

## REVIEWS AND ABSTRACTS

Practical Malaria Control, A Handbook for Field Workers. By Carl E. M. Gunther, 1944. With foreword by Prof. Harvey Sutton, 91 pages. Published by Philosophical Library, Inc., 15 East 40th Street, New York. (The price is listed at \$2.50.)

In his foreword Prof. Sutton points out that

Dr. Gunther has spent many years as Medical Officer in the Mandated Territory of New Guinea in the midst of the tropical jungle, and in an area where malaria is highly endemic. In addition to being a successful physician, Doctor Gunther is also an entomologist of note.

The book is written in four parts; Part I deals with Antimalarial Measures (pp. 9-59); Part II deals with Diagnosis (pp. 40-59); Part III, Treatment (pp. 60-82); Part IV, Complications of Malaria, — blackwater fever and herpes (pp. 83-91).

Gunther points out that malaria control aims at reducing the majority of inhabitants from mosquitoes, and reducing the number and severity of attacks of malarial fever per inhabitant (the entire elimination of the infection is not the objective). By comparison with elimination its cost is negligible, and it achieves results which are satisfactory for all working purposes.

He emphasizes the importance of knowing which of the local species of *Anopheles* are vectors and what their breeding habits are. This he illustrates by citing a situation in which malaria was rampant in spite of what seemed to be a favorable hillside location near some clear springs and streams, a lower swampy location having been declared dangerous. It was found that the swamp-breeding species was not a vector in that district, and that the vector was a species which bred in the clear sunlit running streams. The solution of the problem, however, was not to move the community away from the hillside breeding places, but rather to make the sunlit foot unsuitable by growing shade trees and overgrowing shrubs.

The booklet contains practical standard advice on general methods of treating breeding places. It is pointed out that complete screening of houses is the most important single measure against malaria. The real difficulty in screening is the style of tropical houses. Suggestions are made as to how to meet this difficulty. There are some excellent pointers on standards of living in the tropics.

Every physician who elects to practice his profession in tropical malarial regions will be indebted to Doctor Gunther for this very useful booklet.—W. B. Herrms, Department of Entomology and Parasitology, University of California, Berkeley.

Written with the purpose of collecting information on the habits of *Culex molestus*.

Control Institute, clearly outlines definite morphological and biological characters to distinguish this species from *Culex pipiens*, with which it was confused in England until October 1934. As little is known regarding the habits and breeding places of *C. molestus*, the author has given explicit instructions for collecting mosquitoes and differentiating them from other insects. In addition, he has indicated the type of data to be submitted with specimens. These include locality, kind of water, location of water, degree of infestation, whether insect was caught biting or resting on a wall, and other needed facts. Sufficient information is given so that a person not trained in entomology could collect specimens and send in records of much value to the Institute.

As an aid in separating *Culex molestus* and *C. pipiens*, many excellent diagrammatic photographs and drawings appear throughout the paper. Records of *C. molestus* are listed, and show almost at a glance the history of the situation up to 1943. Of particular interest to entomologists is a list of mosquitoes occurring in Britain, given at the end of the paper.

In a compact 15 pages the results of studies gathered on *Culex molestus* up to the end of 1943 are given. This attempt on the part of the British to gain more facts about an insect of economic importance by putting out such a pamphlet is an excellent idea. The plan might well be followed by other groups of entomologists to further the gathering of data on insects or parasites concerning the habits of which we are in doubt or about which we possess scanty information.—Helen Solters, Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, U. S. Department of Agriculture, Washington, D. C.

DICHLORO-DIFENIL-TRICHLORO-ETANO (DDT) NO COMPARTE AS LARVAE DE CURCUBITOS. [DDT in THE CONTROL OF CURCUBITO LARVAE.] By R. Watsick and O. Urti. Arquivos de Higien e Saude Publica 9(2): 87-102, 1944. Sao Paulo, Brazil.

Out of Brazil comes a detailed paper in which the results of two investigations are presented. (1) DDT as a larvicide and ovicide, and (2) the toxicological effects of DDT on laboratory animals. The authors relate their experiments with DDT in various concentrations against larvae of *Culex* sp., *C. quinquefasciatus*, *Anopheles* sp., *A. strovati*, and *A. albivittis* placed in aquaria simulating Berkeley.