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BOOK REVIEW

KETTLE D.S.: MEDICAL AND VETERINARY ENTOMOLOGY. CAB International, Oxon, 1995 (2nd ed.), 725 pp. Hb: ISBN 0-85198-968-3, price GBP 75.00; Pb: ISBN 0-8518-969-1, price GBP 37.50.

After a big success with the first edition of this book in 1984, the second edition appeared in 1995. This new edition retains the overall aims and structure as the first one, established as a standard text in medical and veterinary entomology, but has been thoroughly revised to incorporate the new advances in the subject. The new literature published up to 1995 has been included in the new edition of the book. The author deals with both medical and veterinary entomology, which makes his book more comprehensive and attractive for more readers. It was a good decision, because the problems of human and veterinary medicine overlap each other, having many common topics concerning parasites, vectors and reservoirs of arthropod-borne diseases. Another good decision of the author was to include, apart from the insects, also mites and ticks in his medical entomology, because although taxonomically distant, their role as vectors and pests is similar. However, it is debatable to use the term "insects" also for Acari and omit the better term "arthropods" (page 3). Interestingly, there is the sentence "Sometimes the insect itself may be the pathogen as in scabies, a skin disease due to the presence of the mite, *Sarcoptes scabiei*..." (same page).

The book is divided into three parts. The first part, General introduction to medical and veterinary entomology, provides an introduction to the classification, external and internal structure and function, including mouthparts structure and host finding, of the relevant insects and mites. Special attention is drawn to species complexes and variation in some species of *Anopheles*, *Aedes* and *Simulium damnosum*. A valuable discussion on the mechanical and biological transmission is included in the introduction, followed by the warning against generalizations, in case of absence of knowledge, and against the overestimation of quantitative data. Also important is the information on the consequence of the occurrence of AIDS and transmission and manifestation of tropical diseases. Valuable is a mention on entomophobia and on arthropod venoms. Excellent is the chapter dedicated to the moutparts of medically and veterinary important insects, accompanied with a lot of outstanding and telling figures. The elaboration gives an impression on mouthpart development in different groups of parasitic insects and enables morphological and functional comparison of these groups from this aspect.

The second part of the book, entitled Insect and acarines of medical and veterinary importance, has three sections and 17 chapters: Diptera (10 chapters), Other insects (3 chapters), and Acari (4 chapters). Each chapter includes an introduction, classification, description of life cycle, mating, feeding, major genera and species, bionomics (oviposition, breeding sites, biting habits, host finding and dispersal) and medical and veterinary importance. Each chapter is completed by excellent figures of professional quality and an extensive list of recent literature. The author refers to important reviews and comprehensive literature directly behind the subtitles of different subchapters. This is a good idea, but when the subtitle is the name of a taxon, the reference could be confused with the name of the author and the year of description of the taxon.
The third part of the book, of equal value as the previous two parts, is dedicated to diseases of which the pathogens are transmitted by insects and acarines. This chapter is of great importance mostly for entomologists and acarologists rather than for physicians and veterinarians, because it includes a comprehensive overview of all arthropod-borne diseases, their epidemiology, distribution, causative agents, mode of transmission and other information. Nine chapters are included in this part, dealing with diseases caused by arboviruses, rickettsiae, bacteriae (including borreliae), followed by malaria, babesiosis and theileriosis, trypanosomiases and leishmaniases, lymphatic filariasis, human onchocercosis and other helminths transmitted by insects. Also in this part, the author uses the references for the most important reviews or essential literature in subtitles of subchapters, which in connection with the scientific name of taxon can be misunderstood as the author of the taxon. In the chapter on bacterial diseases, where also borreliae are included, a special taxonomic subchapter on the *Ornithodoros moubata* species complex is included. As this subchapter is not particularly important from the medical point of view, it should be included in the chapter on the taxonomy of Argasidae in the second part of the book. In the same chapter, the author still uses the name *Ixodes dammini* for one of main vectors of *Borrelia burgdorferi*. This taxon, however, was synonymized with *Ixodes scapularis* by Olivier et al. in 1993.

The second edition of the D.S. Kettle's Medical and veterinary entomology is an excellent book, which could be recommended to all interested in this scientific discipline, students or scientists, biologists, physicians, parasitologists, entomologists, epidemiologists, etc. The book established itself internationally as a standard text in medical and veterinary entomology. It belongs among the best textbooks which were published on this topic and we can congratulate the author for such an excellent work and to the editors for the decision to publish a second edition of the book.

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