

BOOK REVIEW

Malária Aviária en un País de la Región Neotropical - Venezuela

Author: Arnaldo Gabaldon

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This book is a review on the plasmodia and other haemosporidia of birds from Venezuela, written by one of the most important malariologist of the New World, Prof. Arnaldo Gabaldon, who devoted himself over almost 60 years to the study of these parasites. He considered the bird plasmodia as splendid experimental models for the instruction of parasitologists as well as for research on the host-parasite relationship in malaria. Indeed, recent phylogenetic studies based on phenotypic and genotypic characters of species belonging to the genus *Plasmodium* have shown that *P. falciparum* is more closely associated to the avian malaria parasites than to other mammalian and human plasmodia. The experimental model *P. gallinaceum* x *Aedes aegypti*, is widely used in laboratories throughout the world, but both the parasite and the vector are alien to the Neotropical Region. Therefore, Prof. Gabaldon decided to search for Venezuelan models of avian malaria parasites. In spite of having one of the most numerous bird fauna, practically nothing was known about the prevalence and transmission of avian malaria parasites in that country. Then, Prof. Gabaldon and his collaborator, Dr G Ulloa, examined blood samples of almost 26,000 birds from Venezuela, described five new species and one

subgenus and resurrected from synonym two species of *Plasmodium* originally described from Brazil. In addition, they carried out investigations on the biology and ecology of avian malaria vectors and described a new method to search for sporozoites in naturally infected mosquitoes. The experience and knowledge acquired during several decades of research on bird malaria epidemiology in Venezuela was passed to this opera. Moreover, this book surpasses other publications for the study of most aspects of bird malaria in Venezuela. For instance, in spite of being a book on parasitology, it also provides a list of resident birds from Venezuela and keys for their identification. In addition, descriptions of geographic distribution, ecology and nesting season are given. A large amount of data on bird malaria vector biology, distribution and breeding-sites is available, particularly on *Aedeomyia squamipennis*, because of its ornithophilic behavior and role in the transmission of avian plasmodia. Most of the necessary knowledge on bird malaria epidemiology in the country is given, followed by redescrptions of twelve species of *Plasmodium* as well as of three other haemosporidia of birds from Venezuela. This book is indispensable for those who want to study the bird malaria parasites of the New World, mainly to those that are starting to work with such haemoparasites, since it provides a lot of information on the natural history of the genus *Plasmodium* as a whole and discusses the differences in the life cycle of those parasites of mammals and birds. Unfortunately the present edition needs to be revised and the bibliography must be updated, since most of the important discoveries obtained in the last ten years have been overlooked.

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