BOOK REVIEWS

VECTOR CONTROL IN SOUTHEAST ASIA. Proceedings of the First SEAMEO Workshop. Singapore, August 17–18, 1972. Edited by Chan Yow-Cheong, Chan Kai-Lok and Ho Ben-Chuan. Organizing Committee, SEAMEO-TROPMED, Vector Control Workshop, Faculty of Medicine, Sepoy Lines, Singapore 3. 226 p. U.S. $10.00.

This publication deals with the proceedings of a workshop sponsored by member countries of the Southeast Asian Ministers of Education Organization (SEAMEO) for the purpose of sharing and exchanging views, knowledge and experience in vector control. SEAMEO member countries are Indonesia, Khmer Republic, Malaysia, Philippines, Singapore, Thailand and Republic of Vietnam. The workshop was held in Singapore. The proceedings are divided into four sessions. Session I deals with Control of Malaria Vectors, Session II with Control of Muscoid Flies, Session III with the Control of *Aedes* Vectors and Session IV with the Control of Filariasis Vectors. During these sessions, emphasis was placed on status reports from each country on the organization, program, method and problem in vector control. Each session was followed by discussion. In addition to workers from member countries, participants included vector control experts from other countries and from the World Health Organization.

This publication should serve as a reference source on vector control in that region of the world. Kenneth W. Ludlam, Maryland Department of Agriculture.

A BIBLIOGRAPHY AND A KEYWORD-IN-CONTEXT INDEX OF THE CERATOPOGONIDAE (DIPTERA) FROM 1758 TO 1973. By William R. Atchley, Willis W. Wirth and Charles T. Gaskins. Texas Tech Press, Lubbock, Texas. 1975. 300 pp. $4.00.

The bibliography of 1950 published papers included in the book is a valuable contribution to the study of ceratopogonids. To this is added a permuted KWIC Index (keyword in context) which contains about 6750 entries on 125 pages. This use of a KWIC Index as a "retrieval tool" in a specialized field such as ceratopogonid study is unusual. KWIC Indices are commonly used as "current awareness tools" for a broad field, as in *Biological Abstracts*. I tested the KWIC Index as a source of specific information on ceratopogonids in several ways: by location (e.g. Florida), by parasites (e.g. microsporidia), by species (e.g. *obsoletus*) and it worked well. It was less useful for taxonomic purposes because the Index words *new, species,* and *genus* were not included as keywords. In fact the number of keywords was smaller than is typical for a KWIC Index, reducing its usefulness. *Chemical Titles,* (American Chemical Society) has an average of 6 KWIC Index entries per bibliographic title. In contrast this publication had only 3.5 entries.

The major drawback of KWIC Indices is that they are derived entirely from the title and many titles do not completely reflect the subject matter. The Index is useful primarily for a rapid but incomplete survey of the literature. For research purposes it must be supplemented by a detailed perusal of the bibliography and an examination of many of the published papers in their entirety.

In addition to the KWIC Index, there are two sample pages of KWOC (keywords out of context). The KWOC keywords are on a separate line followed by the full title. This takes more room than a KWIC Index (17 entries per page for KWOC; 54 for KWIC), but is easier to use. There are also two pages of a sample *Author Index,* also followed by full titles (16 entries per page).

A magnetic computer tape containing the complete ceratopogonid bibliography as well as KWIC, KWOC and the author list are available for a service charge of $50.00 (write William Atchley, Department of Biological Sciences, Texas Tech University, Lubbock, Texas 79409).—Hugo Jamnback.

FAUNA OF THE USSR, DIPTERA, VOLUME III, No. 4, MOSQUITOES, FAMILY CULICIDAE. By A. V. Gutsevich, A. S. Monchadskii, and A. A. Shtakel'berg. Academy of Sciences of the USSR, Zoological Institute. Translated by the Israel Program for Scientific Translations, Jerusalem, 1974. 408 pp. with 261 figures. Supplied by the International Scholarly Book Services, Inc., P.O. Box 4347, Portland, Oregon 97208. $30.00.

The authors have drawn on other published works on mosquitoes and their own original research to produce an excellent book on this important group of insects in the USSR. Following the preface and a systematic index, 36 pages of text and 27 figures are devoted to general morphological descriptions of the adult mosquito, including male and female, and the larva and pupa of the immature stages. The structures shown in the figures are labeled to facilitate the study of the species that appear later in the text. About 9 pages are used for a discussion of the importance of mosquitoes as pests of man and animals and as vectors of diseases. Four pages are devoted to methods of collecting, mounting and preserving mosquitoes for study. A bibliography of 207 references, including publications in Russian and other languages, makes up the next 15 pages of the book. Except for the 4-page index of scientific names at the end of the book the remainder of the text is devoted to the systematics of mosquitoes in the USSR. A total of 8 genera and 98

species is included. Information is given on several species which have not yet been found in the country. Subspecies are also included and described. Excellent keys are provided for the identification of the genera and species.

Diagnostic descriptions are given in the systematic part of the text for the family Culicidae, and for each of the subfamilies, genera, subgenera, species and subspecies. Information on the species and subspecies include descriptions of the female, male hypopygium, and the fourth instar larva. The authors have avoided the use of specialized data and lengthy descriptions. Two hundred thirty-four figures, most of which show structures of the larva and male hypopygium, are provided to facilitate identification of the genera and species. Drawings that show the entire body of the female mosquito are included for 17 species. Pertinent information is also given on distribution, biology, systematics, and relation to the transmission of diseases.

The type used for this English translation of the book is smaller than that found in most volumes dealing with mosquitoes. Most of the figures have been taken from or redrawn from other works on mosquitoes. About 23 species treated in this book are also known to occur in North America. Many of these are *Aedes* spp. which develop in water derived from melting snow in the arctic and subarctic regions, and in the mountains. The additional information found in this book adds a great deal to our knowledge of these mosquitoes. Copies of this book should be available in every university and entomology department library, and culicidologists will find it advisable to acquire copies for their personal use.—Stanley J. Carpenter.