

Literature review

Nematode parasites of Vertebrates. Their development and transmission. 2nd ed. R.C. Anderson, Cabi Publishing, Wallingford, Oxon, UK, 2000, 650 pp., ISBN 0-85199421-0, £99.5.

This book is the second edition of a book that was published in 1992. There is an increase in page numbers from 578 to 650. There is also an increase in the number of species described (from 561 to 595). The increase in pages is also due to the incorporation of new facts on nematode systematics, few of which are based on molecular data. It is intended for parasitologists as well as veterinarians, physicians, zoologists, wildlife and fishery biologists, phylogenists and ecologists.

The book is divided into two parts, the first one corresponds to the Secernentea Class (the majority of vertebrate nematodes: pp. 17–590) and the second to the Adenophorea Class (very few nematode parasites of vertebrates, among which *Trichinella* is the most important: pp. 591–634). In the first part (Secernentea), the following orders are presented: Rhabditida, Strongylida, Oxyurida, Ascaridida, Spirurida with the suborders Camallanina and Spirurina. The second part (Class Adenophorea) comprises the order Enoplida including two suborders (Dioctophymina and Trichinellina). One might think that we do not need such a book: Soulsby's Helminthology (in English, or Spanish: Parasitología y enfermedades parasitarias en los animales domésticos, 7a Edición, Nueva Editorial Interamericana, México, 1987) or Euzeby's books on helminthology (in French) are available and may solve most of the problems a researcher may encounter in the helminthology field. Roy Clayton Anderson provides us with a book of "biological scope" whereas the other books include considerations on treatments or veterinary importance of these infestations. The present book was written by a biologist for biologists and people having a curiosity for biology: I was interested in this book for that exact reason. The anthelmintic treatments are regularly updated/modified and books are obsolete within one or two years: any physician or veterinarian does not look only in books (updated every 8 years in that case) to find efficient treatments. The use of the present book is somewhere else. The clarity and quality of nematode drawings should be acknowledged, and are probably in relation to the interest of R.C. Anderson for morphology. I think it will bring more information to biologists than Soulsby's book, which has other merits: here we have clear information on the morphology of the different stages and up to date life cycles. As a researcher I would be pleased to have this book available to browse when some new question arises.

I am well aware that it is impossible to cover all aspects of nematodology and follow up all new findings. I regret that "morphological" polymorphism in the superfamily Trichostrongyloidea is not reviewed. It is a very surprising phenomenon: most of the species present two morphs (a minor and a major one), probably unequally fit to a variety of environments. The protostrongylids are not also fully updated. The existence of the new species in muskoxen, in the coldest part of Canada, the higher susceptibility of older animals, the absence of transmission from the goat to the kid, the putative existence of sheep and goat "lines" of *Muellerius capillaris*, and the knowledge acquired on mollusc infections and reinfections remain unrepresented in this book. The *Trichinella* section has also been revised but only the recognised species are presented whereas seven *Trichinella* types are found; new data have been gained on the

immunogenicity of *Trichinella* and they are not presented here. As is, the book deserves interest from veterinarians: there is an enormous bulk of information on parasites of veterinary importance.

I recommend the reading of this book. You may not find the latest news on phylogenetic relationships between taxa, but you should be satisfied with the morphological and eco-epidemiological data presented. The critics I introduce are small compared to the merits of this book. I congratulate R.C. Anderson for delivering such a useful book to the animal nematodologist community.

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