

BOOK REVIEW

Sifonápteros do Brasil

Authors: Pedro Marcos Linardi & Lindolpho Rocha Guimarães
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 Brasil, 2000, 291 pp.
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The book entitled *Sifonápteros do Brasil*, with two chapters, is a fantastic and extremely qualified work, that presents a revision of all flea species that occur in the country. Chapter I “Visão Panorâmica e Novos Avanços na Ordem Siphonaptera”, comprises the following topics: parasitic importance; study methodology; flea/host interaction; biology; control; morphology; systematics and the identification key for all South American flea families. Under “Importância Parasitológica”, two aspects are covered: the role of fleas as infesting agents and as disease-causing microorganism carriers; some of these diseases affecting humans and domestic animals. The transmission, as well as the epidemiology of the diseases, caused by virus (mixomatosis, in rabbits), rickettsiae (typhus murine caused by *Rickettsia mooseri*, in rodents and humans), bacteria (salmonellosis, tularemia and the plague, in humans), protozoa (trypanosomiasis in rodents) and helmintes, are vastly discussed. In addition, the authors present information on fleas’ natural enemies and their use in biological control. Under “Métodos de Estudo em Siphonaptera” the authors describe the hosts capture technique, as well as the collecting of fleas from wild animals. In addition to preservation methods, assembling and curatorial activities, the authors describe rearing and dissecting techniques. The topic “Interações pulgas/hospedeiros” deals with the importance of knowing infestation indices in order to stipulate control measures; it discusses the concept of primary and secondary hosts, highlighting that the specific association between parasite and host, not only aid taxonomic identification of the host but also allow suggestions of phylogenetic implications. Under “Biologia e Controle” the authors detail the biological cycle of the common dog flea, including some information on other species. The authors then discuss

the different control methods (mechanical, chemical, and biological) and the perspectives towards the use of different strategies for a qualified control program. The following topic, “Morfologia”, enables the researcher to comprehend each of the cited morphological characters, for they are all indicated in figures. Next, the phylogenetic relationships between the flea families, as well as the presentation of an identification key are dealt with under “Sistemática” and “Chave de Identificação das Famílias de Pulgas Sul-Americanas”. Chapter II “Sistemática dos Sifonápteros Brasileiros” deals, in detail, with each of the families, including identification keys for subfamilies, tribes, genera, and species. In some cases, a key for subspecies is presented. The authors also discuss their ideas on the perspectives for new researchers, highlighting the importance of investing in the study of larvae morphology, without forgetting that data obtained from fleas found off the host can help epidemiological alertness especially in plague occurrence areas. Three hundred and seventy four bibliographical references are cited, as well as two anexes: “Distribuição Geográfica das Espécies e Subespécies de Pulgas por Estados do Brasil” and “Lista de Hospedeiros de Pulgas Brasileiras”. The arduous and perfectionist work of Pedro Marcos Linardi and Lindolpho Rocha Guimarães is reflected in the well written text. These two authors, no doubt, have left a major contribution for nowadays and future siphonapterologists, when presenting identification keys for families, genera, species and subspecies, carefully illustrated by means of 363 illustrations that greatly facilitate taxonomical diagnosis. Considering the information presented for the Brazilian biodiversity, represented to date by 21 genera and approximately 60 species, including 17 endemic species, against the Neotropical biodiversity, with 52 genera and 280 known species, it is clear that the national territory has yet great potential to be studied. As such, this book represents great stimuli for young scientists to continue, not only taxonomical studies, but also different research lines, based on taxonomy. Finally, as I came across the final version of the book, I felt kind of proud for having been one of the authors apprentices and consequently was able to enjoy all his knowledge in each of these printed pages. As I read, my admiration and respect for the authors grew, for they translated all their dedication to Science in these 291 pages.

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