



Guia dos Sphingidae da Serra dos Órgãos, Sudeste do Brasil.

Author: Zenker, Mauricio Moraes

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BOOK REVIEW

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GUIA DOS SPHINGIDAE DA SERRA DOS ÓRGÃOS, SUDESTE DO BRASIL. A GUIDE TO THE HAWKMOTHS OF THE SERRA DOS ORGAOS, SOUTH-EASTERN BRAZIL by Martin, M., A. Soares, and J. Bizarro. Softcover. REGUA Publications, Oxford, 143 pp. ISBN: 9780956829108. Available from NHBS, UK (www.nhbs.com). Price: £ 24.99, US\$ 39

Located along the densely populated coast of Brazil, the Atlantic rainforest is one of the most endangered biomes in the world. Its extraordinary diversity and levels of endemism warrants its designation as a biodiversity hotspot in South America. Although vertebrates and trees are relatively well known, invertebrate diversity is poorly understood. Due to the ongoing loss of biodiversity, guides to identification of insect species are essential tools to aid in faunal documentation. The authors Alan Martin, Alexandre Soares and Jorge Bizarro try to fill this gap for the moth family Sphingidae in their book “A Guide to the Hawkmoths of the Serra dos Órgãos South-eastern Brazil”. Alan Martin is an amateur British entomologist with passion for Lepidoptera. Alexandre Soares is Brazilian and a research Professor at the National Museum (Museu Nacional, Universidade Federal do Rio de Janeiro). Jorge Bizarro is Portuguese but was trained as an entomologist in Brazil. The authors are engaged with conservation projects at REGUA natural reserve (Reserva Ecológica de Guapiaçu), in the heart of the Atlantic rainforest, Rio de Janeiro State.

The book is written in English but includes introductory chapters in Portuguese. It is richly illustrated with about 400 color figures, including dorsal and ventral views of pinned museum specimens and more than 100 live specimen photographs. It treats both males and females of the 110 species registered for the Serra dos Órgãos region, Rio de Janeiro State. Four additional species not known to the Serra dos Órgãos but registered to other regions of Rio de Janeiro are also included, making this book the first guide to Sphingidae moths of that state. Considering that there are 230 known species of sphingids in Brazil, this book represents the first field guide to the Sphingidae of Brazil.

The book starts with a checklist of hawkmoths with species names organized according to the Sphingidae phylogeny of Kitching and Cadiou (2000); each species name has a number linking it to the images of pinned and live specimens, making it easier for the reader to locate images. The first three chapters are short and to

the point. Chapter one is an introduction to the Atlantic rainforest and the Serra dos Órgãos. It details the different habitats in the biome, the huge loss of forest cover due to human action since European colonization, and the conservation actions to mitigate it. In the second chapter the authors explain the taxonomy of the family and what species are treated in the book. Maybe one of the limitations of this chapter is that the phylogeny used by the authors has already been revised twice, and there is no graphical representation allowing quick and easy interpretation of evolutionary relationships between subfamilies and tribes. The contribution of Henry Pearson to the Sphingidae collection of the National Museum in Rio is also mentioned. Pearson was an amateur English entomologist who immigrated to Brazil in the 1950's. For many years Pearson was engaged with the entomology collection of the National Museum. He built a collection of over 12,000 specimens, especially Mimallonidae, Saturniidae and Sphingidae, and introduced Alexandre Soares to entomology in the 1980's. Pearson passed away in 2004, leaving the National Museum his legacy: his collection and his pupil. Life history and development are described in the third chapter, along with highlights on biological differences between males and females, and hawkmoth flight capabilities and seasonal occurrence.

The fourth and last chapter is the largest and contains detailed taxonomical information for each species, i.e. scientific name, author and date of description, original description data, synonyms and type specimen locality. It also contains common names (when available), species distributions, notes to help with identification, and forewing length. This last item is very important since the pinned specimen photographs are not to scale, and forewing length is a crucial species character. The identification plates follow, including pinned museum specimens, images illustrating the Atlantic rainforest, and photos of live specimens in nature.

The book ends with six Appendices. Appendix I is a short biography of Henry Pearson, including a list of his publications. In Appendix II one can find further information about REGUA natural reserve and its conservation actions. Appendix III is a list of species organized according to the initial checklist with label data for all specimens that were measured. Appendix IV is a list of host-plants (from several sources) for all genera treated in the book that is organized by family and genus. In Appendix V and VI one can find a list of species reported from the five municipalities included

in the Serra dos Órgãos region, and a list of species recorded by month at REGUA natural reserve.

In general I found the book excellent, and the very good plates and images will certainly be of great help identifying adults. However, I have two philosophical issues on how the book was produced. First, who is the target audience of this book? The foreword states that it was written to “stimulate the enthusiasm and interest of volunteer naturalists with no prior specialist knowledge”. Considering the level of scientific content, the book seems written mainly for researchers rather than amateurs. Second, it is admirable that the authors tried to produce a bilingual book, but if the authors were attempting to stimulate volunteer naturalists, why

are only the introductory chapters in Portuguese? Indeed, there are many “volunteer naturalists” in Brazil who would prefer to read the descriptions in their native language.

LITERATURE CITED

KITCHING, I.J. & J.M. CADIOU. 2000. Hawkmoths of the World: an annotated and illustrated revisionary checklist. Cornell University Press, London, 256 p.

MAURICIO MORAES ZENKER, *Departamento de Zoologia, Universidade Federal do Paraná, Curitiba-PR, Brazil, CP.19020, CEP 81531-9880. Email: maurizenker@gmail.com*