

LITERATURE REFERENCES TO MOSQUITOES AND MOSQUITO-BORNE DISEASES

1973—PART IV

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FUMIGANTS

Smith, A., Obudho, W. O., Eszed, S. and Myamba, J. 1972. Verdandah-trap hut assessments of mosquito coils with a high pyrethrin I/pyrethrin II ratio against *Anopheles gambiae*, Giles. Pyrethrum Post 11(4):138-140.

Standards Institute of Malaysia. 1972. Specification for mosquito coils. Pyrethrum Post 11(4):126-131.

Takiura, K., Yamaji, A., Oe, M. and Yuki, H. 1973. Analysis of commercial mosquito coil smoke by gas chromatography. Botyu-Kagaku 38(1):26-29. In Jap., Engl. Sum.

ADULTICIDES, LARVICIDES AND OVICIDES

Altman, R. M. and Coauthors. 1972. Evaluation of seven insecticides applied as ground ULV aerosols for adult mosquito control. N.J. Mosquito Extermin. Assoc. Proc. 59:177-179.

Baker, G. J. 1973. Mosquito adulticiding with pyrethrum. Pyrethrum Post 12(1):12-13.

Bruder, K., Sutherland, D. J. and Rupp, H. R. 1972. Experiments with ULV in New Jersey. N.J. Mosquito Extermin. Assoc. Proc. 59:179-185.

Fontaine, R. E. and Rosen, P. 1973. Evaluation of Abate insecticide formulations as larvicides against *Anopheles gambiae* in northern Nigeria. Mosquito News 33(3):428-440.

Kurihara, T., Hata, K. and Sasa, M. 1973. Studies on the effectiveness of the guppy *Poecilia reticulata* in controlling *Culex pipiens* s.l. Part III. Field evaluation of control methods using guppy, larvicide, or guppy-larvicide. Jap. J. Sanit. Zool. 24(1):83-88. In Jap., Engl. Sum.

Lhoste, J. and Rauch, F. 1972. Possibilités d'utilisation des nouveaux pyrethrinoïdes de synthèse pour lutter contre les insectes d'importance médicale ou vétérinaire. Wiad. Parazitol. 18(4-6):619-627. [Aedes aegypti included.]

Ludlam, K. W., Berry, R. A. and Joseph, S. R. 1972. Evaluation of SBP aqueous pressurized

spray and aerosol formulations. N. J. Mosquito Extermin. Assoc. Proc. 59:56-60.

Macdonald, W. W. 1972. The response of vectors and of nature to current eradication and control measures. Pan Amer. Health Organ. Sci. Pub. No. 238:41-53, discussion pp. 54-58.

McDaniel, I. N. 1973. Recommendations for chemical control of mosquitoes. Maine Agr. Expt. Sta. Misc. Rpt. 148. 6 pp.

McDonald, J. L. and Zimmerman, E. E. 1973. Comparison of the various forms of insecticides for adult mosquito control in residential Taipei, Taiwan, April-September 1971. Mosquito News 33(3):455-461.

Meisch, M. V., Lancaster, J. L., Jr. and Coombes, L. E. 1973. Demonstration of mosquito control in a ricefield community, 1970-1972. Ark. Farm Res. 22(3):6.

Miller, T. A., Lawson, M. A., Nelson, L. L. and Young, W. W. 1973. Polymer formulations of mosquito larvicides VII. Laboratory and field evaluation of encapsulated formulations of malathion and Abate. Mosquito News 33(3):413-417.

Mitrofanov, A. M., Krivtsova, E. N., Timofeeva, L. S. and Shogam, S. M. 1973. Study of granulated phosphororganic larvicides in control of mosquitoes of the genus *Aedes*. Med. Parazit. i Parazit. Bolezni 42(3):315-320. In Rus., Engl. Sum.

Mossadegh, A., Motabar, M. and Javadian, E. 1973. Evaluation and investigation of the effect of oil spraying on the interruption of malaria. Soc. de Path. Exot. Bul. 66(1):92-100. In Engl., Fr. Sum.

Mount, G. A. and Pierce, N. W. 1973. Toxicity of selected adulticides to six species of mosquitoes. Mosquito News 33(3):368-370.

Mrope, F. M., Bang, Y. H. and Tonn, R. J. 1973. Comparative trial of three larvicides against *Culex pipiens fatigans* in Morogoro, Tanzania. WHO/VBC/73.452, 10 pp.

Nelson, L. L. and Coauthors. 1973. Polymer formulations of mosquito larvicides VI. Laboratory and field evaluation of selected polyethylene formulations of chlorpyrifos. Mosquito News 33(3):403-412.

Nelson, L. L., Miller, T. A. and Young, W. W. 1973. Polymer formulations of mosquito larvicides V. Effects of continuous low-level chlorpyrifos residues on the development of *Culex pipiens quinquefasciatus* Say populations in the laboratory. Mosquito News 33(3):396-402.

¹This work was supported in part by Grant LM 01786 from the National Library of Medicine, National Institutes of Health, U. S. DHEW.

- Pant, C. P. and Mathis, H. L. 1973. Residual effectiveness of ULV aerosols against *Aedes aegypti* in Bangkok: a study of sumithion and malathion applied by a portable ULV machine. *Southeast Asian J. Trop. Med. and Pub. Health* 4(2):231-237.
- Pierce, N. W., Baldwin, K. F., Meisch, M. V. and Mount, G. A. 1973. Effectiveness of ten adulticides against *Psorophora confinis* (Lynch Arribalzaga) in Arkansas. *Mosquito News* 33(3):418-420.
- Pridantseva, E. A. and Volodkin, A. A. 1973. New juvenile larvicides against mosquitoes: Monsanto-585 and structurally related compounds. *Med. Parazit. i Parazit. Bolezni* 42(4):480-482. In Rus., Engl. Sum.
- Rogers, A. J. 1972. Mosquito control in Florida salt marshes (a slide presentation). *N. J. Mosquito Extermin. Assoc. Proc.* 59:31-35.
- Saha, J. G. 1973. Insecticides used for the control of biting flies and their pollution potential. In *Symposium on Biting Fly Control and Environmental Quality* (edited by Hudson, A.) pp. 19-34. [Includes mosquitoes.]
- Tatem, C. E. and Dorer, R. E. 1972. A year's experience with ULV fogging in Virginia. *N. J. Mosquito Extermin. Assoc. Proc.* 59:35-37.
- West, A. S. 1973. Recent Canadian developments in area chemical control of biting flies. In *Symposium on Biting Fly Control and Environmental Quality* (edited by Hudson, A.) pp. 15-18. [Includes mosquitoes.]
- Wilson, H. G., LaBrecque, G. C. and Weidhaas, D. E. 1973. Residual activity of selected insecticides against *Anopheles quadrimaculatus*: degree of toxicity with short exposure. *Mosquito News* 33(3):348-353.

STERILIZATION METHODS AND GENETIC CONTROL

- Hallinan, E. and Rai, K. S. 1973. Radiation sterilization of *Aedes aegypti* in nitrogen and implications for sterile male technique. *Nature (London)* 244(5415):368-369.
- Navqvi, S. N. H., Ashrafi, S. H. and Rasheed, S. 1973. Preliminary screening of miscellaneous compounds for their antifertility effects on *Aedes aegypti* (L.). *Z. Angew. Ent.* 73(1):107-111.
- Rai, K. S. 1973. Genetic control of biting flies: progress and prospects. In *Symposium on Biting Fly Control and Environmental Quality* (edited by Hudson, A.) pp. 79-88.
- Sharma, V. P., Patterson, R. S., Grover, K. K. and LaBrecque, G. C. 1973. Chemosterilization of the tropical house mosquito *Culex pipiens fatigans* Wied.: laboratory and field cage studies. *WHO Bul.* 48(1):45-48.
- Sonoda, H. 1972. The effect of gamma irradiation on fertility and mating competitiveness of the mosquito, *Culex pipiens molestus* F. (Diptera: Culicidae). *Appl. Ent. and Zool.* 7(3):103-108.

GROWTH INHIBITORS

- Henrik, C. A., Staal, G. B. and Siddall, J. B. 1973. Alkyl 3,7,11-trimethyl-2,4-dodecadienates, a new class of potent insect growth regulators with juvenile hormone activity. *J. Agr. and Food Chem.* 21(3):354-359. [Includes *Aedes aegypti*.]
- Miura, T. and Takahashi, R. M. 1973. Insect developmental inhibitors. 3. Effects on non-target aquatic organisms. *J. Econ. Ent.* 66(4): 917-922. [Includes mosquitoes.]
- Schaefer, C. H. and Dupras, E. F., Jr. 1973. Insect developmental inhibitors. 4. Persistence of ZR-515 in water. *J. Econ. Ent.* 66(4):923-925.
- Schaefer, C. H. and Wilder, W. H. 1973. Insect developmental inhibitors. 2. Effects on target mosquito species. *J. Econ. Ent.* 66(4): 913-916. [Includes mosquitoes.]
- Strong, F. E. 1973. Juvenile hormone analogs—third generation pesticides? In *Symposium on Biting Fly Control and Environmental Quality* (edited by Hudson, A.) pp. 35-37. [Includes mosquitoes.]

See also Pridantseva et al. in *Adulticides, Larvicides and Ovicides Section*.

MOSQUITO CONTROL AGENCY PROBLEMS'

- Jones, J. A. 1972. The role of the State Mosquito Control Commission in New Jersey mosquito work. *N. J. Mosquito Extermin. Assoc. Proc.* 59:2-5.
- McDonald, J. L. 1973. Does Arizona need a mosquito abatement program? *Mosquito News* 33(3):385-387.
- Slavin, P. T. 1972. A regional approach to mosquito control in the Great Bay area of New Jersey. *N. J. Mosquito Extermin. Assoc. Proc.* 59:52-54.
- Vannote, R. (Chairman). 1972. Commissioner symposium. *N. J. Mosquito Extermin. Assoc. Proc.* 59:79-100.

PARASITES, PREDATORS, VIRUSES AND RELATED AGENTS

- Anthony, D. W., Hazard, E. I. and Crosby, S. W. 1973. A virus disease in *Anopheles quadrimaculatus*. *J. Invert. Path.* 22(1):1-5.
- Bay, E. C. 1973. Biological control and its applicability to biting flies. In *Symposium on Biting Fly Control and Environmental Quality* (edited by Hudson, A.) pp. 65-70. [Includes mosquitoes.]
- Brown, A. W. A. 1972. Alternative methods of vector control. *Pan Amer. Health Organ. Sci. Pub. No. 238-59-63*, discussion pp. 64-66. [Chiefly mosquitoes.]

- Chapman, H. C. 1973. Assessment of the potential of some pathogens and parasites of biting flies. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 71-77. [Includes mosquitoes.]
- Chapman, H. C., Gorham, J. R. and Fukuda, T. 1973. *Thelohania* (Nosematidae:Microsporida) in *Aedes* mosquitoes of Alaska. Mosquito News 33(3):465-466.
- Dixon, R. D. and Brust, R. A. 1971. Predation of mosquito larvae by the fathead minnow. Manitoba Ent. 5:68-70.
- Faust, R. M. 1973. The *Bacillus thuringiensis* β -exotoxin: current status. Ent. Soc. Amer. Bul. 19(3):153-156. [*Aedes aegypti* tested.]
- Genga, R. and Maffi, M. 1973. *Coelomomyces* sp. infection in *Aedes (Stegomyia) hebreus* Edwards on Nupani Island, Santa Cruz Group, Solomons. J. Med. Ent. 10(4):413-414.
- Goodyear, C. P. 1973. Learned orientation in the predator avoidance behavior of mosquito-fish, *Gambusia affinis*. Behaviour 45(3-4): 191-224.
- Grassmick, R. A. and Rowley, W. A. 1973. Larval mortality of *Culex tarsalis* and *Aedes aegypti* when reared with different concentrations of *Tetrahymena pyriformis*. J. Invert. Path. 22(1):86-93.
- Hagmann, L. E. 1972. The occurrence of enzootic mosquito pathogens in New Jersey. N. J. Mosquito Extermin. Assoc. Proc. 59: 175-176.
- Ilyateldinova, S. G. and Dubitsky, A. M. 1972. Method of determining the toxicity of blue-green algae according to behavior of mosquito larvae. Akad. Nauk Kazak SSR Izvest. Ser. Biol. No. 2:39-42. In Rus.
- Kawarabata, T. and Hayashi, Y. 1972. Development of a cytoplasmic polyhedrosis virus in an insect cell line. J. Invert. Path. 19(3):414-415. [Includes mosquitoes.]
- Khalilulin, G. L. and Ivanov, S. L. 1973. Parasitic fungus *Coelomomyces* sp. in mosquito larvae in the Maryiskaya ASSR. Med. Parazit i Parazit. Bolezni 42(4):487. In Rus.
- Koshy, T. and Chandra, K. R. 1972. New approaches to the control of harmful insects. J. Scientific and Indus. Res. 31(10):515-523. [Includes mosquitoes.]
- Kurihara, T. 1973. Studies on the effectiveness of the guppy *Poecilia reticulata* in controlling *Culex pipiens* s.l. Part I. Laboratory experiments on predation behaviour. Jap. J. Sanit. Zool. 24(1):73-77. In Jap., Engl. Sum.
- Kurihara, T. and Sasa, M. 1973. Studies on the effectiveness of the guppy *Poecilia reticulata* in controlling *Culex pipiens* s.l. Part II. Efficiency of predation in breeding habits. Jap. J. Sanit. Zool. 24(1):79-82. In Jap., Engl. Sum.
- Laird, M. 1973. Dragonflies versus mosquitoes again. Mosquito News 33(3):462-463.
- Laird, M. 1973. Environmental impact of insect control by microorganisms. N. Y. Acad. Sci. Ann. 217:218-226. [Includes mosquitoes.]
- Lebedeva, O. P., Kuznetsova, M. A., Zelenko, A. P. and Gudz-Gorban, A. P. 1973. Investigation of a virus disease of the densonucleosis type in a laboratory culture of *Aedes aegypti*. Acta Virologica 17(3):253-256.
- Legner, E. F. and Medved, R. A. 1973. Influence of *Tilapia mossambica* (Peters), *T. zillii* (Gervais) (Cichlidae) and *Mollienesia latipinna* LeSueur (Poeciliidae) on pond populations of *Culex* mosquitoes and chironomid midges. Mosquito News 33(3):354-363.
- Levchenko, N. G. and Dzerzhinsky, V. A. 1973. On the harmful effect of *Thelohania opacita* (Microsporidia, Nosematidae) in larvae of bloodsucking mosquitoes (Diptera, Culicidae). Akad. Nauk Kazak SSR Izvest. Ser. Biol. No. 1:58-61. In Rus.
- Martignoni, M. E., Williams, P. and Reineke, D. E. 1973. Computer-based catalog of viral diseases of insects: a FAMULUS application. J. Invert. Path. 22(1):100-107.
- Obiamwe, B. A. 1972. The life cycle of *Romanomermis* sp. (Nematoda: Mermithidae) a parasite of mosquitoes. In Biology of Nematodes: Current Studies p. 183.
- Rajasekharan, P. T. and Chowdaiah, B. N. 1972. Selective feeding behaviour of *Gambusia affinis*. Oecologia 11(1):79-81.
- Sweeney, A. W., Lee, D. J., Panter, C. and Burgess, L. W. 1973. A fungal pathogen for mosquito larvae with potential as a microbial insecticide. WHO/MAL/73.805, WHO/VBC/73.444. 4 pp.
- Toscano, N. C. and Reeves, E. L. 1973. Effect of *Aspergillus flavus* mycotoxin on *Culex* mosquito larvae. J. Invert. Path. 22(1):55-59.
- Zharov, A. A. 1973. Detection of a parasitic fungus *Coelomomyces psorophorae* Couch (Phycomycetes: Blastocladiales) in *Aedes vexans* Meigen mosquitoes in the Astrakhan region. Med. Parazit. i Parazit. Bolezni 42(4):485-487. In Rus., Engl. Sum.
- See also MacDonald and Kurihara et al. in Adulticides, Larvicides and Ovicides Section.

VARIOUS TYPES OF CONTROL

- Collett, G. C. and Rees, D. M. 1972. Approaches to mosquito control on the marshes of the Great Salt Lake, Utah. N. J. Mosquito Extermin. Assoc. Proc. 59:26-29.
- Cookingham, R. A. and McLain, P. D. 1972. The changing role of the Division of Fish, Game and Shellfisheries in wetland and estuarine management. N. J. Mosquito Extermin. Assoc. Proc. 59:14-22.
- Goodenough, R. D. 1972. Wetlands regulations in New Jersey. N. J. Mosquito Extermin. Assoc. Proc. 59:202-208.

- Hocking, B. 1973. Environmental quality and biting fly control: problems and possibilities. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 9-14. [Includes mosquitoes.]
- Junkert, R. and Townzen, K. R. 1973. Biological and engineering evaluation of an irrigated pasture mosquito problem in Stanislaus County, California, and recommendations for its alleviation. Calif. Vector Views 20(1): 1-9.
- LaSalle, R. N. and Knight, K. L. 1973. The effects of ditching on the mosquito populations in some sections of *Juncus* salt marsh in Carteret County, North Carolina. Water Resources Res. Inst. (Univ. N. C.) Rpt. No. 82, 162 pp.
- Lomax, J. L., Walker, S. J. and Waters, J. R. 1972. An appraisal of the Bass River State Forest mosquito control program. N. J. Mosquito Extermin. Assoc. Proc. 59:192-197.
- Provost, M. W. 1973. Environmental quality and the control of biting flies. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 1-7. [Includes mosquitoes.]
- Schliessmann, D. J., Joseph, V. R., Solis, M. and Carmichael, G. T. 1973. Drainage and larviciding for control of a malaria focus in Haiti. Mosquito News 33(3):371-378.

COST ANALYSIS

- Riewe, M. C., McNeill, J. C., IV and Ludwig, P. 1972. Effects of mosquitoes on beef cattle production on saltgrass pastures along the Texas Gulf Coast. Texas Agr. Expt. Sta. Prog. Rpt. 3123:43-49.
- Steelman, C. D., White, T. W. and Schilling, P. E. 1973. Effects of mosquitoes on the average daily gain of Hereford and Brahman breed steers in southern Louisiana. J. Econ. Ent. 66(5):1081-1083.

EQUIPMENT

- Hayden, D. L., Mulrennan, J. A., Weeks, W. V. and Ulmer, F. M. 1973. Ultra low volume dispersal equipment for military helicopters. Mosquito News 33(3):387-391.
- Levick, A. 1972. New amphibious equipment for mosquito control on tidelands. N. J. Mosquito Extermin. Assoc. Proc. 59:189-191.
- Rafatjah, H. A. and Pearson, J. A. 1973. A simple flowmeter for measuring variation in the discharge rates of sprayer nozzle tips. WHO Bul. 48(3):375-377.
- Rupp, H. R. 1973. An effective filter for ULV application of malathion. Mosquito News 33 (3):463-464.
- Thompson, G. A. 1973. Some errors inherent in U. L. V. operations. Mosquito News 33(3): 364-367.

ATTRACTANTS AND REPELLENTS

- Gualtieri, F. and Coauthors. 1973. Topical mosquito repellents. VI. Sulfonamides and quinoline-4-carboxylic acid derivatives. J. Pharmaceut. Sci. 62(5):849-851.
- Kalpage, K. S. P. and Brust, R. A. 1973. Oviposition attractant produced by immature *Aedes atropalpus*. Environmtl. Ent. 2(5):729-730.
- Maasch, H. J. 1973. Investigations on the repellent effects of vitamin B₁. Z. Tropenmed. u. Parasitol. 24(1):119-122. In Ger., Engl. Sum. [*Culex p. quinquefasciatus* and *Anopheles gambiae*.]
- Okoth, J. 1973. *Tagetes minuta* L., as a repellent and insecticide against adult mosquitoes. East Afr. Med. J. 50(6):317-322.
- Section on Insect Repellent Research. 1973. Chemical structure and biological activity: synthesis of N-substituted ethyl carbamates and their mosquito repellent activities. Acta Ent. Sinica 16(1):39-46. In Chin., Engl. Sum. [*Aedes aegypti* used.]
- Weidhaas, D. E. 1973. Personal-use repellents and repellent-treated netting: a review of their effectiveness and related applied and basic research. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 109-114.
- White, G. B. 1973. The insect-repellent value of *Ocimum* spp. (Labiatae): traditional anti-mosquito plants. East Afr. Med. J. 50(5):248-252.

RESISTANCE AND SUSCEPTIBILITY

- Correa, R. D. R., Ferreira, E., Ramalho, R. G. and Zaia, L. 1971. Susceptibilidade do *Anopheles darlingi*, vetor de malária, aos inseticidas. Rev. Brasil. de Malariol. 23(1-4):105-110. Engl. Sum. [Pub. received 1973.]
- Georghiou, G. P. 1972. The evolution of resistance to pesticides. Ann. Rev. Ecol. and Systematics 3:133-168. [Mosquitoes included.]
- Hobbs, J. H. 1973. Effect of agricultural spraying on *Anopheles albimanus* densities in a coastal area of El Salvador. Mosquito News 33(3):420-423.
- Kupriyanova, E. S. and Coauthors. 1973. On the characteristics of synanthropic populations of *Culex pipiens* L. in the Soviet Union. Communication II. The level of sensitivity to DDT and BHC. Med. Parazit. i Parazit. Boleznii 42(3):305-312. In Rus., Engl. Sum.
- Rongshriyam, Y. and Busvine, J. R. 1973. Relation between time and concentration in equitoxic exposures of mosquitos to papers treated with organophosphorus and carbamate insecticides and their rate of deterioration at different storage temperatures. WHO/VBC/73.436, 9 pp.
- Zahar, A. R. and Davidson, G. 1973. The practical implication of resistance of malaria

vectors to insecticides. WHO/MAL/73.803, WHO/VBC/73.448. 12 pp.

PESTICIDES AND CHEMICALS

- Brust, R. A. 1971. DDT residues in soil in the Winnipeg area. Manitoba Ent. 5:49-53.
- Egloff, D. A. and Partridge, R. 1972. Resistance to DDT of a freshwater alga. Ohio J. Sci. 72(1):6-10.
- Elgar, K. E., Mathews, B. L. and Bosio, P. 1972. Dichlorvos residues in food arising from the domestic use of dichlorvos PVC strips. Pesticide Sci. 3(5):601-607.
- Elgar, K. E. and Steer, B. D. 1972. Dichlorvos concentrations in the air of houses arising from the use of dichlorvos PVC strips. Pesticide Sci. 3(5):591-600.
- Elliott, M. and Coauthors. 1973. Potent pyrethroid insecticides from modified cyclopropane acids. Nature (London) 244(5416):456-457.
- Fahmy, M. A. H., Fukuto, T. R., Metcalf, R. L. and Holmstead, R. L. 1973. Structure-activity correlations in DDT analogs. J. Agr. and Food Chem. 21(4):585-591.
- Gupta, D. S. and Mishra, R. C. 1971. Status of bioassay in the determination of insecticide residues. Pesticides (Bombay) 5(8):18-23, 26.
- Hayashi, A. and Tanaka, T. 1973. Etude sur le pouvoir insecticide de *d-trans*-Allethrine. Botyu-Kagaku 38(1):29-32. Fr. Sum. [Includes mosquitoes.]
- Klassen, W. and Schwartz, P. H., Jr. 1973. The role of the USDA in developing new chemical pesticides. Ent. Soc. Amer. Bul. 19(2):98-99.
- Lichtenstein, E. P., Liang, T. T. and Anderegg, B. N. 1973. Synergism of insecticides by herbicides. Science 181(4102):847-849. [*Aedes aegypti* included.]
- Nalin, D. R. 1973. Epidemic of suicide by malathion poisoning in Guyana. Report of 264 cases. Trop. and Geog. Med. 25(1):8-14.
- Parmar, B. S. and Gulati, K. C. 1971. Chemical classification of pyrethrum synergists. Pesticides (Bombay) 5(10):14-15.
- Peterson, J. W. 1972. Pesticide use on federal wetlands in the Northeast. N. J. Mosquito Extermin. Assoc. Proc. 59:61-64.
- Ruber, E. 1972. Food additives, drugs and pesticides: parallelism in science and society. N. J. Mosquito Extermin. Assoc. Proc. 59:38-51.
- Sutherland, D. J., Helrich, K. and Siewierski, M. 1972. Incidents of fish mortalities in Cape May, New Jersey, in 1971. N. J. Mosquito Extermin. Assoc. Proc. 59:185-189.
- Wells, L. F., Jr. 1972. Massachusetts pesticide regulations as they affect mosquito control. N. J. Mosquito Extermin. Assoc. Proc. 59:23-26.
- Wilhelm, K. and Reiner, E. 1973. Effect of sample storage on human blood cholinesterase

activity after inhibition by carbamates. WHO Bul. 48(2):235-238.

Wilson, D. and Coauthors. 1973. DDT concentrations in human milk. Amer. J. Dis. Children 125(6):814-817.

World Health Organization. 1973. Pesticide residues in food. Report of the 1972 joint FAO/WHO meeting. WHO Tech. Rpt. Ser. No. 525, 47 pp.

World Health Organization. 1972. 1971 evaluations of some pesticide residues in food. WHO Pesticide Residues Ser. No. 1, 345 pp.

TOXICOLOGY

Snow, D. H. 1973. The acute toxicity of dichlorvos in the dog: 2. Pathology. Austral. Vet. J. 49(3):120-125.

Snow, D. H. and Watson, A. D. J. 1973. The acute toxicity of dichlorvos in the dog: I. Clinical observations and clinical pathology. Austral. Vet. J. 49(3):113-119.

BEHAVIOR, BIOLOGY AND ECOLOGY

Akiyama, J. 1973. Exophily in *Anopheles gambiae* species B in the Sudan. Roy. Soc. Trop. Med. and Hyg. Trans. 67(4):440.

Barbosa, P. and Peters, T. M. 1973. Some effects of overcrowding on the respiration of larval *Aedes aegypti*. Ent. Expt. et Applicata 16(2):146-156.

Brust, R. A. 1973. Distribution of *Aedes* mosquito larvae and their control. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 133-138.

Corbet, P. S. and Danks, H. V. 1973. Seasonal emergence and activity of mosquitoes (Diptera: Culicidae) in a high-Arctic locality. Canad. Ent. 105(6):837-872.

Coz, J. 1973. Contribution à la biologie du complexe *A. gambiae* Giles en Afrique Occidentale. Ent. Méd. Parasitol. Cah. XI(1):33-40. Engl. Sum.

Coz, J. 1973. Contribution à l'étude du complexe *A. gambiae*. Répartition géographique et saisonnière en Afrique de l'ouest. Ent. Méd. Parasitol. Cah. XI(1):3-31. Engl. Sum.

Dadd, R. H. 1973. Autophagostimulation by mosquito larvae. Ent. Expt. et Applicata 16(3):295-300. [*Culex pipiens*.]

Downing, J. D. and Frost, E. L. 1972. Recent radar observations of diurnal insect behavior. N. J. Mosquito Extermin. Assoc. Proc. 59:114-131.

Guptavanij, P., Vutikes, S. and Surathin, K. 1973. The biting cycles of *Mansonia bonneae*, *M. dives*, *M. indiana* and *M. uniformis* in southern Thailand. Southeast Asian J. Trop. Med. and Pub. Health 4(2):288-289.

- Hayes, J. 1973. Overwintering *Culex pipiens pipiens* in the Ohio-Mississippi River Basin 1962-1967. *Mosquito News* 33(3):424-428.
- Ho, B. C., Chan, Y. C. and Chan, K. L. 1973. Field and laboratory observations on landing and biting periodicities of *Aedes albopictus* (Skuse). *Southeast Asian J. Trop. Med. and Pub. Health* 4(2):238-244.
- Jones, J. C. and Pilitt, D. R. 1973. Observations on the sexual behavior of free-flying *Aedes aegypti* mosquitoes. *Biol. Bul.* 144(3):480-488.
- Kukharchuk, L. P. and Gomoyunova, N. P. 1972. Species composition and ecology of blood-sucking mosquitoes (Diptera, Culicinae) in the foothill forest steppe of the Kuznetsk Ala-Tau. In *The Fauna and Ecology of Arthropoda from Siberia*. Acad. Sci. USSR Siberian Branch. Proc. Biol. Inst. Fasc. 11:105-111. In Rus.
- Laudani, U. and Bianchi, U. 1973. Comportamento discriminante di *Anopheles atroparvus* durante l'ovodeposizione. *Riv. di Parassitologia* 34(1):73-81. Engl. Sum.
- Makiya, K. 1973. Population dynamics of mosquitoes in Nagoya district. V. Seasonal change of composition rate of *Culex pipiens molestus* and *Culex pipiens pallens* observed in a mid-town building. *Jap. J. Sanit. Zool.* 2(1):89-96. In Jap., Engl. Sum.
- Mamedniyazov, O. 1970. On some observations of *Culiseta longiareolata* Macq. (Diptera, Culicidae). Akad. Nauk Turkmensk. SSR (Biol.) Izvest. (Ashkhabad) No. 6:80-81. In Rus., Engl. Sum.
- McCrae, A. W. R. and Boreham, P. F. L. 1973. The ecology of host selection in a tropical African mosquito, *Anopheles implexus*. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(4):439.
- McDonald, J. L. and Lu, L. C. 1973. Preference of *Mansonia uniformis* (Theob.) for specific water hyacinth plants. *Mosquito News* 33(3):466-467.
- Metselaar, D. and Coauthors. 1973. Some observations on *Aedes (Aedimorphus) dentatus* (Theo.) (Dipt., Culicidae) in Kenya. *Bul. Ent. Res.* 62(4):597-603.
- Mogi, M. and Wada, Y. 1973. Spatial distribution of larvae of the mosquito *Culex tritaeniorhynchus summorosus* in a rice field area. *Trop. Med. (Nagasaki)* 15(2):69-83. In Engl. Jap. Sum.
- Poitrenau, H., Beytout, D. and Bastide, P. 1973. Action of some antimitotic agents on the development of larvae of *Aedes aegypti*. *Compt. Rend. Soc. de Biol. (Paris)* 167(2):282-285. In Fr.
- Polyakova, P. E. 1972. Bloodsucking mosquitoes in the vicinity of the Ust-Khantaiski hydroelectric power plant. In *The Fauna and Ecology of Arthropoda from Siberia*. Acad. Sci. USSR Siberian Branch. Proc. Biol. Inst. Fasc. 11:112-119. In Rus.
- Reisen, W. K. 1973. Invertebrate and chemical serial progression in temporary pool communities at Turner's Falls, Murray County, Oklahoma. *Kans. Ent. Soc. J.* 46(3):294-301.
- Rozeboom, L. E., Rosen, L. and Ikeda, J. 1973. Observations on oviposition by *Aedes (S.) albopictus* Skuse and *A. (S.) polynesiensis* Marks in nature. *J. Med. Ent.* 10(4):397-399.
- Service, M. W. 1973. Flight activities of mosquitoes with emphasis on host seeking behaviour. In *Symposium on Biting Fly Control and Environmental Quality* (edited by Hudson, A.) pp. 125-132.
- Shalaby, A. M. 1972. A study of the out-door population of anopheline mosquitoes in Gujarat State of India (Diptera: Culicidae). *Soc. Ent. Egypte Bul.* 56:369-388.
- Shroyer, D. A. and Siverly, R. E. 1970. A preliminary study of mosquito populations at waste lagoons in East-Central Indiana—1970. *Indiana Acad. Sci. Proc.* 80:275-282. [Pub. 1971. Includes *Aedes*, *Anopheles*, *Culex*.]
- Skierska, B. 1973. The effect of larval density on the fertility of females *Culex pipiens molestus* Forsk. (Diptera, Culicidae). *Inst. Marine Med. Gdansk Bul.* 24(1-2):135-141.
- Spielman, A. and Wong, J. 1973. Studies on autogeny in natural populations of *Culex pipiens*. III. Midsummer preparation for hibernation in anautogenous populations. *J. Med. Ent.* 10(4):319-324.
- Sweeney, A. W. and Russell, R. C. 1973. Autogeny in *Anopheles amictus hilli*. *Mosquito News* 33(3):467-468.
- Thomas, V. and Leng, Y. P. 1973. Hybridization between *Aedes aegypti* and *Aedes albopictus* in Malaysia. *Southeast Asian J. Trop. Med. and Pub. Health* 4(2):226-230.
- Tonn, R. J., Bang, Y. H. and Pwele, A. 1973. Studies on *Aedes simpsoni* and *Aedes aegypti* in three rural coastal areas of Tanzania. WHO/VBC/73.442, 9 pp.
- Wall, W. J., Jr. 1973. The intertidal sand and salt marsh invertebrate fauna associated with the bloodsucking Diptera of Cape Cod, Massachusetts. *Environmtl. Ent.* 2(4):681-684. [Includes mosquitoes.]
- Webber, L. A. and Edman, J. D. 1972. Anti-mosquito behaviour of cincloniform birds. *Animal Behav.* 20(2):228-232.
- White, G. B. and Rosen, P. 1973. Comparative studies on sibling species of the *Anopheles gambiae* Giles complex (Dipt., Culicidae). II. Ecology of species A and B in savanna around Kaduna, Nigeria, during transition from wet to dry season. *Bul. Ent. Res.* 62(4):613-625.
- Yajima, T. 1973. Ecological studies on the gonotrophic cycle of the mosquito, *Culex tritaeniorhynchus summorosus* Dyar, in relation to the ovarian condition. *Tohoku Univ. Sci. Rpt. Ser. 4 (Biol.)* 36(4):241-253. In Engl.
- Yasuno, M., Rajagopal, P. K., Russel, S. and

LaBrecque, G. C. 1973. Influence of seasonal changes in climate on dispersal of released *Culex pipiens fatigans*. A study in villages in Delhi Union Territory, India. WHO Bul. 48(3):317-321.

GENETICS

Akiyama, J. 1973. Further isolations of translocations in *Anopheles gambiae* species A. Roy. Soc. Trop. Med. and Hyg. Trans. 67(4):440-441.

Coluzzi, M., Di Deco, M. and Cancrini, G. 1973. Chromosomal inversions in *Anopheles stephensi* Liston. WHO/VBC/73.804, WHO/VBC 73.447, 11 pp.

Cousserans, J. and Guille, G. 1973. Expérience de lutte génétique contre *Culex pipiens* dans la région de Montpellier. 2^e année d'observations. Bul. Biol. de France et de Belg. 106(4): 337-343.

Coz, J. 1973. Les mécanismes d'isolement génétique dans le complexe *Anopheles gambiae* Giles. Ent. Méd. Parasitol. Cah. XI(1): 41-56. Engl. Sum.

Espinola, H. N. and Consoli, R. A. B. 1972. Cruzamentos entre colônias de *Culex pipiens fatigans* Wiedemann procedentes de diferentes partes do Brasil. Rev. Brasil. de Malariol. 24(1-4):165-172. Engl. Sum. [Wiedemann in original.]

Iqbal, M. P., Tahir, M. K., Sakai, R. K. and Baker, R. H. 1973. Linkage groups and recombination in the malaria mosquito. J. Heredity 64(3):133-136.

Jones, M. D. R. and Gubbins, S. 1973. Genetic differences in circadian flight-activity in *Anopheles stephensi*. Roy. Soc. Trop. Med. and Hyg. Trans. 67(4):439.

Kitzmiller, J. B. and Chow, G. Y. 1971. The salivary gland chromosomes of *Anopheles aquasalis*. Rev. Brasil. de Malariol. 23(1-4):65-85. [Pub. received 1973.]

Rai, K. S., Grover, K. K. and Suguna, S. G. 1973. Genetic manipulation of *Aedes aegypti*: incorporation and maintenance of a genetic marker and a chromosomal translocation in natural populations. WHO Bul. 48(1):49-56.

Schumann, W. 1973. Immunogenetic and electrophoretic studies with extracts of different adult *Culex pipiens* strains. J. Insect Physiol. 19(7):1387-1396.

ANATOMY, MORPHOLOGY AND PHYSIOLOGY

Chaika, S. Yu. 1972. The new interneuron junction in the sensilla of the mosquito *Culex pipiens molestus* Forsk. (Culicidae: Diptera). Vest. Moskov Univ. Biol. Pochvovedenie Ser. 6(5):100-102. In Rus., Engl. Sum.

Cochrane, A. 1972. Body weight and blood

meal weight as factors affecting egg production of the tree-hole mosquito, *Aedes triseriatus* (Say). N. J. Mosquito Extermin. Assoc. Proc. 59:65-78.

Gwadz, R. W. and Spielman, A. 1973. Corpus allatum control of ovarian development in *Aedes aegypti*. J. Insect Physiol. 19(7):1441-1448.

Elizarov, Yu. A. and Chaika, S. Yu. 1973. Axons of the labellar nerve of mosquitoes *Aedes aegypti* L. (Culicidae: Diptera). Vest. Moskov Univ. Biol. Pochvovedenie Ser. 6(2): 87-91. In Rus., Engl. Sum.

Hagedorn, H. H. and Fallon, A. M. 1973. Ovarian control of vitellogenin synthesis by the fat body in *Aedes aegypti*. Nature (London) 244(5411):103-105.

Nayar, J. K. and Sauerman, D. M., Jr. 1972. Flight performance and fuel utilization as a function of age in female *Aedes taeniorhynchus*. Israel J. Ent. 7:27-35.

Nayar, J. K. and Sauerman, D. M., Jr. 1973. A comparative study of flight performance and fuel utilization as a function of age in females of Florida mosquitoes. J. Insect Physiol. 19(10):1977-1988.

Samish, M. and Akov, S. 1972. Influence of feeding on midgut protease activity in *Aedes aegypti*. Israel J. Ent. 7:41-48.

Tsarichkova, D. B. and Karpenko, L. V. 1973. A study of the development capacity of gonads in dwarf females of some species of mosquitoes and flies (Diptera, Culicidae and Muscidae). Ent. Obozr. 52(2):260-266. In Rus., Engl. Sum.

See also Jones et al. and Yajima in Behavior, Biology and Ecology Section.

TECHNIQUES

Bailly-Choumara, H. 1973. Etude comparative de différentes techniques de récolte de moustiques adultes (Diptera, Culicidae) faite au Maroc, en zone rurale. WHO/MAL/73.806, WHO/VBC/73.449, 20 pp.

Craig, D. A., Braybrook, G., McIntyre, M. and Scott, J. S. 1973. A simple accessory for examining pinned insect material at low magnifications in a stereoscan, scanning electron microscope (SEM). Canad. Ent. 105(7):995-996.

Dhar, G. M., Prasad, B. G., Bhatnagar, J. K. and Mathur, Y. D. 1972. A survey on rats, rat fleas, house-flies and mosquitoes in Village Rahimabad, Lucknow district. Indian J. Med. Res. 60(8):1232-1241.

Haufe, W. O. 1973. Systems evaluation: its role in assessing and monitoring biting fly research and in developing control procedures. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 39-48. [Includes mosquitoes.]

Kamuz, Yu. P. 1973. An exposure meter for

- entomological studies. Med. Parazit. i Parazit. Bolezni 42(4):491-492. In Rus., Engl. Sum. Illus.
- Lofgren, C. S., Anthony, D. W. and Mount, G. A. 1973. Size of aerosol droplets impinging on mosquitoes as determined with a scanning electron microscope. J. Econ. Ent. 66(5): 1085-1088.
- McClelland, G. A. H., McKenna, R. J. and Cahill, T. A. 1973. New approaches for mark-release-recapture studies of biting insects. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 49-52. [Includes mosquitoes.]
- Mirzaeva, A. G. and Patrusheva, V. D. 1972. Certain methods of estimating bloodsucking insects. In The Fauna and Ecology of Arthropoda from Siberia. Acad. Sci. USSR Siberian Branch. Proc. Biol. Inst. Fasc. 11:137-151. In Rus. [Includes collection and rearing of mosquitoes.]
- Rosales-Ronquillo, M. C., Simons, R. W. and Silverman, P. H. 1973. Aseptic rearing of *Anopheles stephensi* (Diptera: Culicidae). Ent. Soc. Amer. Ann. 66(5):949-954.
- Stanford, J. A. 1973. A centrifuge method for determining live weights of aquatic insect larvae, with a note on weight loss in preservative. Ecology 54(2):449-451. [Includes Diptera.]
- Trottier, R. 1973. A controlled temperature and humidity cabinet for recording the emergence behaviour of aquatic insects. Canad. Ent. 105(7):971-974.
- Watanabe, M., Kamimura, K. and Kubota, K. 1973. A simplified method for the analysis of various sugars fed the mosquito, *Culex pipiens* s.l. Jap. J. Sanit. Zool. 24(1):17-21. In Jap., Engl. Sum.
- Colless, D. H. 1973. A note on the status of *Aedes malayensis* and the distribution of *Aedes albopictus*. Mosquito Systematics 5(3): 225-226.
- Downes, J. A. 1973. Biting flies: the necessity for a new systematics. In Symposium on Biting Fly Control and Environmental Quality (edited by Hudson, A.) pp. 115-123. [Includes mosquitoes.]
- Gribine, A. 1972. Une nouvelle espèce de moustique du Congo-Brazzaville: *Eretmapodites hamoni* n. sp. (Dipt. Culicidae). Soc. Ent. France Bul. 77(9-10):308-313. [n. sp.]
- Harrison, B. A. 1973. *Anopheles (An.) reidi*, a new species of the *barbirostris* species complex from Sri Lanka (Diptera: Culicidae). Ent. Soc. Wash. Proc. 75(3):365-371. [n. sp.]
- Manischewitz, J. R. 1973. Prediction and alternative procedures in numerical taxonomy. Systemat. Zool. 22(2):176-184.
- Mattingly, P. F. 1973. Mosquito eggs XXIV. Genus *Deinocerites* Theobald. Mosquito Systematics 5(3):221-224.
- Moriya, K., Yabe, T. and Harada, F. 1973. Chorionic markings of some acidine mosquitoes in Japan. I. Preliminary observations by a scanning electron microscope and a reflected lighting microscope. Jap. J. Sanit. Zool. 24(1):47-55. In Jap., Engl. Sum.
- Reinert, J. F. 1972. Contributions to the mosquito fauna of Southeast Asia. XV. Genus *Aedes* Meigen, subgenus *Ayurakitia* Thurman. Amer. Ent. Inst. Contrib. 9(2):1-42. [*A. peytoni* n. sp.]
- Reinert, J. F. 1973. *Aedes consonans*, a new species of the subgenus *Neomacleaya* from South Vietnam (Diptera: Culicidae). Mosquito Systematics 5(3):252-262. [n. sp.]
- Reuben, R. 1973. Pictorial key to the mosquitoes, *Aedes (Stegomyia)* spp., breeding in domestic containers in India. WHO/VBC/73.434, 3 pp.
- Sirivanakarn, S. 1972. Contributions to the mosquito fauna of Southeast Asia. XIII. The genus *Culex*, subgenus *Eumelanomyia* Theobald in Southeast Asia and adjacent areas. Amer. Ent. Inst. Contrib. 8(6):1-86. [*C. malayensis*, *phangngae* and *baisasi* n. spp.]
- Sirivanakarn, S. 1973. The forms of *Culex (Culex) bitaeniorhynchus* Giles in Southeast Asia. Mosquito Systematics 5(3):235-251.
- See also Knight et al. in Literature References and Reviews Section; McDonald et al. in Distribution Section.

DISTRIBUTION

- Belkin, J. N. and Heinemann, S. J. 1973. Collection records of the project "Mosquitoes of Middle America". I. Introduction; Dominican Republic (RDO). Mosquito Systematics 5(3): 201-220.
- Dentinova, T. S. and Smelova, V. A. 1973. On the medical importance of mosquitoes (Cu-
- TAXONOMY**
- Berlin, O. G. W. and Pandian, R. S. 1973. Description of the egg of *Culex (Lutzia) fuscatus* Wiedemann (Diptera, Culicidae). Mosquito Systematics 5(3):227-229.

- licidae, Diptera) of the fauna of the Soviet Union. *Med. Parazit. i Parazit. Bolezni* 42(4): 455-471. In Rus., Engl. Sum.
- Kukharchuk, L. P. and Evstigneeva, N. S. 1971. The territorial distribution of blood-sucking flies (Diptera, Culicinae) in Tuva. *Izvest. Sibirsk. Otdel. Akad. Nauk SSSR Ser. Biol.* No. 3:97-102. In Rus., Engl. Sum.
- Lofti, M. D. 1973. Iranian species of the genus *Culex* (Culicinae: Diptera). —II. Report of four species of larvae (including three new records) and 14 adult species. *Soc. de Path. Exot. Bul.* 66(1):204-207. In Engl.
- McDonald, J. L., Sluss, T. P., Lang, J. D. and Roan, C. C. 1973. Mosquitoes of Arizona. *Ariz. Agr. Expt. Sta. Bul.* 205, 21 pp.
- Nielsen, L. T., Wolff, T. A. and Linam, J. H. 1973. New distribution records for snowpool *Aedes* mosquitoes in the mountains of Arizona and New Mexico. *Mosquito News* 33(3):378-380.
- Ramalingam, S. and Pillai, A. G. 1973. Ten new records of mosquitoes occurring in West Malaysia. *Southeast Asian J. Trop. Med. and Pub. Health* 4(2):271-272.
- Shalaby, A. M. 1972. Survey of the mosquito fauna of Fezzan south-western Libya (Diptera: Culicidae). *Soc. Ent. Egypte Bul.* 56:301-312.
- Sichinava, Sh. G. 1973. Species and subspecies composition of blood-sucking mosquitoes (Diptera, Culicidae) and their prevalence in Abkhazia area. *Med. Parazit. i Parazit. Bolezni* 42(3):313-315. In Rus., Engl. Sum.
- collection and virus isolation. *Ann. Scavo (Siena)* 13(1):1-8. In Engl., Fr. and Ital. Sum. [Mosquitoes included.]
- Aspöck H., Kunz, C., Picher, O. and Böck, F. 1973. Virological and serological investigations on the role of birds as hosts of arboviruses in eastern Austria. *Zentbl. Bakteriol. Parasit. Infektionskr. u. Hyg. I. Abt. Orig. Reihe A* 224(2):156-167. In Ger., Engl. Sum.
- Atmosoedjono, S. and Coauthors. 1973. Observations on possible *Culex* arbovirus vectors in Djakarta, Indonesia. *Southeast Asian J. Trop. Med. and Pub. Health* 4(1):108-112.
- Brown, D. and Work, T. H. 1973. Mosquito transmission of arboviruses at the Mexican border in Imperial Valley, California 1972. *Mosquito News* 33(3):381-385.
- Brummer-Korvenkontio, M. 1973. Arboviruses in Finland. V. Serological survey of antibodies against Inkoo virus (California group) in human, cow, reindeer, and wildlife sera. *Amer. J. Trop. Med. and Hyg.* 22(5):654-661.
- Calisher, C. H. and Coauthors. 1973. Relationships of *Anopheles* A group arboviruses. *Soc. Expt. Biol. and Med. Proc.* 143(2):465-468.
- Casals, J. and Buckley, S. 1973. Isolation of dengue-2 virus from Puerto Rico. *Dengue Newslet. Americas (WHO PAHO)* 2(2): 6-7.
- Cline, B. L., Lee, D. and Rymzo, W. T. 1973. Puerto Rico. Recent surveillance activities. *Dengue Newslet. Americas (WHO PAHO)* 2(1):4-6.
- Cline, B. L., Rymzo, W. T., Jr. and Kemp, G. E. 1973. Dengue in Villalba, Puerto Rico. *Dengue Newslet. Americas (WHO PAHO)* 2(2):5.
- Digoutte, J. P., Gagnard, V. J. M., Brès, P. and Pajot, F. X. 1972. Human infection by Nyando virus. *Soc. de Path. Exot. Bul.* 65(6): 751-758. In Fr.
- Doherty, R. L. and Coauthors. 1973. Isolation of arboviruses from mosquitoes, biting midges, sandflies and vertebrates collected in Queensland, 1969 and 1970. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(4):536-543. [Wongorr virus from *Aedes lineatopennis*.]
- Datt, N. S. and Coauthors. 1972. Studies on African horsesickness virus type IX ('Jaipur' strain): adaptation of the virus to embryonating chicks and development of a modified vaccine strain. *Indian J. Animal Sci.* 42(8): 601-605.
- Datt, N. S. and Coauthors. 1972. Studies on African horsesickness virus type IX ('Jaipur' strain): host-range pathogenicity including adaptation to guinea-pigs and mice. *Indian J. Animal Sci.* 42(6):438-441.
- Datt, N. S., Sehgal, C. L., Sharma, G. L. and Kumar, S. 1972. Studies on African horsesickness virus type IX ('Jaipur' strain): immunological studies with mouse-adapted virus. *Indian J. Animal Sci.* 42(6):442-445.
- Filipe, A. R., Carvalho, R. G., de and Pinto,

SEVERAL DISEASES

- Audy, J. R. 1972. Aspects of human behavior interfering with vector control. *Pan Amer. Health Organ. Sci. Pub. No.* 238:67-82, discussion pp. 83-84. [Includes mosquitoes.]
- Cambourne, F. J. C. 1972. Diptères vecteurs de maladies parasitaires de l'homme, au Portugal. *Escola Nacional de Saúde Pública e Medicina Tropicais Anais* 6(1-4):95-99. [Includes mosquitoes.]
- Gillet, J. D. 1973. The mosquito: still man's worst enemy. *Amer. Scientist* 61(4):430-436.
- Mohr, W. 1973. Tropical diseases in Europe. *Wien. Med. Wochenschr.* 123(12):191-198. In Ger.
- Steele, J. H., Arambulo, P. V., III and Beran, G. W. 1973. The epidemiology of zoonoses in the Philippines. *Arch. Environmtl. Health* 26(6):330-339. [Includes mosquito-borne diseases.]
- See also Detinova et al. in Distribution Section.

ARBOVIRUSES AND OTHER VERTEBRATE VIRUSES

- Albanese, M. and Coauthors. 1971. Investigation on arboviruses in western Sicily: insect

- M. R. 1972. Uma epidemia em Luanda causada pelo vírus chikungunya. Escola Nacional de Saúde Públ. e Med. Trop. Anais 6(1-4):101-108. Engl. Sum.
- Gadkari, D. A. and Goverdhan, M. K. 1973. Studies on non-specific inactivation of some arboviruses by fresh serum from different laboratory animals. Current Sci. (Bangalore) 42 (10):346-348.
- Groot, H. 1973. Colombia. Follow-up report on the 1971-72 dengue epidemic in Colombia. Dengue Newslet. Americas (WHO PAHO) 2(2):4.
- Halstead, S. B., Shotwell, H. and Casals, J. 1973. Studies on the pathogenesis of dengue infection in monkeys. I. Clinical laboratory responses to primary infection. II. Clinical laboratory responses to heterologous infection. J. Infect. Dis. 128(1):7-14; 15-22.
- Heinz, F. and Coauthors. 1972. A contribution to the problem of Tahyna virus importance in the North Moravia Region. Cs. Epidemiol. Mikrobiol. Immunol. 21(3):149-158. In Czech., Engl. Sum.
- Helenius, A. and Söderlund, H. 1973. Stepwise dissociation of the Semliki Forest virus membrane with Triton X-100 (BBA 76288). Biochimica et Biophysica Acta 307(2):287-300.
- Inglot, A. D., Albin, M. and Chudzio, T. 1973. Persistent infection of mouse cells with Sindbis virus: role of virulence of strains, autointerfering particles and interferon. J. General Virol. 20(1):105-110.
- Issel, C. J., Hoff, G. L. and Trainer, D. O. 1973. Serologic evidence of infection of white-tailed deer in Texas with three California group arboviruses, (Jamestown Canyon, San Angelo, and Keystone). J. Wildlife Dis. 9(3):245-248.
- Ivanic, S. 1973. Nonspecific inhibitors of arbovirus hemagglutinin. Pathologia et Microbiol. 39(1):17-18.
- Joubert, L., Desmettre, P., Prave, M. and Oudar, J. 1973. Classification actuelle des virus zoothopathogènes. Rev. de Méd. Vét. 124(5):635-639. [Includes myxomatosis.]
- Karabatsos, N. 1973. Physical properties and antigenic components of Oriboca virus. Infect. and Immunity 8(1):53-62.
- Kumar, S. and Coauthors. 1972. Studies on African horsesickness virus type IX ('Jaipur' strain): development of modified mouse strain vaccine. Indian J. Animal Sci. 42(6):446-449.
- Kumar, S. and Coauthors. 1972. Studies on African horsesickness virus type IX ('Jaipur' strain): further studies on mouse-adapted vaccine. Indian J. Animal Sci. 42(8):597-600.
- Lvov, D. K. 1973. Arbovirus infections in Australia and Oceania. Med. Parazit. i Parazit. Bolezni 42(3):342-348. In Rus., Engl. Sum. [Includes mosquito-borne.]
- Maeda, A. and Coauthors. 1973. Kurotori virus: a virus newly isolated from *Anopheles sinensis* and pathogenic to mice. I. Isolation and properties. Biken J. 16(2):43-50.
- Marchette, N. J. and Coauthors. 1973. Studies on the pathogenesis of dengue infection in monkeys. III. Sequential distribution of virus in primary and heterologous infections. J. Infect. Dis. 128(1):23-30.
- Martini, G. A. 1973. Marburg virus disease. Postgrad. Med. J. 49(574):542-546. [Possibly mosquito-borne.]
- McClean, D. M. 1973. Canada. Laboratory studies with *Aedes aegypti* and dengue-2 virus. Dengue Newslet. Americas (WHO PAHO) 2(2):3.
- McLean, D. M. 1973. Canada. Research on mosquitoes as amplifying hosts. Dengue Newslet. Americas (WHO PAHO) 2(1):2. [Includes *Aedes aegypti*.]
- McIntosh, B. M. 1972. Rift Valley fever. I. Vector studies in the field. South Afr. Vet. Assoc. J. 43(4):391-395.
- Mécs, I. 1973. The kinetics of formation and sensitivity to interferon of viral intermediates appearing in chick cells infected with Semliki Forest virus. Acta Virologica 17(3):177-188.
- Pant, C. P., Jatanasen, S. and Yasuno, M. 1973. Prevalence of *Aedes aegypti* and *Aedes albopictus* and observations on the ecology of dengue haemorrhagic fever in several areas of Thailand. Southeast Asian J. Trop. Med. and Pub. Health 4(1):113-121.
- Pedersen, C. E., Jr., Barrera, C. R. and Sagik, B. P. 1973. Immunochemical studies of Sindbis virus variants. Arch. Gesamte Virusforsch. 41(1-2):28-29.
- Ranki, M., Kääriäinen, L. and Renkonen, O. 1972. Semliki Forest virus glycoproteins and canavanine. Acta Path. et Microbiol. Scand. 80B(5):760-768.
- Reeves, W. C. 1972. Recrudescence of arthropod-borne virus diseases in the Americas. Pan Amer. Health Organ. Sci. Pub. No. 238:3-14, discussion pp. 15-16.
- Rudnick, A. and Dewey, R. W. 1973. Plaque formation in Vero cell cultures by some Malaysian viruses. Southeast Asian J. Trop. Med. and Pub. Health 4(2):272-273.
- Schwanzerova, I. 1973. Growth of California group viruses in tissue fragments. Acta Virologica 17(3):262.
- Siung, O. H. 1973. Trinidad and Tobago. Status of *A. aegypti* control program. Dengue Newslet. Americas (WHO PAHO) 2(1):7-8.
- Srihongse, S., Stacy, H. G. and Gauld, J. R. 1973. A survey to assess potential human disease hazards along proposed sea level canal routes in Panamá and Colombia. IV. Arbovirus surveillance in man. Military Med. 138 (7):422-426.
- Takayama, N. and Simizu, B. 1973. Japanese quail embryo cells as a host of group A arboviruses. Jap. J. Microbiol. 17(3):199-203.
- Tewari, S. C., Datt, N. S. and Kumar, S. 1972.

- Studies on African horsesickness virus: haemagglutination and haemagglutination-inhibition tests with purified virus suspensions. Indian J. Animal Sci. 42(8):593-596.
- Van der Sar, A. 1973. An outbreak of dengue haemorrhagic fever on Curaçao. Trop. and Geog. Med. 25(2):119-129.
- Van Peenen, P. F. D. and Coauthors. 1973. Dengue type 3 in Indonesia. Roy. Soc. Trop. Med. and Hyg. Trans. 67(3):418-419.
- Ventura, A. K. and Ehrenkranz, J. N. 1973. Hispaniola. Arbovirus surveillance. Dengue Newslet. Americas (WHO PAHO) 2(1):3; 2(2):4.
- Venzon, E. L. and Coauthors. 1972. The greater Manila dengue hemorrhagic fever epidemic of 1966. Philippine Med. Assoc. J. 48(6):297-313.
- Westaway, E. G. 1973. Proteins specified by group B togaviruses in mammalian cells during productive infections. Virology 51(2):454-465. [Japanese B encephalitis included.]
- World Health Organization. 1973. Pathogenetic mechanisms in dengue haemorrhagic fever: report of an international collaborative study. WHO Bul. 48(1):117-133.
- Worthington, M., Levy, H. and Rice, J. 1973. Late therapy of an arbovirus encephalitis in mice with interferon and interferon stimulators. Soc. Expt. Biol. and Med. Proc. 143(3):638-643.
- See also Igarashi et al., Danielová and Sinaratana in Techniques—Tissue Culture Section.

ENCEPHALITIS

- Adler, W. H. and Rabinowitz, S. G. 1973. Host defenses during primary Venezuelan equine encephalomyelitis virus infection in mice. II. *In vitro* methods for the measurement and quantitation of the immune response. J. Immunol. 110(5):1354-1362.
- Borunda Falcón, O. 1972. La encefalitis equina venezolana en México durante 1971. Salud Pública México Epoca 5.14(3):329-351.
- Corniou, B. and Coauthors. 1972. First isolation of eastern equine virus from a case of encephalitis. West Indian Med. J. 21(1):60.
- Cypess, R. H., Lubiniecki, A. S. and Hammon, W. M. 1973. Immunosuppression and increased susceptibility to Japanese B encephalitis virus in *Trichinella spiralis*-infected mice. Soc. Expt. Biol. and Med. Proc. 143(2):469-473.
- Darwish, M. A. 1972. Preparation of inactivated eastern equine encephalomyelitis vaccine from chick embryo cell culture. Egypt. Pub. Health Assoc. J. 47(4):246-255.
- Gusciora, W. and Coauthors. 1972. A search for a possible overwintering arthropod reservoir for EE virus. N. J. Mosquito Extermin. Assoc. Proc. 59:147-164.
- Gushchin, B. V. and Coauthors. 1973. Electron microscope study of Vero cells infected with genetically homogeneous and heterogeneous Venezuelan equine encephalomyelitis virus. Voprosy Virusologii 17(4):436-438. In Rus., Engl. Sum.
- Eugster, A. K. and Sippel, W. L. 1972. Laboratory studies on Venezuelan equine encephalitis during the 1971 epizootic in Texas. Southwest. Vet. 26(1):23-29.
- Hayes, J. 1973. A study of the *Culex pipiens* complex in the Ohio-Mississippi River Basin in relation to St. Louis encephalitis. Mosquito News 33(3):447-454.
- Jahrling, P. B. and Scherer, W. F. 1973. Histopathology and distribution of viral antigens in hamsters infected with virulent and benign Venezuelan encephalitis viruses. Amer. J. Path. 72(1):25-38.
- Kimura, T., Iwai, K. and Ueba, N. 1973. Difference in plaque sizes of Japanese encephalitis virus strains of BHK21 cells and chick embryo cells. Biken J. 16(2):57-66.
- Loginova, N. V., Naroditsky, B. S. and Gavrilov, V. I. 1973. A simple method for concentration of tissue culture antigen of Japanese encephalitis virus. Voprosy Virusologii 17(4):494-496. In Rus., Engl. Sum.
- Lord, R. D., Work, T. H., Coleman, P. H. and Johnston, J. G., Jr. 1973. Virological studies of avian hosts in the Houston epidemic of St. Louis encephalitis, 1964. Amer. J. Trop. Med. and Hyg. 22(5):662-671.
- Lyons, M. J. and Heyduk, J. 1973. Aspects of the developmental morphology of California encephalitis virus in cultured vertebrate and arthropod cells and in mouse brain. Virology 54(1):37-52.
- McLean, D. M. and Coauthors. 1973. California encephalitis virus endemicity in the Yukon Territory, 1972. J. Hygiene 71(2):391-402.
- Ozawa, K. and Inoue, Y. K. 1973. A toxic substance produced by Japanese encephalitis virus in mouse brain. Arch. Gesamte Virusforsch. 41(1-2):20-27.
- Parker, R. L., Dean, P. B. and Zehmer, R. B. 1973. Public health aspects of Venezuelan equine encephalitis. Amer. Vet. Med. Assoc. J. 162(9):777-779.
- Pavlov, P. and Coauthors. 1972. Natural foci of virus encephalitis infection in sheep and goats in surroundings of Dobrostan village. Vet. Med. Nauk 9(6):13-19. In Bulg., Engl. Sum.
- Rabinowitz, S. G. and Adler, W. H. 1973. Host defenses during primary Venezuelan equine encephalomyelitis virus infection in mice. I. Passive transfer of protection with immune serum and immune cells. J. Immunol. 110(5):1345-1353.
- Rie, H. E., Hiltz, M. D. and Cramblett, H. G. 1973. Intelligence and coordination following California encephalitis. Amer. J. Dis. Children 125(6):824-827.
- Saulmon, E. E. 1972. Scientific and regulatory

- aspects of Venezuelan equine encephalitis. Wash. Acad. Sci. J. 62(4):317-328.
- Schneider, N. J. 1973. United States of America. Patients tested for arbovirus antibodies in Florida. Dengue Newslett. Americas (WHO PAHO) 2(1):8.
- Shope, R. E. and Woodall, J. P. 1973. Ecological interaction of wildlife, man, and a virus of the Venezuelan equine encephalomyelitis complex in a tropical forest. J. Wildlife Dis. 9(3): 198-203.
- Singh, B., Chang, I. C. and Hammon, W. M. 1973. Semi-commercial scale production of Japanese B encephalitis virus vaccines from tissue culture. Appl. Microbiol. 25(6):945-951.
- Suyemoto, W., Schiefer, B. A. and Eldridge, B. F. 1973. Precipitin tests of blood-fed mosquitoes collected during the VEE surveillance survey in the southern United States in 1971. Mosquito News 33(3):392-395.
- Villegas Delgado, M. 1972. Encéphalomyélite équine Vénézuélienne. Historique, évolution et mesures de lutte, particulièrement en ce qui concerne le Venezuela. Cah. de Med. Vet. 41(4):155-170. Engl. Sum.
- Villegas Delgado, M. 1972. La encefalomielitis equina venezolana su evolución y control en Venezuela. Rev. Vet. Venezolana 32(187): 98-122.
- Wills, W. and Pidcoe, V. 1972. Use of domestic rabbits as indicators for California encephalitis virus in Pennsylvania. N. J. Mosquito Extermin. Assoc. Proc. 59:165-168.

FILARIASIS

- Ash, L. R. 1973. Life cycle of *Burgia patei* (Buckley, Nelson, and Heisch, 1958) in the jird, *Meriones unguiculatus*. J. Parasitol. 59 (4):692-695.
- Bain, O. 1972. Recherches sur la morphogénèse des filaires chez l'hôte intermédiaire. Ann. de Parasitol. Humaine et Compar. 17(2):251-303. [Wuchereria bancrofti included.]
- Bain, O. and Durette-Desset, M. C. 1973. Cycle de *Skrjabinofilaria skrjabini*, filaire de marsupial sud-américain; position systématique. Ann. de Parasitol. Humaine et Compar. 48(1):61-79. Engl. Sum. [Culex pipiens as host.]
- Brinkmann, U. K. 1972. Infections with *Wuchereria bancrofti* in Marshall Territory, a coastal region of Liberia. Z. Tropenmed. u. Parasitol. 23(4):369-386. In Ger., Engl. Sum.
- Bryan, J. H. and Southgate, B. A. 1973. An investigation of the transmission potential of ultra low level *Wuchereria bancrofti* microfilaria carriers after diethylcarbamazine treatment. WHO/FIL/73.116, 11 pp.
- Davies, P., Cunningham, T. J., Gould, R. G. and Horton, J. 1973. *Dirofilaria* infection; occurrence in northeastern New York. N. Y. State J. Med. 73(15):1999-2001. [Dirofilaria tenuis.]
- Denham, D. A. and Coauthors. 1972. Studies with *Brugia pahangi*. II. The effect of repeated infection on parasite levels in cats. Internat. J. Parasitol. 2(4):401-407.
- Desowitz, R. S. 1973. Epidemiological investigations on filariasis in Fiji and Tonga including a small additional survey in Western Samoa. Report on visits made from 17 July to 14 September 1972. WHO/FIL/73.113, 7 pp.
- Desowitz, R. S. and Southgate, B. A. 1973. Studies on filariasis in the Pacific: 2. The persistence of microfilaraemia in diethylcarbamazine treated populations of Fiji and Western Samoa: diagnostic application of the membrane-filtration technique. Southeast Asian J. Trop. Med. and Pub. Health 4(2):179-183.
- Dissanaike, A. S. 1973. *Dirofilaria* infection in man in Ceylon. Southeast Asian J. Trop. Med. and Pub. Health 4(2):274-275.
- Dondero, T. J., Jr. and Sivanandam, S. 1973. Filariasis blood survey in Kelantan. Med. J. Malaysia 27(4):306-309. [Brugia and Wuchereria.]
- ElBihari, S. and Ewert, A. 1973. Worm burdens and prepatent periods in jirds (*Meriones unguiculatus*) infected with *Brugia malayi*. Southeast Asian J. Trop. Med. and Pub. Health 4(2):184-186.
- Engelshtein, A. S., Kigel, R. M. and Zaporozhets, G. I. 1973. A case of *Dirofilaria repens* detected. Med. Parazit. i Parazit. Bolezni (3): 358. In Rus.
- Ferguson, D. L. 1973. Heartworm infection. Nebr. Agr. Expt. Sta. Quart. 20(1):15-16. [Dirofilaria immitis in Nebraska dogs.]
- Gentilini, M., Pinon, J. M., Niel, G. and Danis, M. 1972. Comparative study of precipitation and indirect immunofluorescence reactions in filariasis diagnostic. Soc. de Path. Exot. Bul. 65(6):849-858. In Fr., Engl. Sum. [Includes Wuchereria.]
- Gentilini, M., Pinon, J. M., Niel, J. and Rosin, G. 1973. Rosettes and blood leucocytes migration inhibition tests in human filariasis. Soc. de Path. Exot. Bul. 66(1):133-139. In Fr., Engl. Sum. [Includes bancroftian.]
- Giles, R. C., Jr. and Hildebrandt, P. K. 1973. Ruptured pulmonary artery in a dog with dirofilariasis. Amer. Vet. Med. Assoc. J. 163 (3):236-238.
- Hasham, A. L. 1973. Two-stage reconstruction of scrotum for tropical elephantiasis. J. Urology 109(4):659-661. [Wuchereria.]
- Ismail, M. M. and Nagaratnam, N. 1973. Arthritis, possibly due to filariasis. Roy. Soc. Trop. Med. and Hyg. Trans. 67(3):405-409.
- Katiyar, J. C. and Coauthors. 1973. Dislodging action of diethylcarbamazine in relation to its overall microfilaricidal activity in *Wuchereria bancrofti* infection (periodic strain). Indian J. Med. Res. 61(7):1087-1093.
- Lagraulet, J., Barsinas, M., Fagneau, G. and Teahui, M. 1973. Present status of filariasis in the Marqueses and different epidemiological

- aspects. Soc. de Path. Exot. Bul. 66(1):139-155. In Fr., Engl. Sum.
- Lapierre, J., Tran Vinh Hien, Holler, C. and Saison, E. 1973. Diseases from the Antilles observed in the metropole. General epidemiologic considerations. Soc. de Path. Exot. Bul. 66(1):216-226. In Fr., Engl. Sum. [Includes filariasis.]
- O'Leary, T. P., Bemrick, W. J. and Johnson, K. H. 1973. Serial section analysis of cells in the microfilariae of *Dirofilaria immitis* containing neurosecretory-like granules. J. Parasitol. 59(4):701-705.
- Orihel, T. C. 1973. Cerebral filariasis in Rhodesia—a zoonotic infection? Amer. J. Trop. Med. and Hyg. 22(5):596-599.
- Ramachandran, M. 1973. Colorimetric determination of diethyl carbamazine (tetrazan) with picric acid. Indian J. Med. Res. 61(6):864-869.
- Rao, N. S. N., Murthy, N. S. and Marwah, S. M. 1973. A statistical analysis of age factor amongst filariasis carriers in areas with different infection rates. Indian J. Med. Res. 61(6):943-949. [*Wuchereria*.]
- Shichinohe, K. and Coauthors. 1973. Studies on the diagnosis of canine filariasis with special reference to the comparison of hemagglutination test and skin test. Jap. J. Vet. Sci. 35(1):1-10. In Engl., Jap. Sum.
- Shivanna, S., Gowda, M. B., Roa, L. R. and Kumar, S. A. J. 1973. Filaria survey in the slums of Bangalore City Corporation. J. Commun. Dis. 5(1):1-7. [*C. p. quinquefasciatus* involved.]
- Sivaloganathan, V. and Cheah, W. 1973. Plastic surgery on elephantiasis of the legs: a case report. Southeast Asian J. Trop. Med. and Pub. Health 4(2):279-280.
- Southgate, B. A. 1973. Studies of filariasis in the Pacific. I. A field trial of a counting-chamber technique for the determination of microfilarial rates and densities. Southeast Asian J. Trop. Med. and Pub. Health 4(2):172-178.
- Stein, F. J. and Lawton, G. W. 1973. Comparison of methods for diagnosis and differentiation of canine filariasis. Amer. Vet. Med. Assoc. J. 163(2):140-141.
- Sucharit, S. and Macdonald, W. W. 1973. *Brugia pahangi* in small laboratory animals: attempts to increase susceptibility of white rats to *Brugia pahangi* by host selection. Southeast Asian J. Trop. Med. and Pub. Health 4(1):71-77.
- Sucharit, S., Riganti, M. and Harinasuta, C. 1973. Microfilarial granuloma in the spleen. Southeast Asian J. Trop. Med. and Pub. Health 4(2):286-287.
- Suenaga, O. 1973. Studies on the filarial prevalence among dogs and the mosquito vectors in Nagasaki City, western Japan. 4. On the susceptibility of *Anopheles sinensis* and *Aedes vexans nipponii* to the larvae of *Dirofilaria immitis* in Nagasaki City. Trop. Med. (Nagasaki) 15(2):84-91. In Jap., Engl. Sum.
- Suzuki, T. and Sone, F. 1973. Filarial infection in vector mosquitoes after mass drug administration in Western Samoa. WHO/FIL/73.117, WHO/VBC/73.446. 13 pp.
- Suzuki, T. and Sone, F. 1973. The bionomics of filariasis vectors in Western Samoa. WHO/FIL/73.115, WHO/VBC/73.443. 15 pp. [*Aedes samoanus* and *A. polynesiensis*.]
- Ten Eyke, D. R. 1973. *Onchocerca volvulus* and *Wuchereria bancrofti*: fluorescent antibody staining of frozen homologous sections for diagnosis. Expt. Parasitol. 34(1):154-161.
- Watson, A. D. J. 1973. On the detection and differentiation of microfilariae and the diagnosis of canine heartworm disease. Austral. Vet. J. 49(7):363. [Includes *D. immitis*.]
- Weiner, D. J. and Bradley, R. E. 1973. The 2-mercaptoethanol labile immunoglobulin response of beagles experimentally infected with *Dirofilaria immitis*. J. Parasitol. 59(4):696-700.
- Wong, M. M., Suter, P. F., Rhode, E. A. and Guest, M. F. 1973. Dirofilariasis without circulating microfilariae: a problem in diagnosis. Amer. Vet. Med. Assoc. J. 163(2):133-139.
- Yong, W. K. 1973. Indirect fluorescent antibody technique with micro-fragments of *Wuchereria bancrofti*. Roy. Soc. Trop. Med. and Hyg. Trans. 67(3):338-344.
- Zaman, V. and Lal, M. 1973. Treatment of *Wuchereria bancrofti* with levamisole. Roy. Soc. Trop. Med. and Hyg. Trans. 67(4):610.
- Zielke, E. 1973. Experimental studies on the quantitative aspects of transmission of *Dirofilaria immitis* by mosquitoes. Z. Tropenmed. u. Parasitol. 24(2):214-221. In Ger., Engl. Sum.

MALARIA

- Bain, B. 1973. Disseminated intravascular coagulation in benign tertian malaria. Brit. Med. J. 5852:550.
- Bazaz-Malik, G. 1973. Increased resistance to malaria after mycobacterium tuberculosis infection. Indian J. Med. Res. 61(7):1014-1024.
- Bridges, J. R. 1973. A study of malaria rates in the Que Son Mountains of Vietnam. Military Med. 138(7):413-417.
- Butcher, G. A., Mitchell, G. H. and Cohen, S. 1973. Mechanism of host specificity in malarial infection. Nature (London) 244 (5410):40-41.
- Charoenlarp, P. and Harinasuta, T. 1973. Relapses of vivax malaria after a conventional course of primaquine and chloroquine: report of 2 cases. Southeast Asian J. Trop. Med. and Pub. Health 4(1):135-137.
- Clarke, J. H. 1973. Imported malaria in Cape Town. South Afr. Med. J. 47(15):640.
- Clarke, M. D. and Coauthors. 1973. Human malarias and intestinal parasites in Kresiek,

- West Java, Indonesia, with a cursory serological survey for toxoplasmosis and amoebiasis. Southeast Asian J. Trop. Med. and Pub. Health 4(1):32-36.
- Collins, W. E. and Coauthors. 1973. Studies on human malaria in *Aotus* monkeys. II. Establishment of a strain of *Plasmodium falciparum* from Panama. J. Parasitol. 59(4):609-612.
- Collins, W. E., Contacos, P. G., Stanfill, P. S. and Richardson, B. G. 1973. Studies on human malaria in *Aotus* monkeys I. Sporozoite transmission of *Plasmodium vivax* from El Salvador. J. Parasitol. 59(4):606-608.
- Contacos, P. G. and Collins, W. E. 1973. Malarial relapse mechanism. Roy. Soc. Trop. Med. and Hyg. Trans. 67(4):617-618.
- Craddock, A. L., Horrobin, D. F. and Easton, J. A. 1973. Blackwater fever in Kenya: problems of etiology. East Afr. Med. J. 50(1):14-18.
- Delfini, L. F. 1973. The relationship between body temperatures and malaria parasitaemia in rural forest areas of Western Nigeria. J. Trop. Med. and Hyg. 76(5):111-114.
- Esan, G. J. F. 1973. The diagnosis of beta thalassaemia in malarious environments. Ghana Med. J. 12(2):222-224.
- Ferris, D. H., Beamer, P. D. and Stutz, D. R. 1973. Observations on the response of dysgamma-globulinemic chickens to malarial infection. Avian Dis. 17(1):12-23.
- Gabaldón, A. 1972. La epidemiología y el saneamiento ambiental en la acción sanitaria. Bol. Inform. (Dir. de Malaria y San Amb.) 12(6):300-309. [Malaria included.]
- Gabaldón, A. 1972. Recrudescence of malaria. Pan Amer. Health Organ. Sci. Pub. No. 238:23-34, discussion pp. 35-37.
- Gossuin, A. and Coauthors. 1971. First attacks of *Plasmodium falciparum* malaria. Five recent observations. Acta Clin. Belg. 26(6):366-379. In Fr., Engl. Sum.
- Gyselings, R. J. 1973. Congenital malaria. Helv. Paediatr. Acta 28(2):161-164. In Fr., Engl. Sum.
- Johnson, D. R. 1973. Recent developments in mosquito-borne diseases: malaria. Mosquito News 33(3):341-347.
- Kark, J., Egoz, N., Naggan, L. and Eldar, R. 1973. Malaria in Israeli-held territories during the years 1967-1971. Harefuah 84(4):195-199. In Heb., Engl. Sum.
- Khuda, S. A. 1973. On the duration of the malaria season in the Vinniza region of the Ukrainian SSR. Med. Parazit. i Parazit. Bolezni 42(4):411-415. In Rus., Engl. Sum.
- Kortmann, H. F. C. M. 1972. Malaria and pregnancy. 118 pp., Utrecht. Drukkerij Elinkwijk. [Thesis.]
- Moran, C. J., De Rivera, V. S. and Turk, J. L. 1973. The immunological significance of histological changes in the spleen and liver in mouse malaria. Clin. and Expt. Immunol. 13 (3):467-478.
- Moshkovsky, Sh. D. 1973. Experience in explaining the difference of incubation type and features of alternation of acute periods of tertian malaria associated with different strains of *Plasmodium vivax*. Med. Parazit. i Parazit. Bolezni 42(4):393-400. In Rus., Engl. Sum.
- Myers, G. 1973. Malaria risk to travellers. Brit. Med. J. 5866:611-612.
- Nair, C. P. 1973. Malaria in Kashmir Province of Jammu and Kashmir State-India. J. Commun. Dis. 5(1):22-46.
- Ohlrogge, R. and Schlipkötter, H. W. 1973. The erythrogram in treated and untreated malaria patients in Western Africa. Med. Microbiol. and Immunol. 158(4):267-274. In Ger., Engl. Sum.
- Pirumov, Kh. N. 1972. Development and achievement of medical parasitology in the Armenian SSR in connection with the establishment of the USSR. Med. Parazit. i Parazit. Bolezni 41(6):697-700. In Rus. [Includes malaria.]
- Postiglione, M. 1973. Imported malaria in Europe. Inst. Marine Med. Gdansk Bul. 24 (1-2):95-107. In Engl.
- Rachmilewitz, D. 1973. Increased incidence of malaria in Sinai and its prevention. Harefuah 84(4):199-200. In Heb., Engl. Sum.
- Sarikyan, S. Ya., Bandin, A. I. and Alekseeva, Z. M. 1973. Typification of certain territories of the USSR according to the degree of danger of malaria recurrence. Med. Parazit. i Parazit. Bolezni 42(4):406-411. In Rus., Engl. Sum.
- Shute, P. G. and Maryon, M. 1973. The need for sympathetic cooperation between statesman and medical scientists in order to prevent malaria regaining a foothold in Europe. Arch. Roumaines Path. Expt. et Microbiol. 32(2):293-295. In Engl.
- Sichinava, Sh. G. 1973. Results of eleven years of phenological observations of *Anopheles maculipennis* Mg.—the main malaria carrier in the Sukhumi vicinity. Med. Parazit. i Parazit. Bolezni 42(4):415-418. In Rus., Engl. Sum.
- Sucharit, P. and Reid, H. A. 1973. Fibrinogen catabolism in *Plasmodium knowlesi* malaria. Southeast Asian J. Trop. Med. and Pub. Health 4(2):168-171.
- Theakston, R. D. G. and Fletcher, K. A. 1973. A technique for the cytochemical demonstration in the electron microscope of glucose-6-phosphate dehydrogenase activity in erythrocytes of malaria-infected animals. J. Microscopy 97(3):315-320.
- Vanderberg, J. P. 1973. Inactivity of rodent malaria anti-sporozoite antibodies against exoerythrocytic forms. Amer. J. Trop. Med. and Hyg. 22(5):573-577.

- Weise, M., Ehrich, J. H. H. and Weise, R. 1972. Studies on the kidneys of mice infected with rodent malaria: II. Characterisation of urinary proteins by micro disc electrophoresis. *Z. Tropenmed. u. Parasitol.* 23(4):399-405. In Engl., Ger. Sum.
- Wells, C. 1973. Malaria risk to travellers. *Brit. Med. J.* 5865:552.
- Wintrob, R. M. 1973. Malaria and the acute psychotic episode. *J. Nerv. and Mental Dis.* 161(5):306-317.
- Wood, A. 1973. Therapeutic screening to differentiate malaria from other tropical syndromes. *Cent. Afr. J. Med.* 19(8):167-171.
- Woodruff, A. W. 1973. Mechanisms involved in anaemia associated with infection and splenomegaly in the tropics. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(3):313-325. [Includes malaria.]
- Woodruff, A. W., Ziegler, J. L., Hathaway, A. and Gwata, T. 1973. Anaemia in African trypanosomiasis and "big spleen disease" in Uganda. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(3):329-337. [Includes malaria.]
- World Health Organization. 1973. Information on malaria risk for international travellers. *WHO Chron.* 27(6):254-258.
- Zaman, V., Aschheim, L., Yap, E. H. and Simons, M. J. 1972. Detection of malaria antibodies by counter current immunoelectrophoresis. *Singapore Med. J.* 13(6):305-306.
- See also Ewers, Ward and Yoeli in Biography and History Section.

Malaria—Eradication

- Lelijveld, J., Otieno, L. H. and Meuwissen, J. H. E. T. 1973. Serological studies of malaria in East Africa. II. Serological indices as parameters of progress of malaria control and eradication. *Trop. and Geog. Med.* 25(1): 75-83.
- Motabar, M. and Behbahani, G. R. 1973. Nomadism and the problem of malaria eradication in southern Iran. *WHO/MAL/73.813*, 7 pp.
- Rafatjah, H. A. 1972. The impact of irrigation and drainage on the control and eradication of malaria. *Cong. on Irrigation and Drainage, 8th Varna Trans.* 6:C.52-C.58.

Malaria—Immunology

- Cabrera, E. J., Alger, N. E. and Silverman, P. H. 1973. Some qualitative aspects of spleen cell transfer studies on *Plasmodium berghei*-infected rats. *J. Protozool.* 20(3):449-452.
- Kasper, L. and Alger, N. E. 1973. Adoptive transfer of immunity to *Plasmodium berghei* by spleen and lymph node cells from young and old mice. *J. Protozool.* 20(3):445-449.
- Matola, Y. G., Lelijveld, J., Kortmann, H. and Meuwissen, J. H. E. T. 1973. The sensitivity of some human and simian haemosporidia antigens to detect fluorescent antibodies against human Plasmodia. *East Afr. Med. J.* 50(6): 294-299.

- Nussenzweig, R. S., Montuori, W., Spitalny, G. L. and Chen, D. 1973. Antibodies against sporozoites of human and simian malaria produced in rats. *Bol. Ofic. Sanit. Panamer.* 75(2):114-118. In Sp., Engl. Sum.
- Voller, A., Green, D. I. and Richards, W. H. G. 1973. Cross immunity studies with East and West African strains of *Plasmodium falciparum* in owl monkeys (*Aotus trivirgatus*). *J. Trop. Med. and Hyg.* 76(6):135-139.

Malaria—Parasites

- Autuori, M. J. and Lacaillade, C. W. 1973. Hemoglobin concentration changes determined in populations of living host erythrocytes during *Plasmodium berghei* infection in mice. *Experientia* 29(7):897-898.
- Bertagna, P. and Coauthors. 1973. Techniques de culture applicables aux stades érythrocytaires des parasites du paludisme. *WHO Bul.* 48(3): 355-372.
- Black, R. H. 1973. Parasite counts in infections with *Plasmodium falciparum*. *Med. J. Austral.* 2(5):218-219.
- Boonpucknavig, S., Benchachai, P., Boonpucknavig, V. and Bhamarapratvi, N. 1973. *Plasmodium berghei*: detection in organs of infected mice by means of immunofluorescence. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(3): 410-415.
- Canning, E. U. and Sinden, R. E. 1973. The organization of the ookinete and observations on nuclear division in oocysts of *Plasmodium berghei*. *Parasitology* 67(1):29-40.
- Chauvet, G., Ravaonjanahary, C. and Duval, J. 1973. Comparative studies on the infectivity with *Plasmodium falciparum* of species A and B of the *Anopheles gambiae* complex in Madagascar. *WHO/MAL/73.809*, 3 pp.
- Chum-Chantholl. 1973. Use of the association of sulfamethoxazole-trimethoprim (bactrim) in general medicine in tropical areas. *Soc. de Path. Exot. Bul.* 66(1):227-234. In Fr., Engl. Sum. [Includes *Plasmodium falciparum*.]
- Eden, M., Green, J. E. and Sun, A. 1973. Feasibility of computer screening of blood films for the detection of malaria parasites. *WHO Bul.* 48(2):211-218.
- Fajardo, L. F. 1973. Malaria parasites in mammalian platelets. *Nature (London)* 243 (5405): 298-299.
- Finerty, J. F., Evans, C. B. and Hyde, C. L. 1973. *Plasmodium berghei* and *Eperythrozoon coccoides*: antibody and immunoglobin synthesis in germfree and conventional mice simultaneously infected. *Expt. Parasitol.* 34(1):76-84.

- Garnica, R. D. and Coauthors. 1971. Effect of experimental infection with *Plasmodium berghei* or *P. vinckeii* on gastrointestinal motility of mice. *Rev. Canad. de Biologie* 30(4):331-332.
- Gentilini, M. and Richard-Lenoble, D. 1972. Utilisation of antigen *Plasmodium berghei* for human serodiagnosis by indirect immunofluorescence. *Soc. de Path. Exot. Bul.* 65(6):815-822. In Fr., Engl. Sum.
- Gillet, J. and Herman, F. 1973. Note sur la préparation d'un serum anti-*Plasmodium berghei* avec la souris et le lapin. WHO/MAL/73.812, 4 pp.
- Howells, R. E. and Maxwell, L. 1973. Further studies on the mitochondrial changes during the life cycle of *Plasmodium berghei*: electrophoretic studies on isocitrate dehydrogenases. *Ann. Trop. Med. and Parasitol.* 67(3):279-283.
- Jadin, J. B. 1971. Présentation du mémoire de J. M. Bafort, intitulé: the biology of rodent malaria with particular reference to *Plasmodium vinckeii vinckeii* Rodhain 1952. *Acad. Roy. Sci. Outre-Mer Bul. des Séances (Brussels)* No. 4: 837-839.
- Killick-Kendrick, R. 1973. Parasitic protozoa of the blood of rodents. I: The life-cycle and zoogeography of *Plasmodium berghei nigeriensis* subsp. nov. *Ann. Trop. Med. and Parasitol.* 67(3):261-277. [n. subsp.]
- Manwell, R. D. and Sessler, G. J. 1973. Blood parasites of Pekin robins (*Liothix luteus*). *J. Protozool.* 20(3):363-364. [Includes *Plasmodium*.]
- Mercado, T. I. 1973. *Plasmodium berghei*: inhibition by splenectomy of a paralyzing syndrome in infected rats. *Expt. Parasitol.* 34(1): 142-147.
- Merrill, T. G. 1972. Fine structure of the heart of the owl monkey (*Aotus trivirgatus*) infected with human malaria (*Plasmodium falciparum*). *Amer. Osteopath. Assoc. J.* 72(2): 180-181.
- Oxbrow, A. I. 1973. Strain specific immunity to *Plasmodium berghei*: a new genetic marker. *Parasitology* 67(1):17-27.
- Piccinini, E. and Albergoni, V. 1973. The enzymic synthesis of dihydropteroate and dihydrofolate by *Plasmodium berghei*. *J. Protozool.* 20(3):459-464.
- Rutledge, L. C., Ward, R. A. and Buckwalter, R. M. 1973. *Plasmodium* spp.: dispersion of malaria oocyst populations in anopheline and culicine mosquitoes. *Expt. Parasitol.* 34(1): 132-141.
- Schmidt, L. H. 1973. Infections with *Plasmodium falciparum* and *Plasmodium vivax* in the owl monkey—model systems for basic biological and chemotherapeutic studies. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(4):446-470, discussion pp. 471-474.
- Schneider, M.D. and Seal, N. 1973. Influence of various cooling and warming temperatures on survival after thawing of cryopreserved *Plasmodium berghei*. *Cryobiology* 10(1):67-77.
- Sterling, C. R., Aikawa, M. and Vanderberg, J. P. 1973. The passage of *Plasmodium berghei* sporozoites through the salivary glands of *Anopheles stephensi*: an electron microscope study. *J. Parasitol.* 59(4):593-605.
- Malaria—Simian**
- Sucharit, P. and Reid, H. A. 1973. Coagulation and fibrinolysis in simian *Plasmodium knowlesi* malaria. *Southeast Asian J. Trop. Med. and Pub. Health* 4(1):15-18.
- Malaria—Therapeutics and Antimalarials**
- Chein, P. L. and Cheng, C. C. 1973. Further side-chain modification of antimalarial phenanthrene amino alcohols. *J. Medicinal Chem.* 16(10):1093-1096.
- Chin, W. and Intraprasert, R. 1973. The evaluation of quinine alone or in combination with tetracycline and pyrimethamine against falciparum malaria in Thailand. *Southeast Asian J. Trop. Med. and Pub. Health* 4(2):245-249.
- Clyde, D. F., Robert, C. C., McCarthy, V. C. and Miller, R. M. 1973. Prophylaxis of malaria in man using the sulfone DFD with pyrimethamine. *Military Med.* 138(7):418-421.
- Colwell, E. J. 1973. Tetracycline treatment of malaria: a warning. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(4):612-613.
- Fugitt, R. B. and Roberts, R. M. 1972. 2-substituted cinchoninic acids as intermediates in quinolinemethanol syntheses. *J. Medicinal Chem.* 16(8):875-879.
- Hall, A. P. 1973. Quinine and chloroquine antagonism in falciparum malaria. *Roy. Soc. Trop. Med. and Hyg. Trans.* 67(3):425.
- Harmon, R. E., Lin, T. S. and Gupta, S. K. 1973. Preparation and antimalarial activity of some derivatives of 6-bromo-a(di-n-heptylaminomethyl)-9-phenanthrenemethanol. *J. Medicinal Chem.* 16(8):940-942.
- Klayman, D. L., Griffin, T. S., Bower, J. D. and Page, S. W. 1973. Thiosulfuric acid analog of quinine as a potential antimalarial agent. *J. Medicinal Chem.* 16(9):1042-1043.
- LaMontagne, M. P., Markovac, A. and Ao, M. S. 1973. Antimalarials. 5. 2-aryl-6-trifluoromethyl-4-pyridinemethanols. *J. Medicinal Chem.* 16(9):1040-1041.
- Leitao, M. T. 1972. Prophylaxie de la malaria dans l'armée portugaise. *Rev. Internat. Serv. de Santé Armées* 45(12):877-882. Engl. Sum.
- Martin, Y. C., Bustard, T. M. and Lynn, K. R. 1973. Relationship between physical properties and antimalarial activities of 1, 4-naphtho-

- quinones. J. Medicinal Chem. 16(10):1089-1093.
- O'Holohan, D. R., Dondero, T. J., Jr. and Pon-nampalam, J. T. 1973. Misuse of Fansidar. Med. J. Malaysia 27(4):310.
- Omar, M. S. and Collins, W. E. 1973. The antimalarial activity of RC-12 against gametocytes and sporogony of *Plasmodium cynomolgi*. Roy. Soc. Trop. Med. and Hyg. Trans. 67(3): 423-424.
- Peters, W. 1973. Antimalarial drugs and their actions Postgrad. Med. J. 49(574):573-583.
- Rosowsky, A., Chaykovsky, M., Lin, M. and Modest, E. J. 1973. Pteridines. 2. New 6,7-disubstituted pteridines as potential antimalarial and antitumor agents. J. Medicinal Chem. 16(8):869-875.
- Rosowsky, A., Chen, K. N., St. Amand, R. and Modest, E. J. 1973. Chemical and biological studies on 1,2-dihydro-5-triazines. XVIII: Synthesis of 1-(5,6- and 5,7-dichloro-2-naphyl) derivatives and related compounds as candidate antimalarial and antitumor agents. J. Pharmaceut. Sci. 62(3):477-479.
- Malaria—Antimalarials—Resistance**
- Almeida Netto, J. C., Oliveira, G. S. C. and Sampaio, J. A. A. 1972. Resistência *Plasmodium falciparum* à associação sulfamídicos-antifólicos na região centro-oeste do Brasil. Dados referentes ao estudo de 104 casos. Rev. Patol. Trop. 1(3):385-393. Engl. Sum.
- Howells, R. E. and Maxwell, L. 1973. Citric acid activity and chloroquine resistance in rodent malaria parasites: the role of the reticulocyte. Ann. Trop. Med. and Parasitol. 67(3):285-300.
- Oostburg, B. F. J. 1973. Chloroquine-resistant tropical malaria in South Surinam. Ned. Tijdschr. v. Geneesk. 117(17):693-694. In Dut.
- Rabinovich, S. A. and Tikhomirova, L. A. 1973. Selective infection of reticulocytes by parasites of *Plasmodium berghei* *berghei* strain with acquired resistance to chloroquine. Med. Parazit i Parazit. Bolezni 42(4):401-406. In Rus., Engl. Sum.
- World Health Organization. 1973. Chemotherapy of malaria and resistance to antimalarials. Report of a WHO scientific group. WHO Tech. Rpt. Ser. No. 529, 121 pp.
- Malaria—Vectors**
- Catangui, F. P., Collins, R. T., Kalaw, F. and Del Rosario, A. 1972. *Anopheles litoralis* King, recently incriminated malaria vector in Tatalan, Sulu. Acta Med. Philippina 8, Ser. 2(4):136-144.
- Zahar, A. R. 1973. Review of ecology of malaria vectors in the WHO Eastern Mediterranean Region. WHO/MAL/73.808, WHO/VBC/73.453. 21 pp.
- YELLOW FEVER
- Brès, P. 1972. Recent epidemics of yellow fever in Africa. Pan Amer. Health Organ. Sci. Pub. No. 238:17-19, discussion pp. 20-21.
- Felsenfeld, O., Wolf, R. H. and Dutta, N. K. 1973. Serological responses of patas monkeys (*Erythrocebus patas*) to vaccination against cholera and yellow fever. Soc. Expt. Biol. and Med. Proc. 143(2):548-550.
- Filipe, A. R., Pinto, M. R., Serra, M. L. and Champalimaud, J. L. 1973. Yellow fever infection after recent convalescence from chikungunya fever: report of a fatal case. Roy. Soc. Trop. Med. and Hyg. Trans. 67(3): 400-404.
- Freestone, D. S. 1973. Simultaneous vaccination against cholera and yellow fever. Lancet 7806: 774.
- Mohr, W. 1973. Vaccination against yellow fever in general practice? Deut. Med. Wochenschr. 98(21):1088.
- Monath, T. P. and Kemp, G. E. 1973. Importance of nonhuman primates in yellow fever epidemiology in Nigeria. Trop. and Geog. Med. 25(1):28-38.
- Museteneau, C., Ahlert, M., Haase, J. and Voss, H. 1973. Brain involvement in viral diseases. II. Communication: experimental encephalitis of mice after infection with yellow fever virus strain 17D and other brain lesions—a comparative analysis. Zentbl. Bakteriol. Parasit. Infektionskr. u. Hyg. I. Abt. Orig. Reihe A. 222(4):431-445. In Ger., Engl. Sum.
- Ruben, F. L. and Coauthors. 1973. Simultaneous administration of smallpox, measles, yellow fever, and diphtheria-pertussis-tetanus antigens to Nigerian children. WHO Bul. 48(2): 175-181.
- EXPERIMENTAL HOSTS OR VECTORS
- Bain, O. 1973. Cycle of a rodent filaria passed by mosquitoes. Compt. Rend. Sér. D Sci. Nat. 276(19):2689-2690. In Fr. [*Culex pipiens*, *Aedes aegypti*, *A. polynesiensis*, *Anopheles stephensi*.]
- De Biasi, P., Pessôa, S. B. and Vieira, F. C. G. 1972. Nota sobre longa latência de infecção por Hemogregarina em uma serpente peçonhenta: *Bothrops moojeni* Hoge, 1965. Soc. de Biol. do Rio de Janeiro Atas 15(2):71-73. Engl. Sum. [*Culex p. quinquefasciatus* and *C. dulosus* negative for development of *Plasmodium*.]
- Francis, T. I., Smith, J. A. and Ogunba, E. O. 1972. Transmission of Australia (Au.) antigen by *Culex* mosquitoes. Arch. Fr. des Maladies de l'Appar. Digestif. 61(6-7):163c.
- Hardin, S., Santa Maria, M. E. and Liaw, C. F. 1973. Experimental infection of *Anopheles donaldi* Reid with *Plasmodium falciparum* and *Plasmodium vivax*. WHO/MAL/73.802, 7 pp.

- Landau, I. and Coauthors. 1973. Développement chez *Culex pipiens* de *Saurocytozoon tupinambis* (Sporozoaire, Leucocytoziidae), parasite de lézards brésiliens. Compt. Rend. Sér. D Sci. Nat. 276(17):2449-2452.
- Prod'hon, J. and Bain, O. 1972. Développement larvaire chez *Anopheles stephensi* d'*Oswaldofilaria bacillaris*. Filaire de Caiman sud-américain, et redescription des adultes. Ann. de Parasitol. Humaine et Compar. 47(5):745-758. Engl. Sum.
- Wegner, Z. 1972. Assessment of the susceptibility of females of several species of mosquitoes to infection with tick-borne encephalitis virus. Wiad. Parazitol. 18(4-6):587-590. [*Aedes togoyi* and *A. aegypti*.]
- LIGHT AND OTHER TRAP STUDIES**
- Bailly-Choumara, H. 1973. Etude préliminaire d'une récolte d'*Anopheles labranchiae* par piège CDC réalisée dans la région de Larache, Maroc. WHO/MAL/73.807, 12 pp. Engl. Sum.
- Bordash, G. J. and Coauthors. 1972. A comparison of mosquito collections taken from dry ice supplemented and non-supplemented modified New Jersey light traps. N. J. Mosquito Extermin. Assoc. Proc. 59:132-146.
- Hagmann, L. E. and Feldlaufer, M. F. 1972 Mosquito populations in northwest New Jersey based on light trap collections. N. J. Mosquito Extermin. Assoc. Proc. 59:198-202.

LITERATURE REFERENCES AND REVIEWS

- Dukhanina, N. N. and Losev, O. L. 1973. National literature on problems of medical parasitology and parasitic diseases for 1972. Med. Parazit. i Parazit. Bolezni 42(3):362-369. In Rus. [Includes mosquitoes.]
- Houpeau, J. L., Rageau, J. and Mallardeau, J. 1973. Bulletin Analytique d'Entomologie Médicale et Vétérinaire 20(6):1-32; 20(7): 1-32; 20(8):1-33. [Includes mosquitoes.]
- Knight, K. L. and Pugh, R. B. 1973. A bibliography of the mosquito publications of Fred V. Theobald (1868-1930). Mosquito Systematics 5(3):230-234.
- Losev, O. L. 1973. National literature on problems of medical parasitology and parasitic diseases for 1972-1973. Med. Parazit. i Parazit. Bolezni 42(4):492-500. In Rus. [Includes mosquitoes.]
- Sollers-Riedel, H. 1972. Highlights of the 1971 global mosquito situation. N. J. Mosquito Extermin. Assoc. Proc. 59:8-13.
- Sollers-Riedel, H. 1973. Literature references to mosquitoes and mosquito-borne diseases. 1973 —part III. Mosquito News 33(3):480-499.

BIOGRAPHY AND HISTORY

Bickley, W. E. 1973. Donald Louis Collins.

August 19, 1908—August 6, 1973. Mosquito News 33(3):475. Photograph on p. 474.

Ewers, W. H. 1972. Robert Koch, his work in New Guinea, and his contribution to malariology. Papua and N. Guinea Med. J. 15(2): 117-124.

Ward, R. A. 1973. The influence of Ronald Ross upon the early development of malaria vector control procedures in the United States Army. J. Trop. Med. and Hyg. 76(8):207-209.

Yoeli, M. 1973. Sir Ronald Ross and the evolution of malaria research. N. Y. Acad. Med. Bul. 49(8):722-735.

Yoeli, M. 1973. The development of malaria research before and since Ronald Ross. Munch. Med. Wochenschr. 115(5):151-158. In Ger., Engl. Sum.

SUBJECTS NOT COVERED BY OTHER HEADINGS

Hess, C. E. 1972. Change and the experiment stations's concerns in wetlands research. N. J. Mosquito Extermin. Assoc. Proc. 59:5-8.

NEW PERIODICALS

Acta Entomologica Sinica, a Chinese publication, although not a new periodical, has begun circulation again after a 5-year lapse. Volume 16, number 1 for 1973 is off the press.

BOOKLETS AND REPORTS

Gerhardt, R. R., Dukes, J. C., Falter, J. M. and Axtell, R. C. 1973. Public opinion on insect pest management in coastal North Carolina. N. C. Agr. Ext. Serv. Misc. Pub. No. 97, 81 pp. [Mosquitoes included.]

Pan American Health Organization. 1972. Vector control and the recrudescence of vector-borne diseases. Pan Amer. Health Organ. Sci. Pub. No. 238, 85 pp. [Mostly mosquitoes.]

Pan American Health Organization. 1973. 1972 annual report of the Director. 346 pp. Washington, D. C. [Pan Amer. Sanit. Bur. Off. Doc. No. 124.]

BOOKS

Horsfall, W. R., Fowler, H. W., Jr., Moretti, L. J. and Larsen, J. R. 1973. Bionomics and embryology of the inland flood-water mosquito *Aedes vexans* 211 pp., Urbana, Chicago, London. Univ. Illinois Press.

ERRATA

In Mosquito News 30(4):671—change Aspöck and Christian to read Aspöck, H. and Kunz, C. in both references and add I Abt. Orig.; 31(2):

307—under Bianchi change issue number to read (5); 31(2):302—under Mount and Pierce change issue number to read (1); 31(3):473—under Peters change Brit. Med. J. pages to read 95-98; 32(1):138—under Bullini et al.

change J. Heredity to read Heredity: 32(1):145—under Obiamiwe add and Macdonald, W. W.; 32(3):491—under Pinto and Armindo change Armindo to Filipe, A.R.; 33(2):324—under Jones change pages to read 435-441.

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