U. S. Nat. Mus. Proc. 117:349-457.
- TRIPLEHORN, C. A. 1967. Notes on the species of *Megasida* Casey from the United States. (Coleoptera, Tenebrionidae), Ohio J. Sci. 67:38-41.
- VANEMDEN, F. I. 1947. Larvae of British beetles. VI. Tenebrionidae. Ent. Mon. Mag. 91:161-171.
- WATT, J. C. 1967. Specific synonymy in *Mimopeus* Pascoe (*Cilibe auctorum*), and the nomenclatural status of some related genera (Coleoptera, Tenebrionidae). New Entomol. 4:35-39.
- WATT, J. C. 1967. A review of classifications of Tenebrionidae (Coleoptera). Entomol. Mon. Mag. 102:80-86.
- WOLLASTON, T. V. 1860. On additions to the Madeiran Coleoptera. Ann. and Mag. Nat. Hist. 6:48-54.

- WOODROFFE, G. E. 1966. The significance of the ninth abdominal segment of the male in the systematics of *Dermestes* L. (Coleoptera. Dermestidae). *J. Stored Prod. Res.* 1:377-379.
- YANO, T. 1965. Larval stages of the leaf-miners found in Shikoku Coleopterous leaf-miners of Japan. VII. *Shikoku Entomol. Soc. Trans.* 8:115-132.

TECHNIQUE

- ABBOTT, D. C., BURRIDGE, A. S., THOMSON, J. and WEBB, K. S. 1967. A thin-layer chromatographic screening test for organophosphorus pesticide residues. *Analyst* 92:170-175.
- AMOS, T. G. 1965. Time-lapse photography with synchronized electronic flash for recording insect behavior. *Anim. Behav.* 13:558-560.
- AMOS, T. G. 1967. Apparatus for studying locomotory activity of small animals with the aid of time-lapse photography. *J. Econ. Ent.* 60:886-887.
- ANDRADE, O. 1967. The recording of insect venation photographically. *Turrialba* 17:450-451.
- ATZINGER, C. W., and PROVEAUX, M. T. 1965. Conversion equipment to produce a cyclic environment within constant temperature cabinets. *Fla. Entomol.* 48:227-237.
- BELTON, P., KEMPSTER, R. H., and NAIR, K. K. 1967. A device for programming the intensity of fluorescent lamps. *J. Econ. Entomol.* 60:883-884.
- BOYD, H. 1967. Pressure-vacuum fumigation. *Ass. Oper. Millers. Bull.*, 1967: 3011-3014.
- BRADY, J. 1965. A simple technique for making very fine, durable dissecting needles by sharpening tungsten wire electrolytically. *World Health Organ. Bull.* 32:143-144.
- BROERSMA, D. B. and HAYS, S. B. 1966. Improved methods for mass rearing plum curculio, Conotrachelus nenuphar. *J. Econ. Entomol.* 59:235-236.
- BROOK, T. S. 1967. A pendulum-type sprayer. *J. Econ. Entomol.* 60:284-285.
- BROWN, G. A., AH, H. S. and DAVIS, R. 1966. An environmental chamber for rearing and irradiating small arthropods. *Ga. Entomol. Soc. J.* 1:29-30.
- BUCHANAN, R. S. 1965. A microapplicator for topical application of insecticide solutions to small insects. *New Zeal. Entomol.* 3:36-38.
- BURT, E. C., SMITH, D. B. and LLOYD, E. P. 1966. A rotary disc device for applying ultra-low-volume (undiluted) pesticides with ground equipment. *J. Econ. Entomol.* 59:1487-1489.
- CLARK, E. W. 1965. A simple rearing technique for obtaining eggs or young larvae of the southern pine beetle (Dendroctonus frontalis). *U. S. Forest Serv. Res. Note SE-44*, 2 p.
- CONDRAHOFF, S. F. 1967. An extraction method for rapid counts of insect eggs and small organisms. *Can. Entomol.* 99:300-303.

- COOKE, J. A. L. 1966. A convenient, design of pooter for the capture of small carnivorous arthropods. Entomol. Mon. Mag. 102:87.
- CORBET, P. S. 1966. A method for sub-sampling insect collections that vary widely in size. Mosquito News 26:420-424.
- COTHRAN, W. R. and GYRISCO, G. G. 1966. A container for rearing phytophagous insects with potential application to controlled humidity experiments. J. Econ. Entomol. 59:481-482.
- COTHRAN, W. R. and GYRISCO, G. G. 1966. A multi-photoperiod constant-temperature chamber. J. Econ. Entomol. 59:866-869.
- DAVICH, T. B. 1965. Mass marking boll weevil (*Anthonomus grandis*) field populations. J. Econ. Entomol. 58:1035-1037.
- EICHLER, F. 1965. Simplified microphotogrammetry; supplement. (Ge) Deut. Entomol. Z. (n. s.) 12:53.
- ERIKSSON, G. 1967. An electrophoretic technique to concentrate and separate substances and its application to insect hemolymph. Acta Chem. Scand. 21:2290-2291.
- FABER, W. 1966. Moisture chamber observation nests for secretive insects. (Ge) Z. Angew. Zool. 53:371-382.
- FINCHER, G. T. and STEWART, T. B. 1968. An automatic trap for dung beetles. Ga. Entomol. Soc. J. 3:11-12.
- GAST, R. T. 1965. Mass producing artificial diet pellets for adult boll weevils. J. Econ. Entomol. 58:1024-1025.
- GAST, R. T. 1966. A spray technique for implanting boll weevil eggs on artificial diets. J. Econ. Entomol. 59:239-240.
- GONCHARENKO, L. 1965. An apparatus for collecting small insects. (Rus) Zashch. Rast. Vred. Boleznei. 3:42.
- GRANT, H. J. 1965. A measuring device for use in insect systematics. Entomol. News (Philadelphia) 76:249-251.
- HAFEEZ, M. A. 1962. A simple apparatus for the study of small insects under controlled conditions of humidity and temperature. Laboratory Practice, pp. 926-927.
- HALGREN, L. A. and RETTENMEYER, C. W. 1967. An insect flight chamber. J. Econ. Ent. 60:1165-1167.
- HANSON, B. 1966. Recording equipment as a new important aid in biological observations. (Sw) Entomol. Tidskr. 87:100.

- HARDEE, D. D. 1966. A laboratory technique for bioassay of plant attractants for the boll weevil. *J. Econ. Entomol.* 59:240-241.
- HARRELL, E. A., HARE, W. W. and YOUNG, J. R. 1966. A fan for handling live insects. *J. Econ. Entomol.* 59:756-758.
- HARRENDORF, K. 1965. A modified high-clearance sprayer for plot use. *J. Econ. Entomol.* 58:1014-1015.
- HARRIS, R. L. and FRAZAR, E. D. 1968. A device for immobilizing insects with cooled air. *J. Econ. Entomol.* 61:1755-1756.
- HOWELL, D. E. and GOODHUS, L. D. 1965. A simplified insect olfactometer. *J. Econ. Entomol.* 58:1027-1028.
- HRDY, I. 1966. Laboratory breeding of Leptinotarsa undecimlineata. ITIS, 158 p.
- HERNE, D. C. 1967. An accurate thermistor psychrometer for small containers. *J. Econ. Entomol.* 60:895.
- ILYUSHCHENKO, V. N. 1964. Seed fumigator. (Rus) *Zashch. Rast. ot Vred. i Boleznei* 2:32.
- KERFOOT, W. B. 1966. A photoelectric activity recorder for studies of insect behavior. *Kans. Entomol. Soc. J.* 39:629-633.
- KLEMSTEIN, J. 1966. Freeze drying, a new method for preparation of larvae. (Ge) *Entomol. Z.* 76:17-21.
- KNOWLTON, G. F. 1966. A simple spreading board for insects. *Utah. State Univ. Ext. Entomol. Mimeo Ser.* 103, 2p.
- KNOWLTON, G. F. 1966. A simple spreading board for insects. *Utah. State Univ. Ext. Entomol. Mimeo Ser.* 86, 2 p.
- KOPPEN, H. 1966. A practical aid for the study of pinned insects with the microscope. (Ge) *Beitr. Entomol.* 16:321-325.
- LAFAY, F. 1967. Microradiography supplements microscopic observation. (Fr) *Rev. Appl. Elec.* 40:50-53.
- LINDROTH, C. H. 1966. New material for bottoms of insect boxes. (Sw) *Opusc. Entomol.* 31:80.
- LIPPOLD, P. C. 1967. Plastic enclosures for in vivo radioassay of insects. *Int. J. Appl. Radiat. Isotopes* 18:656-658.
- LLOYD, E. P. and MERKL, M. E. 1966. A fieldcage study of population dynamics of the boll weevil. *J. Econ. Entomol.* 59:83-86.
- LOFQVIST, J., and STENRAM, H. 1965. An electronic actograph for automatic registration of animal locomotion. *Lund. Univ. Acta. Univ. Lundensis. Sect. II, Med. Math. Sci. Rerum Natur.* 9, 9p.

- LOSCHIAVO, S. R. and ATKINSON, J. M. 1967. A trap for the detection and recovery of insects in stored grain. *Can. Entomol* 99:1160-1163.
- MACFADYEN, A. 1966. Methods of study of productivity of invertebrates in terrestrial ecosystem. (Fr) *Terre Vie* 113:361-392.
- MAHARAJ, S. 1965. A new design of trap for collecting the palm weevil, Rhynchophorus palmarum (L.) *Trop. Agr. (St. Augustine)* 42:373-375.
- MC DONALD S., and HALL, N. W. 1965. A laboratory insecticide sprayer designed to simulated field spraying equipment. *J. Econ. Ent.* 58:739-742.
- MIDDLETON, W. E. K. and WYSGECKI, G. W. 1956. Colorimetry of shiny biological specimens. *Canad. Ent.* 88:683-685.
- MILLS, R. B. 1965. Apparatus for studying feeding and oviposition by Angoumois grain moth adults. *J. Econ. Entomol.* 58:177.
- MITCHELL, R. G. 1966. An improvised table-type microprojector. *Entomol. Soc. Amer. Ann.* 59:1025-1027.
- MORDUE, D. L., SITTLER, O. D. and HOLLINGSWORTH, J. P. 1965. Instrumentation and techniques for electroretinogram studies with insects. *Amer. Soc. Agr. rap.* 302, 8 p.
- MORDUE, D. L., SITTLER, O. D. and HOLLINGSWORTH, J. P. 1967. Instrumentation and techniques for electroretinogram studies with insects. *Amer. Soc. Agr. Eng. Trans. ASAE* 10:130-132, 135.
- MORRISON, F. O. 1966. A standardized technique for recording the susceptibility levels of stored-products pest populations to insecticides in common use. *ITIS-9*, 234 p.
- NAKANE, T. 1967. On the collecting and mounting of insects. (Ja) *Natur. Sci. Mus.* 34:138-150.
- NICHOLLS, C. F. and BERUBE, J. A. C. 1965. An expandable cage for feeding tests of coccinellid predators of aphids. *J. Econ. Entomol.* 58:1169-1170.
- NICHOLLS, C. F. and GRILLS, E. E. 1968. An improved incubator for operation above room temperature relative humidity. *J. Econ. Entomol.* 61:1142-1145.
- OSSIANNILSSON, F. 1966. Making permanent fluid mounts of minute arthropods. *Entomol. Tidskr.* 87:1-4.
- PFLETSCHINGER, H. 1967, Large portraits of small animals. (Ge) *Kosmos* 63: 216-219.
- PLESS, C. D. 1968. A lightweight, weather-resistant field insect cage. *J. Econ. Entomol.* 61:501-503.

- RAYCHAUDHURI, A. 1968. Staining whole mounts of an insect (Tribolium confusum) reproductive system for succinic dehydrogenase and nonspecific esterase. *Stain Technol.* 43:9-14.
- RAYNAUD, P. 1968. Rearing hybrids of Coleoptera Carabidae. (Fr) *Soc. Linn. Lyon Bull. Mens.* 37:34-42.
- RICKARD, W. H. and HAVERFIELD, L. E. 1965. A pitfall trapping survey of darkling beetles in desert steppe vegetation. *Ecology* 46:873-875.
- ROTHSCHILD, A., EISENBERG, W. V., and VAZQUEZ, A. W. 1968. A simple rearing container for drosophila. *J. Hered.* 59:98.
- RYAZANOVA, G. I. 1966. Studying insect flight by filming. (Rus) *Zool. Zhur.* 45:938-939.
- SABROSKY, C. W. 1966. Mounting insects from alcohol. *Entomol. Soc. Amer. Bull.* 12:349.
- SHANDS, W. A., SHANDS, M. K. and SIMPSON, G. W. 1966. Techniques for mass-producing *Coccinella septempunctata*. *J. Econ. Entomol.* 59:1022-1023.
- SHATOURY, H. H. 1966. Micro-determination of insect blood volume. *Nature (London)* 211:317-318.
- SHUMAKOV, E. M., EDEL'MAN, N. M. and BORISOVA, A. E. 1967. Rearing phytophagous insects on medium. (Rus) *Zashch. Rast.* 6:21-22.
- SMITH, C. N. 1966. Insect colonization and mass production. New York, Academic Press, 1966. 618 p.
- SMITH, C. N. 1967. Mass-breeding procedures. In Wright, J. W. and Pal, R., ed. *Genetics of insect vectors of disease*, p. 653-672.
- SMITH, H. G. and HYNES, C. D. 1966. Modifications of the N-butyl methacrylate imbedding method as applied to insect larval head capsules. *Entomol. Soc. Amer. Ann.* 59:230.
- SMITH, H. W. and FURNISS, M. M. 1966. An automatically recording insect flight mill. *Can. Entomol.* 98:249-252.
- STERMER, R. A. 1966. Instrumentation for measuring spectral response of insects. *Amer. Soc. Agr. Eng. Trans. ASAE* 9:230-232, 235.
- STEYSKAL, G. C. 1967. Something better than polyporus or pith for double mounts. *Entomol. Soc. Wash. Proc.* 69:297.
- STRONG, R. G., PARTIDA, G. J. and WARNER, D. N. 1968. Rearing stored-product insects for laboratory studies: Bean (Acanthoscelides obtectus) and cow pea weevils (Callosobruchus macalatus). *J. Econ. Entomol.* 61:747-751.
- STRONG, R. G., SBUR, D. E. and PARTIDA, G. J. 1967. Rearing stored-products insects for laboratory studies; lesser grain borer, granary weevil, rice weevil, Sitophilus zeamais, and angoumois grain moth. *J. Econ. Ent.* 60:1078-1082.

- TORNE, E. 1965. Experiences fixing and preserving small soil arthropods. (Ge) Deut. Entomol. Ges. Mitt. 24:67-69.
- TRAVIS, B. V. 1968. Glyptal-a useful slide ringing compound. J. Med. Entomol. 5:24.
- TURNBULL, A. L. and NICHOLLS, C. F. 1966. A "quick trap" for area sampling of arthropods in grassland communities. J. Econ. Entomol. 59:1100-1104.
- VINCENT, L. E. and LINDGREN, D. L. 1966. Determination of relative humidity by gas chromatography. J. Econ. Entomol. 59:1546-1547.
- VOCKERROTH, J. R. 1966. A method of mounting insects from alcohol. Can. Entomol. 98:69-70.
- VOROB'EV, B. 1967. Exhauster with valve. (Rus) Zashch. Rast. 2:43.
- WENZEL, G. 1966. Rearing hybrids. II. (Ge) Entomol. Z. 76:51-53.
- WHARTON, G. W. and KNULLE, W. 1966. A device for controlling temperature and relative humidity in small chambers. Entomol. Soc. Amer. Ann. 59:627-630.
- WILLIAMS, J. H. 1966. Culture-jar modifications for sampling respiratory environments. J. Econ. Entomol. 59:1022.
- WILLIS, E. R. and RUTH, L. M. 1949. A microscope stage for the continuous anesthesia of insects. Science 109:230.
- WOOD, S. F. 1965. An efficient water cooler for transport of heat-sensitive arthropods. World Health Organ. Bull. 33:859-861.
- WOOD, G. W., McALLAN, J. W. and WASSON, W. D. 1965. An improved electronic counting apparatus for use in olfactometers. J. Econ. Entomol. 58:1166-1167.
- WRIGHT, R. H. 1966. An insect olfactometer, Can. Entomol. 98:282-285.
- YATES, H. O. and LEWIS, W. G. 1965. A new material to secure cage entrances. J. Econ. Ent. 58:787-788.
- YINON, U. 1965. A simple technique for obtaining eggs of the khapra beetle (Trogoderma granarium Everts). Riv. Parassitol. 26:143-145.

TERATOLOGY

The following bibliography, kindly supplied by Dr. J. Balazuc, as reproduced here in its entirety because of its intrinsic interest, although many organisms described are not Coleoptera. (Ed.)

- BALAZUC, J. 1942. Un cas de schistomélie chez un Carabique (Col.) Bull. Soc. ent. Fr., no. 1, p. 13, 1 fig.
- BALAZUC, J. 1943. Une monstruosité rare chez un Tenebrio molitor L. (Col. Zenebrianidae) Bull. Soc. Ent. Fr., no. 1, pp. 9-11, 1 fig.
- BALAZUC, J. 1945. Sur le phénomène de schistomélie induite à distance par greffe autoplastique dysharmonique chez Tenebrio molitor L. Bull. Soc. ent. Fr., 50, no. 6, pp. 81-83, 4 fig.
- BALAZUC, J. 1945. Variation et anomalies de la striation élytrale chez les Coléoptères. L'Ent., 1, no. 8/9, pp. 123-125, 1 fig.
- BALAZUC, J. 1946. La Tératologie des Insectes. Bull. Soc. Zool. Fr., 71, no. 2, pp. 96-99.
- BALAZUC, J. 1946. Anomalies lépidoptérologiques. L'Ent., 2, no. 4, pp. 130-131, 2 fig.
- BALAZUC, J. 1946. Une anomalie chez Papilio podalirius (Cep. Papilionidae) Bull. Soc. ent. Fr., no. 20, p. 149, 1 fig.
- BALAZUC, J. 1948. La Tératologie des Coléoptères (p. mem.) (ci-joint).
- BALAZUC, J. 1949. Sur une mutation homéotique de Drosophila melanogaster et sa signification (Notes de Tératologie, I). Rev. fr. Ent., 16, no. 2, pp. 77-81.
- BALAZUC, J. Triangulins monstrueux (ci-joint).
- BALAZUC, J. 1951.(1952). La Tératologie des Hémiptères et groupes voisins. Ann. Soc. ent. Fr., 120, pp. 17-66, 26 fig.
- BALAZUC, J. 1952. Un Ergates faber L. gynandromorphe. Bull. Soc. ent. Fr., 57, pp. 36-38, 2 fig.
- BALAZUC, J. 1952. Monstruosité double chez un Goliath (Col. Scarabaeidae) (Notes de Tératologie, II.) Rev. fr. Ent., 19, no. 2, pp. 128-130, 1 fig. (avec R. P. VARIOT).
- BALAZUC, J. 1953. Notes de Tératologie, III. Symmélie labiale chez un Carabique, Stomis pumicatus L. Rev. fr. Ent., 20, no. 1, pp. 54-55, 1 fig. (avec G. TEMPERÉ).

- BALAZUC, J. 1953. Nouvelle anomalie sexuelle chez un Longicorne (Col. Cerambycidae) Bull. Soc. ent. Fr., 57, no. 6, pp. 95-96, 1 fig. (avec H. DONNOT).
- BALAZUC, J. 1953-54. Anomalies de la striation élytrale chez les Coléoptères (2^e note) Miscellanea ent., 61/62, pp. 77-83, pl. I-II.
- BALAZUC, J. 1955. La Tératologie des Orthoptéroïdes: à propos de quelques nouveaux faits observationnels et expérimentaux. Bull. Lab. Ent. agr. "Filippo SILVESTRI," Portici, 14, pp. 48-64, 1 fig.
- BALAZUC, J. 1956. Observations tératologique chez les Lépidoptères. Bull. Soc. ent. Fr., 61, no. 3/4, pp. 67-74, 10 fig. (avec J. G. POINTEL)
- BALAZUC, J. 1956. Note sur une monstruosité présentée par un Longicorne (Col. Le Naturaliste malgache, 8, no. 1, pp. 47-49.
- BALAZUC, J. 1958 (1959). La Tératologie des Hyménoptéroïdes. Ann. Soc. ent. Fr., 127, pp. 167-203, 4 fig.
- BALAZUC, J. 1959. Anomalie de segmentation (hélicomérie complexe) chez un Lombric. Bull. Soc. zool. Fr., 84, no. 2/3, pp. 205-207, 1 fig.
- BALAZUC, J. 1962. La Tératologie des Myriapods. L'Année biologique, 4^{es.}, b. 1, no. 3/4, pp. 145-174, 21 fig. (avec O. SCHUBART).
- BALAZUC, J. 1963. Anomalie chez un Nagusta praecatoria Fabricius (Hemiptera, Reduviidae). Bull. de l'Inst. fr. d'Afr. noire, 25, ser. A, no. 4, pp. 1168-1169, 1 fig. (ci-joint).
- BALAZUC, J. 1968, 1969. Supplement a la tératologie des Coléoptères Redia 51: 39-111.
- BATTONI, S. 1966. A Percus dejeani robustus Str. with 8 legs. Entomologiste 22:33-36.
- BEYER, J. 1966. Remarkable anomaly in the antennae of a carabid. Entomol. 4. 76:247-248.
- COTHRAN, W. R. and GYRISCO, G. G. 1967. An elytral aberration in the alfalfa weevil, Hypera postica (Coleoptera:Curculionidae). Entomol. Soc. Amer. Ann. 60:482-483.
- DODGE, H. R. 1965. Three examples of insect teratology. Ent. Soc. Wash. Proc. 67:120.
- GAUSS, R. 1966. Cyclopia in Pleolophus brachypterus (Grav.) (Hym. Ichneum.) gynandromorph of Polistes gallicus (Linne) (Hym. Vesp.), and copulation anomaly of Melolontha melolontha (Linne) (Col. Lamellic.). (Ge) Deut. Entomol. Z. (n. s.) 13:291-294.
- GUNTHER, R. G. 1968, One-eyed ambush bug (Hemiptera:Phymatidae). Turttox News 46:149.

- LAVIGNE, R. 1965. Abnormal antenna in Batyle ignicollis (Coleoptera:Cerambycidae). Kans. Entomol. Soc. J. 38:358.
- MARTINEZ, A., and BARRERA, A. 1966. Discovery of anophthalmus and apterous Cryptophagidae, associated with mammals. (Insecta, Coleoptera). (Sp) Ciencioa 25:11-16.
- NASCIMENTO FERREIRA, R. DO. 1966. Teratological atrophy of the hind leg of Oryctes nasicornis L. (Coleoptera). (Sp) Graellsia 22:25-27.
- PRIORE, R. 1964. Teratological case in Rodolia cardinalis Muls. (Coleoptera, Coccinellidae). (It) Portici. Lab. Entomol. Agr. "Filippo Silvestri." Boll. 22:245-250.
- SHARWA, R. K. and SHOREY, H. H. 1969. Occurrence of a two headed pupa in a population of Tribolium confusum (Coleoptera:Tenebrionidae). Ann. Ent. Soc. Amer 62:1205.
- STEINHAUS, E. A. and ZEIKUS, R. D. 1968. Teratology of the beetle Tenebrio molitor. I. Gross morphology of certain abnormal types. J. Invertebrate Pathol. 10:190-210.
- THOMAS, J. G. and BRAZZEL, J. R. 1960. An abnormal antennal condition in a resistant strain of the boll weevil. Jour. Econ. Entomol. 53: 688-689.
- WOOD, G. R. 1965. A trifurcate tiger beetle antenna (Coleoptera:Cicindelidae) Kans. Entomol. Soc. J. 38:392-394. Captured live Cicindela scutellaris lecontei (Hald) L. ant. normal.
- ZEIKUS, R. D. and STEINHAUS, E. A. 1968. Tertology of the beetle Tenebrio molitor. II. The development and gross description of the pupal-winged adult. J. Invertebrate Pathol. 11:8-24.

Current Bibliography

BEHAVIOUR STUDIES

- AMOS, T. G. and WATERHOUSE, F. L. 1967. Phasic behaviour shown by two Carpophilus species (Coleoptera, Nitidulidae) in various humidity gradients and its ecological significance. Oikos, 18, 345-350.
- AMOS, T. G., WATERHOUSE, F. L. and CHETHAM, N. A. 1968. Temporal distribution of Tribolium castaneum Herbst and Cadra cautella Walker on temperature gradients. Experientia, 24: 86-87.
- AMOS, T. G. 1967. The effect of antennectomy on the humidity reactions of Carpophilus dimidiatus and C. hemipterus (Coleoptera, Nitidulidae). Ent. exp. appl., 10:1-6.
- VAN DER SCHAAF, P. 1968. Resistance of corn varieties to infestation of the larger rice weevil, Sitophilus zeamais. Motschulsky. Master's Thesis, Kansas State University, Manhattan, Kansas.

ECOLOGY AND POPULATION ECOLOGY

- HALSTEAD, D. G. H. 1967. Biological studies on species of Palorus and Coeopalorus with comparative notes on Tribolium and Latheticus (Coleoptera:Tenebrionidae). J. stored Prod. Res., 1967, 2, 273-313.
- HOWE, R. W. 1967. Temperature effects on embryonic development in insects. Ann. Rev. Ent., 12, 15-42.
- HOWE, R. W. 1967, The influence of age of the parents on some characteristics of the offspring of insects bred in the laboratory. J. stored Prod. Res., 3, 371-385.
- HOWE, R. W. and HOLE, B. D. 1967. The yield of cultures of Sitophilus granarius at 25 C and 70 per cent relative humidity with some observations on rates of oviposition and development. J. stored Prod. Res., 2, 257-272.
- IWAO, S., KIRTANI, K. and HOKYO, N. 1966. Application of a marking-and-recapture method for the analysis of larval-adult populations of an insect, Nezara viridula. Res. Popul. Ecol. 8:147-160.
- KIRTANI, K., HOKYO, N. and IWAO, S. 1966. Population behaviour of the southern green stink bug, Nezara viridula with special reference to the developmental stages of early-planted paddy. Res. Popul. Ecol. 8:50-63.
- KIRTANI, K., NAKASUJI, F. and HOKYO, N. 1966. The survival rate of eggs and larvae in relation to group size in the southern green stink bug, Nezara viridula. Jap. J. appl. Ent. Zool. 10:205-211.

- KIRITANI, K., HOKYO. and KIMURA, K. 1967. The study on the regulatory system of the population of the southern green stink bug, Nezara viridula under semi-natural conditions. Appl. Ent. Zool. 2:39-50.
- KIRITANI, K. and KIMURA, K. 1967. Effects of parental age on the life cycle of the southern green stink bug, Nezara viridula. Appl. Ent. Zool. 2:69-78.
- LOSCHIAVO, S. R. 1967. Adult longevity and oviposition of Trogoderma parabile Beal (Coleoptera, Dermestidae) at different temperatures. J. stored Prod. Res. 3:273-282.
- MCFARLANE, J. A. and WEAIVING, A. J. S. 1967. A means of differentiating between Acanthoscelides obtectus (Say) and Zabrotes subfasciatus (Boh.) (Coleoptera, Bruchidae) in white haricot beans at the pupal stage. J. stored Prod. Res., 3 (3), 261-262.
- PREVETT, P. F. 1967. Observations on the biology of six species of Bruchidae (Coleoptera) in Northern Nigeria. Ent. mon. mag., 1966(1967) 102,(1226-1228) 174-180.
- RASMUSSEN, S. 1967. Hylotrupes (Col. Cerambycidae) in dead trees on Faron, a Swedish island. Entomologiske Meddelelser 35:223-226.
- RASMUSSEN, S. 1967. Growth of larvae of the house longhorn beetle (Hylotrupes bajulus L.) in constant conditions - Oikos 18:155-177.
- SASABA, T. 1966. Interspecific competition between two species of Trichogrammatidae III. Res. Popul. Ecol. 8:102-106.
- SINHA, R. N. and UTIDA, SYUNRO, 1967. Climatic areas potentially vulnerable to stored product insects in Japan, Appl. Ent. Zool. 2:124-132.
- SINHA, R. N. and WALLACE, H. A. H. 1966. Ecology of insect-induced hot spots in stored grain in Western Canada. Res. Popul. Ecol. 8:107-132.

GENERAL

- BRAY, D. F. and SCHEINBERG, E. 1967. Further information on the control of genotype-environment interaction by selection in Tribolium castaneum. Canadian Journal of Genetics and Cytology 9:656.
- BRAY, D. F. and SCHEINBERG, E. 1967. Genotype-environment interaction in Tribolium castaneum and its control by selection. Genetics 56:588.
- CHAUDHARY, K. D., SRIVASTAVA, U. and LEMONDE, A. 1967. Monoamine oxidase in Tribolium confusum Duval (Coleoptera). Biochim. Bioph. Acta, 132, 290-299.
- CHAUDHARY, K. D., RICHARD, C., TANGUAY, R. and LEMONDE, A. 1967. Nucleic acids in Tribolium confusum Duval (Coleoptera). 7th Intern. Cong. Biochem. Abstracts V (J-218), 1001.

- CHAUDHARY, K. D., MOORJANI, S., SRIVASTAVA, U. and LEMONDE, A. 1967. Pentose phosphate cycle enzymes in Tribolium confusum Duval. Biochim. Biopj. Acta, 148, 569-571.
- DAVID, J. and BOULETREAU, M. Contribution a l'etude de la biologie et de l'ecologie d'un coleoptere entomophage: Xylodrepa quadripunctata (Schreb.) (Silphidae) Bull. Soc. Linn. Lyon 37:73-83.
- LADISCH, R. K., LADISCH, S. K. and HOWE, P. M. 1967. "Quinoid Secretions in Grain and Flour Beetles," Nature 215 939-940.
- LADISCH, R. K. and SUTER, SR. ST. A., "Affinity of Tetrtoxoin to Animal Protein," Proc. Penna. Acad. Sci.
- LADISCH, R. K., SUTER, SR. ST. A., and DEMER, C., "Antibacterial Properties of Ethylquinone," ibid.
- LADISCH, R. K., LADISCH, S. K. and HOWE, P. M., "Quinoid Secretions in Grain and Flour Beetles," Proc. Pa. Acad. Sci.
- MILLS, R. B. 1966. Stored-products insects as experimental animals in high school biology. The American Biology Teacher. 28:638-43.
- QUARTERMAIN, A.R. 1967. Population structure and breeding for genetic improvement. Proc. N. Z. Soc. Anim. Prod. 27:46-47.
- QUARTERMAIN, A. R. 1967. Beetle pest proves to be experimental asset. N. Z. J. Agric. 115:20-21.
- SCHEINBERG, E. 1967. An approach to data processing in selection for genetic gain using high speed computers. Canadian J. of Gen. and Cytol. 9:857-873.
- SCHEINBERG, E. 1967. The sampling variance of the relative efficiency of indirect to direct selections when using variance-covariance components. Australian J. of Statistics 9:35-40.
- SCHEINBERG, E. 1967. Experimental evidence for a high relative efficiency of indirect to direct selection in Tribolium castaneum. Genetics 56:588.
- SCHMITZ, T. H. and ENGLERT, D. G. 1967. The "mottled" mutation in Tribolium castaneum. Canad. J. Genet. Cytol. 9:335-341.
- STATENS SKADEDYRLABORATORIUM (Government Pest Infestation Laboratory) 1967. Annual Report 1966. Lyngby, Denmark.
- UTIDA, S. 1967. Collective oviposition and larval aggregation in Zabrotes subfasciatus (Coleoptera, Bruchidae). Jour. stored Prod. Res., 2:315-322.
- UTIDA, S., and SINHA, R. N. 1967. Climatic areas potentially vulnerable to stored product insects in Japan. Appl. Ent. Zool. 2:124-132.

- UTIDA, S. 1967. Polymorphism in the southern cowpea weevil, Callosobruchus maculatus and the adaptation of its life to the stored condition of the bean. Plant Protection (Tokyo, Japan), 21:243-248.
- UTIDA, S. 1967. Damped oscillation of population density at equilibrium. Res. Popul. Ecol., 9:1-9.
- UTIDA, S. 1967. A decade of insect population ecology in Japan. Kontyu, 35:196-204.

GENETICS

- BLACKMAN, D. G. 1966. A pearl-eyed mutation in Oryzaephilus surinamensis (L.) (Coleoptera, Silvanidae). J. Stored Prod. Res., 1966, 2, 167-169.
- COSTANTINO, R. F. 1967. On population biology: Unification of biochemical, genetical, and biometrical concepts. Ph.D. Thesis, 104 p. Purdue Univ. Lib.
- COSTANTINO, R. F. 1967. Genetic parameters in a developing biological system (abst). Genetics 56:552.
- COSTANTINO, R. F., BELL, A. E. and ROGLER, J. C. 1967. Genetic analysis of a population of Tribolium: 1. Corn oil sensitivity and selection response. Heredity 22.
- DEWEES, A. A. and BELL, A. E. 1967. Close linkage of eye color genes in Tribolium castaneum. Genetics. 56:633-640.
- HARDIN, R. T. and BELL, A. E. 1967. Two-way selection for body weight in Tribolium on two levels of nutrition. Genetical Research 9:309-330.
- HARDIN, R. T., ROGLER, J. C. and BELL, A. E. 1967. Genetic and environmental interactions in growth of Tribolium castaneum Canad. J. Zool. 45: 139-144.
- ROBERTS, C. W. and JURILOFF, D. 1968. Evidence for Gene Homology of Two Pearl-Eyed Genes in Tribolium castaneum and Tribolium confusum. Can. J. Genet. Cytol. (in press).
- SCHEINBERG, E. 1967. An approach to data processing in selection. Can. J. of Genet. Cytol. (in press)
- SCHEINBERG, E. 1967. Experimental evidence for a high relative efficiency of indirect to direct selection in Tribolium castaneum. (Abst) Genetics 56:588.
- SCHEINBERG, E., BELL, A. E. and ANDERSON, V. L. 1967. Genetic gains in populations of Tribolium castaneum under uni-stage tandem selection and under restricted selection indices. Genetics. 55:69-90.

- WEBER, J., and ROBERTS, C. W. 1966. The Genetics of Riboflavinless, Pearl-Eyed Trait in Tribolium confusum. Can. J. Genet. Cytol. 8:796-806.
- WEBER, J. and ROBERTS, C. W. 1967. Relationship Between malpighian Tubule pigmentation and Riboflavin, Associated with Eye-Color Mutants of Tribolium confusum. Can. J. Genet. Cytol. 9:302-306.
- WEBER, J. and ROBERTS, C. W. 1967. Riboflavin Accumulation in $p^R m p^S$, and Wild Type Genotypes of Tribolium confusum. Can. J. Genet. Cytol. 9:565-568.

INSECTICIDES AND INSECTICIDE RESISTANCE

- DYTE, C. E. and BLACKMAN, D. G. 1967. Selection of a DDT-resistant strain of Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae). J. stored Prod. Res., 2, 211-228.
- RASMUSSEN S. 1967. Fumigation of houses with methyl bromide against the house longhorn beetle (Hylotrupes bajulus L.) Material and Organismen 2:65-78.
- REYNOLDS, E. M., ROBINSON, J. M. and HOWELLS, C. The effect on Sitophilus granarius (L.) (Coleoptera, Curculionidae) of exposure to low concentrations of phosphine. J. stored Prod. Res., 2, 177-186.
- WILBUR, D. A. 1967. What causes fumigation failures. Grain and Feed Jour. 124:13-17.

IRRADIATION

- MILLS, R. B. and WILBUR, D. A. 1967. Radiographic studies of Angoumois Grain moth development in wheat, corn, sorghum kernels. J. Econ. Entomol. 60:671-7.
- WATERS, F. L. and MACQUEEN, K. F. 1967. Effectiveness of gamma irradiation for control of five species of stored-product insects. J. stored Prod. Res. 3:223-234.

NUTRITION

- MILLS, R. B. 1965. Early germ feeding and larval development of the Angoumois grain moth. J. Econ. Entomol. 58:220-223.

PARASITES

- BURGES, J. D. 1966. The standardization of products based on Bacillus thuringiensis. Meded. Rijkerac. Landbouw. Wet. Gent. 31:536-546.

PESTS

- PREVETT, P. F. 1967. The field occurrence of Caryedon serratus (ol.) the groundnut seed beetle (Coleoptera, Bruchidae). in Uganda. J. stored Prod. Res., 3:267-268.

PHYSIOLOGY AND BIOCHEMISTRY

- COUTURE, G. et HUOT, L. 1967. Etude biochimique de Plodia interpunctella (Hbn) (LEPIDOPTERE) II. Le phosphore total chez les larves, les chrysalides et les adultes. Arch. intern. Physiol. Bioch. 75:609-613.
- COUTURE, G. et HUOT, L. 1967. Etude biochimique de Plodia interpunctella (HBN) (LEPIDOPTERE) I. Variations du poids corporel, de la teneur en eau et de la matiere seche. Naturaliste Can., 94:437-445.
- HUOT, L. et CORRIVAUULT, G. W. 1967. Les substances neuroleptiques et le comportement des insectes. V-Etude comparative de l'action de la reserpine et de quelques uns de ses derives sur le Tribolium confusum Duval. Arch. intern. Physiol. Bioch., 75: sous press.
- NATON, E. 1967. Die Auswirkungen der Carnitinblockade durch-Butyrobetain bei den Larven von Tribolium destructor Uyttenb. (Col. Tenebrionidae) und einigen anderen Vorratsschidlingen. J. Stored Prod. Res. 3:49-63.
- PERRON, J. M., SMIRNOFF, W. A. and HUOT, L. 1967. Comparaison de toxicite de quelques elements pour Bacillus thuringiensis var. thuringiensis BERL. Can. J. Microbiol. 13:81-91.
- PERRON, J. M., SMIRNOFF, W. A. and HUOT, L. 1967. Effets de certains elements sur la relation hote/pathogene Plodia interpunctella (Hbn) et Bacillus thuringiensis var thuringiensis Berliner. Naturaliste Can., (sous presse).

TAXONOMIC STUDIES

- PREVETT, P. F. 1967. The larva of Caryedon serratus (ol), the groundnut seed beetle (Coleoptera:Bruchidae), J. stored Prod. Res. 3:117-123.

TECHNIQUE

- AMOS, T. G. 1967. Apparatus for studying locomotory activity of small animals with the aid of time lapse photography. J. econ. Ent., 60:886-887.
- LOSCHIAVO, S. R. and ATKINSON, J. M. 1967. A trap for the detection and recovery of insects in stored grain. Canad. Entomol. 99:1160-1163.
- MILLS, R. B. 1965. Appartus for studying feeding and oviposition by Angoumois grain moth adults. J. Econ. Entomol. 58:177.

