

BOOK REVIEWS

BIBLIOGRAPHY ON PATHOGENS OF MEDICALLY IMPORTANT ARTHROPODS. Edited by D. W. Roberts, R. A. Daoust and S. P. Wraight. Unpublished document WHO VBC/83.1, Geneva. 1983. 324 pp¹.

D. W. Jenkins' original compilation of the literature on pathogens, parasites and predators of medically important arthropods appeared in 1964. Since then, additional updated bibliographies on pathogens were published in 1977 and 1980. This, the fourth such compilation, brings together the literature on pathogens of medically important arthropods from mid-1977 to mid-1981. Approximately 550 publications were abstracted for the present volume.

The book is divided into two main parts. The first part, 272 pages, consists of host-pathogen lists, references and abstracts. It is divided into 14 sections each dealing with an insect family or order and an associated group of pathogens. Thus, for example, there are sections devoted to virus pathogens of mosquitoes (10 pp), bacterial pathogens of mosquitoes (55 pp), microsporidan pathogens of mosquitoes (9 pp), and so on. Hosts are listed alphabetically. Not surprisingly, the bacterial pathogens and nematode parasites of mosquitoes, and the pathogens of blackflies occupy nearly one-half of the volume. The lists include details of (a) the host, (b) host stage infected, (c) the pathogen, (d) percentage incidence, (e) locality, (f) whether laboratory or field observations, and (g) references. As a reflection of the direction of much of the recent research on mosquitoes, there are 62 references to *Bacillus sphaericus* and 131 references to *Bacillus thuringiensis israelensis*. A list of abstracts of the cited publications appears at the end of each section. Nearly all of the abstracts were newly written by Dr. R. A. Daoust. These abstracts will be especially welcome to research workers, as many of the original papers are from Russian journals and have been translated into English.

The second part of the volume, 52 pp, deals with pathogen-host lists. There are nine sections: (a) viruses, (b) rickettsiae, (c) bacteria, (d) protozoa other than Microsporida, (e) Microsporida, (f) fungi other than *Coelomomyces*, (g) *Coelomomyces*, (h) nematodes, and (i) others. Pathogens are listed alphabetically in each section, together with host group, host species, and references. To locate the complete citation and abstract of a particular reference, it is necessary to turn to that section in the first part of the book; however, this is not too inconvenient.

It is evident that much care and effort were used to compile this valuable information, and the editors deserve credit for a job well done. Further updates of this work are planned.—William R. Kellen, USDA-ARS, 2021 S. Peach Avenue, Fresno, CA 93727.

¹ Limited numbers of this document are available free to persons professionally concerned, on application to the Division of Vector Biology and Control, World Health Organization, 1211 Geneva 27, Switzerland.

ANNUAL REVIEW OF ENTOMOLOGY, Volume 30, 1985. Thomas E. Mittler, Editor. Annual Reviews, Inc., Palo Alto, CA 94306. 492 pp. \$27.00 USA; \$30.00 elsewhere.

The 20 reviews in this volume emphasize physiology and behavior. Three articles are of special interest to medical entomologists: "Scope and Applications of Forensic Entomology" by B. Keh, "Population Ecology of Tsetse" by D. J. Rogers and S. E. Randolph, and "Ecology of *Ixodes dammini*-borne Human Babesiosis and Lyme Disease" by A. Spielman, M. L. Wilson, J. F. Levine, and J. Piesman. The last review is a concise explanation of the extremely complex natural history of 2 diseases transmitted by a tick closely related to *I. scapularis*. The first disease is a malaria-like infection; the second is caused by a spirochaete. Mosquito control workers will find this article fascinating because it elucidates most of the perplexing host-parasite-reservoir relationships the study of which briefly (and negatively) involved mosquitoes. In Volume 30 the well-known high standards of the Annual Reviews are continued.—W. E. Bickley.

NATURALIST ON THE NANTICOKE: The natural history of a river on Maryland's Eastern Shore. Robert A. Hedeon. 1982. Tidewater Publishers, Centreville, MD. 172 pp., \$12.95.

The Nanticoke extends for 36 miles from a point above Seaford, Delaware (the terminus of barge traffic) to Tangier Sound (a part of the Chesapeake Bay). By most standards the river is unglamorous because it is surrounded by "mosquito-ridden, low-lying marshland." The author, a protege of the late Osmond Breland, has used his expertise as a scientist and an outdoorsman to describe his experiences with sea nettles, crabs, fish, turtles, birds, and other animals, including mosquitoes, tabanids, and stable flies. The biting flies are discussed in a chapter entitled "Stilletes, Meataxes, and Bayonets." This readable book is illustrated with pen and ink drawings by Julie Payne.—W. E. Bickley.

MOSQUITO BORNE DISEASES BULLETIN is a new quarterly bulletin published by the Museum and Reference Centre (MRC) of the Southeast Asian Ministers of Education (SEAMEO) Tropical Medicine Project (TROPMED); address: Faculty of Tropical Medicine, 420/6 Rajvithi Rd., Bangkok 10400, Thailand.

Vol. 1, No. 1 (July-September, 1984) has 22 pages containing 2 articles, a research note, some abstracts and some news notes. Vol. 1, No. 2 (October-December, 1984) contains 1 article, 1 research note, 13 abstracts, and 13 pages of news notes. This new journal aims to disseminate information about research on mosquito-borne disease occurring in south-

east Asia. The first 2 numbers provide evidence that the goal is being achieved, and the editor-in-chief, Dr. Supat Sucharit, is to be congratulated.—W. E. Bickley.

THE NEW PESTICIDE USER'S GUIDE. Bert L. Bohmont. 1983. Reston Publishing Company, Inc., A Prentice-Hall Company, Reston, VA. 452 pp. \$23.95.

This publication is a revision of a book published in 1981 with the same title. Additional material has been added to several chapters, and some materials have been moved for the sake of continuity. An index and appendix have been included to make the reference more usable.

The author has done a good job of referencing insecticides and herbicides (the largest categories) by trade name, common name and toxicity values. Although comprehensive in nature, there have been some omissions in these groups.

The first five chapters are devoted to a history of pesticide usage, and a cursory treatment of various kinds of pests controlled. This is followed by Pesticide Laws and Liability, The Pesticide Label, Pesticide Safety and Environmental Considerations. Particularly helpful to those who apply pesticides are chapters on Pesticide Formulations and Adjuvants, Application Equipment, Calibration, Calculations, and Pesticide Storage, Transportation, Decontamination, Disposal and Record Keeping.

A glossary is appended along with a handy appendix that lists Regional Offices of the Environmental Protection Agency, and State Pesticide Control Offices. A cross reference table lists pesticides by trade names with the common name also indicated. Toxicity value tables, and an index complete the book.

This publication provides a convenient reference

source for anyone interested in the application of pesticides.—Lawrence L. Lewallen, American Mosquito Control Association, Fresno, CA 93727.

PESTICIDE APPLICATION AND SAFETY TRAINING. M. W. Stimmann. Publication 4070, Agricultural Sciences Publications, University of California, University Hall, Berkeley, CA 94720. 107 pp. \$8.00

This well-rounded publication would be useful to anyone involved in the application of pesticides. Basic principles of pest identification, classification of pesticides, safety precautions, application techniques and other useful information are included. A handy glossary of terms is included.—Lawrence A. Lewallen, American Mosquito Control Association, Fresno, CA 93727.

REVISTA BRASILEIRA DE MALARIOLOGIA E DOENÇAS TROPICAIS. Volume 35, 1983. 138 pp.

This journal in Portuguese contains technical papers on malaria and tropical diseases in Latin America, primarily Brazil. There are no summaries or abstracts in English. Only papers written in Portuguese are accepted for publication. The publication is available gratis to individuals or institutions that are involved in malaria and tropical disease control from:

Superintendência de Campanhas de Saúde Pública
— SUCAM

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