

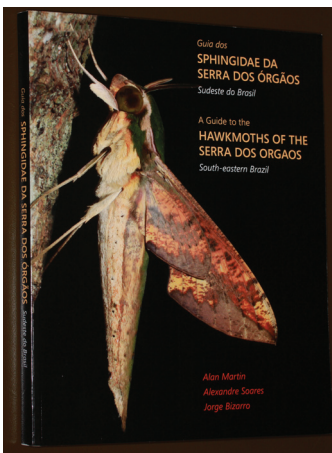
## BOOK REVIEW

**Martin, A., Soares, A. and Bizarro, J. (2011). *Sphingidae da Serra dos Órgãos, Sudeste do Brasil / A Guide to the Hawkmoths of the Serra dos Órgãos, South-eastern Brazil.***

Published by REGUA Publications. 143 pp. including 37 color plates. ISBN 978-0-9568291-0-8. Glossy soft cover, matte paper, 20 x 25 cm. Approximately US \$40-\$50. Available from NHBS - Everything for wildlife, science & environment | [www.nhbs.com](http://www.nhbs.com).

This is a book on the hawkmoths of the Serra dos Órgãos region of the state of Rio de Janeiro in southeastern Brazil. The book is written in both Portuguese and English, and includes accounts of the 110 hawkmoth species found in the region. The book has 37 color plates of pinned moth specimens, 120 images of hawkmoths resting, and photos of their habitats. The book is divided into four chapters and six appendices. The introductory chapter is on the history of the Mata Atlântica (Atlantic Rainforest) of Brazil, and outlines how human development in the area has led to a destruction of this habitat. Fortunately, the Serra dos Órgãos region has survived major destruction and is considered one of the world's ten biodiversity hotspots, which includes over 20,000 plant species. Both Chapter 2, "Hawkmoth taxonomy and the species covered" and Chapter 3, "Hawkmoth life history and development" are useful for amateur entomologists as they describe common features of hawkmoths for identification, and provide background in sphingid systematics and life-history, both on a global and local scale. In Chapter 2, a table accompanies the text and lists the number of sphingid genera found in the Serra dos Órgãos. Chapter 3 includes valuable information on how to distinguish male and female hawkmoths.

While the first three chapters are only 1-2 pages in length, Chapter 4 is much longer and features the hawkmoths of Serra dos Órgãos. This chapter also includes notes on four additional species that have been found elsewhere in the state of Rio de Janeiro. Taxonomy follows Kitching and Cadiou (2000) and also the CATE Sphingidae website (Kitching et al. 2011). Each species account is fairly general, and includes the genus and species name, a reference to the original description, a list of synonyms, the type locality, forewing length, and distribution and diagnostic features. The list of species was generated primarily from the records of the late Henry Pearson who had amassed a collection of over 12,000 Lepidoptera specimens from the region.



Photographs of pinned adult specimens are superb. Each plate includes a dorsal and ventral photograph of both sexes, along with their scientific name. Taxa are listed by subfamily in the order of Smerinthinae, Sphinginae, and Macroglossinae. The quality of the images is high, and the photos are useful for identification. The only shortcoming of the plates is the absence of collecting data

for the photographed specimens. Because there can be seasonal and regional phenotypic variation, it would have been useful to have these data included. Following the images of the pinned specimens, there are several pages that show photos of live, perched hawkmoths and their habitat. These images are of a high quality and are valuable as they show how some of the species perch. This section is the highlight of the book!

There are six appendices at the end of the book: (1) biography of Henry Pearson, (2) review of the Reserva Ecológica de Guapiaçu (REGUA), a private natural reserve located about 70 km north of Rio de Janeiro in the Serra dos Órgãos, (3) list of specimens measured for forewing length data, (4) larval host plant list, (5) table of species recoded by municipality, and (6) table of species recorded at REGUA by month. While I found most of these appendices useful, the hostplant section seems rather incomplete, as it only lists the genus names of moths and hostplants. Because some hawkmoth genera feed on a variety of host species, I think it would have been more appropriate if species names of both moths and hostplants were listed.

Overall, the authors have done an excellent job compiling a book on the hawkmoths of the Serra dos Órgãos. While this book covers the diversity of sphingids in a relatively small area in Rio de Janeiro state, the photographs are very well done and can certainly be used to identify species in surrounding areas. The authors write, "[we] hope that this book will encourage further interest and studies, from amateurs and professionals alike, into the hawkmoths of the Mata Atlântica and perhaps even lead the way for further publications on the remarkable and diverse Lepidoptera and wildlife of the region." (p. 7). I believe their wish will be granted, and I recommend this identification guide to anyone interested in Neotropical hawkmoths.

## REFERENCES CITED

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