R. Muller: Worms and Human Disease. Second Edition. *CABI Publishing, Wallingford, Oxon, UK, 2002. ISBN 0 85199 516-0, paperback, 300 pp. Price £35.00 (US$60.00).*

The second edition of the textbook of medical helminthology by R. Muller, the former director of the International Institute of Parasitology, St Albans, UK, appeared 27 years after the first edition published as "Worms and Disease: A Manual of Medical Helminthology". The new edition has been updated to present contemporaneous information about one of the most important groups of parasitic animals, the causative agents of diseases that affect millions persons in tropical and temperate zones of the world. During this time the importance of new helminths of people (e.g., *Oesophagostomum bifurcum*, *Parastrongylus costaricensis*, *Baylisascaris procyonis*) has emerged and some previously known species now have other names (e.g., *Calodium hepaticum*, *Parastrongylus cantonensis*). However, most of the changes made are due to the progress in molecular biology, diagnostics and treatment of helminthoses. The amount of new information about immunology of helminthoses is so extensive that the chapter "Immunology of Helminths" had to be completely revised.

The book is divided into the following chapters, which are preceded by 8 unnumbered pages of colour photographs impressively demonstrating the impact of helminth diseases on human health: Introduction; The Trematodes; The Cestodes; The Acanthocephala; The Nematomorpha; The Nematodes; Other (Non-Helminth) Groups; Immunology of Helminths (written by Derek Wakelin); Epidemiological Aspects of Helminth Infections; extremely useful chapter Helminthological Techniques; Appendices 1-3; General References and Further Reading; and Index. Appendix 1 summarises some landmarks in medical helminthology (unfortunately it finishes no later than 30 years ago) whereas Appendix 2 presents a glossary of terms used in helminthology. Appendix 3 provides the information about location of helminth parasites in the human body. Each main chapter includes a list of references and more general sources of information are also presented at the end of the book.

The text for individual parasites contains a list of synonyms, the names of the diseases caused by them, data on the morphology and life cycle, clinical manifestations and pathogenesis, diagnosis, treatment, epidemiology, prevention and control, and zoonotic aspects. The text is accompanied by high quality illustrations and photomicrographs, most of them published already in the first edition. The reader may appreciate some details in documentation, such as the comparative sizes of medically important trematodes in silhouette (Fig. 3).

However, the quality of maps showing geographical distribution of helminth parasites is low and the information they provide is not useful, e.g., the difference between the distributional areas of *Clonorchis sinensis* and *Opisthorchis viverrini* (Map 4) and between those of the periodic and non periodic forms of *Wuchereria bancrofti* (Map 8) are difficult to see. This is surprising because the maps in the first edition were much clearer, providing clear information about the occurrence of selected human parasites.

Although an up-to-date taxonomical terminology and modern helminthological system are used in this texbook, one of the prominent non-helminth groups – pentastomes – is still considered as a separate phylum and placed between annelids and arthropods. Recently, the palaeontological views favouring the pre-arthropod derivation of pentastomes have been replaced by opinions about their crustacean origin (Pentastomida + Branchiura = Ichthyostraca), based on spermatological and molecular evidence.

The present edition undoubtedly represents a step forward in providing updated information about the most important helminth parasites of man, with particular emphasis on diagnosis, treatment, clinical manifestations, pathogenesis, epidemiology, and control.

Practical guidelines are given for estimating the clinical and public significance of helminthoses: most helminths are pathogenic only when worm burdens are high. As there is only exceptionally multiplication within the host in most helminths, light infections become clinically important only following reinfection. It is highlighted in several examples (e.g., schistosomosis, filariosis) that only few patients are really sick, while the majority of infected people remain asymptomatic. However, even the low percentage of patients who suffer from severe clinical disease represents a problem of great medical and economic importance.

The book has a useful format and will serve as an indispensable source of basic information for human parasitologists, physicians working in tropical countries, parasitology students, helminthologists as well as anybody interested in diverse world of parasitic worms infecting human beings and in tropical public health.

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