

Book Review

Medical Insects and Arachnids. Edited by **Richard P. Lane and Roger W. Crosskey.** Chapman & Hall. New York. 1993. 723 pp. ISBN: 0-412-40000-6. \$145.95

The editors state their intentions to "stress... 'systematic' aspects of medical entomology... and how the most important families, genera and species can most easily be identified." They have succeeded admirably in attaining their goal. This emphasis precludes extended descriptions of diseases associated with insect and arachnid species, and control is reviewed only briefly. The book is accurate and authoritative.

The 19 chapters are written by 15 authors, the first two, and five others by the editors. There is a General Introduction, with sections on classification and nomenclature, species and species complexes, distribution, vectors, and collection, storage and handling of specimens. The next chapter is an overview of the structure and classification of the Arthropods.

The major portion of the book is divided into three Parts: Diptera, the most extensive section; Other Insects; and Arachnids. The chapters on Diptera are written by 8 different authors. In Part Two, cockroaches, bedbugs, kissing-bugs, lice, fleas, and other insects are dealt with by 6 authors. In Part Three, written by 2 authors, one chapter describes medically important ticks and mites, the other spiders and scorpions.

There are no keys to the insect orders or dipteran families, which the authors feel would be unduly difficult for the non-specialist. Rather the reader is referred to the Recognition section of each chapter. Keys to genera and species of medically important taxa are presented, but the reader would have to have some knowledge of insect and arachnid morphology in order to use them effectively. More

diagrams representative of the genera in the keys would be helpful; the bibliographies in each chapter, valuable in their own right, can be used to find keys to specific groups.

Most chapters have been arranged by the editors into six topics: 1) Recognition and elements of structure; 2) Classification and identification; 3) Biology; 4) Medical importance; 5) Control; 6) References. The editors have been diligent in presenting chapters that are well-balanced and evenly edited.

Page headings do not show chapter number; therefore it is tedious to locate references to figures and tables which occur in chapters other than the one being read. The diagrams vary somewhat in clarity, but the figures are characteristically valid and well-presented, and, along with interspersed tables, are a positive feature of the book.

There are two helpful indices. The index of scientific names lists genus and species with page citations; each entry includes the name of the appropriate higher taxon. The subject index includes the common names of diseases and of organisms, and lists taxa (families, genera, or species) or common disease vectors. There is no glossary; one is indicated.

Medical Insects and Arachnids will be most useful to medical doctors and field biologists working in the tropics and subtropics. Even so, medical personnel in non-tropical regions who treat patients who have traveled in tropical regions will find this book a dependable and, perhaps necessary, reference. For others, sections on Biology or Medical importance, for example, can be read for detail or pleasure. It will appeal to a broad spectrum of readers, from undergraduates in entomology or pre-medicine to professionals in entomology and medicine. — **Arnold Van Pelt, Greensboro, NC.**