## Journal of the Lepidopterists' Society 53(1), 1999, 48

SATURNIIDAE MUNDI: SATURNIID MOTHS OF THE WORLD, Part 3, by Bernard D'Abrera. 1998. Published by Goecke & Evers, Sportplatzweg 5, D-75210 Keltern, Germany (email: entomology@ s-direktnet.de), in association with Hill House, Melbourne & London. 171 pages, 88 color plates. Hard cover, 26 × 35 cm, dust jacket, glossy paper, ISBN-3-931374-03-3, £148 (about U.S. \$250), available from the publisher, also in U.S. from BioQuip Products.

Imagine a large book with the highest quality color plates showing many of the largest and most famous Saturniidae from around the world! Imagine that this book shows males and females of all the 14 known species of Attacus, in addition to the equally massive Coscinocera and Archaeoattacus. Imagine that all of the American Rothschildia were depicted, as well as all of the African Epiphora. Imagine many of the species of Samia, some recently discovered in and described from Indonesia and China, to be included. Imagine that the North American Callosamia, Hyalophora, and Eupackardia were included to complete the tribe Attacini. Imagine that this book had all of the beautiful Actias, Argema, and Graellsia, with their delicate green, yellow, and pink coloration, and tailed hindwings. Now suppose such a book included all species of the confusing and complex group from the Northern Hemisphere usually placed in Saturnia, Caligula, Neoris, Agapema, Eriogyna, and Perisomena, all neatly sorted out and figured. Add to all these, numerous other saturniids in well-known genera like Rhodinia, Loepa, Copaxa, and Cricula, and lesser-known genera like Syntherata, Opodiphthera, Lemaireia, and Pararhodia. If you can imagine all of those saturniids shown as life-sized illustrations, then you can begin to visualize the satisfaction that this book will bring to everyone who owns or uses it. This is the book for which lepidopterists who love Saturniidae have been waiting!

The book shows many species that are absent from most museum and private collections. For example, from China is shown the rich maroon colored Samia watsoni, the massive peach-colored Loepa oberthuri, and Actias dubernardi, the most gracile of all the Actias. From East Africa is the unique Argema besanti, the smallest yet perhaps the most beautiful of its genus, and from Indonesia we see Samia yayukae, Samia naumanni, and Cricula hayatiae. Included also are several recently described species such as Neoris codyi from Pakistan, named for the American saturniid artist John Cody, Opodiphthera excavus from Queensland that forms its cocoons below ground to avoid sweeping fires, Samia treadawayi from the Philippines, Actias angulocaudata and Loepa obscuromarginata both from China, Agapema platensis from Texas, Copaxa evelynae from Guatemala, and Rothschildia renatae from Peru. None of the latter three species could be included in Claude Lemaire's revision of the American representatives of the subfamily Saturniinae (1978, Les Attacidae Américains, Édition C. Lemaire, Neuilly-sur-Seine, France, 238 pp., 49 pls.), because they had not yet been discovered in 1978.

I will provide some taxonomic commentary. In the book, D'Abrera describes two new species: *Opodiphthera goodgeri* and *Pararhodia setekwa*, both from New Guinea. The figure of Actias chapae from Chapa, Vietnam (near its northern border with China), shows that it is a very distinct species; I had not seen a figure or specimen of A. chapae until now. The figure of the Chinese Actias felicis still makes me think that this name is a synonym of A. gnoma from Japan and Siberia, an opinion I reached long ago. The taxonomic differences between Actias heterogyna and A. sinensis are not clear in the figures in this book. D'Abrera has shown good insight by sorting out some synonymies in Epiphora and Coscinocera. We now have a color figure of each pair of species of Opodiphthera, enabling us to identify material from New Guinea in the *sciron* group, which includes several species that look much alike. Prior to this we only had a key published by E.-L. Bouvier (1936, Mem. Natl. Mus. Nat. Hist. Paris, 3:1–350), in which he called these species *Neodiphthera*. I agree with D'Abrera's interpretation of the distribution of *Attacus aurantiacus*.

As with D'Abrera's similar books on Sphingidae and butterflies, this one is a pictorial guide to these moths, based largely on specimens in The Natural History Museum in London. In an effort to make the coverage as complete as possible, the author has done an exceptional job of gathering missing material to be photographed, receiving several loans and donations from Australia, Belgium, France, Germany, and the United States. He has largely succeeded; relatively few known species are missing. Missing also, but by design, is the extensive genus Antheraea, because it will be treated in Part 2 along with the many African genera such as Imbrasia, *Pseudobunaea, Gynanisa, Eochroa, Heniocha, Usta, Eustera, Ludia*, and Microgone. Part 1 of Saturniidae Mundi was published in 1995 (reviewed in 1996, J. Lepid. Soc. 50(4):355–356) and included the magnificent moths in the genera Copiopteryx, Arsenura, Automeris, Hemileuca, Citheronia, Eacles, and related groups.

In Part 3, the text is not very extensive for each species, mainly giving the citation to the original description, diagnostic characters, and the distribution in general terms. An additional component is that for many species D'Abrera refers the reader to primary sources in literature where the life history and immature stages have been described and figured by other authors. D'Abrera does not use subgenera and makes minimal use of the subspecies category, thereby preserving the most basic tenets of the binomial system of nomenclature intended by Linnaeus. My taxonomic philosophy is in total agreement with his approach. D'Abrera's taxonomy is both conservative and accurate. I found virtually no errors in spelling or fact. The book is extremely reliable as an authoritative source on these venerable moths.

As in Part 1, the introductory section offers some photographic portraits of some of those who contributed significantly to our knowledge of Saturniidae in the past, and who are actively doing so in the present. These include Charles Oberthür, Dr. Karl Jordan, Walter Rothschild, Dr. Stefan Naumann, Captain Ulrich Paukstadt, Laela Hayati Paukstadt, and Thierry Bouyer.

All who consider Saturniidae to be among their special interests will want this book, but some will delay or avoid purchasing a copy because of the high cost. A book of this magnitude and physical quality simply cannot be sold these days for less money. Publishers and authors are not getting rich on these kinds of publications. Anyone who considers the price to be an obstacle should buy this one book instead of spending more money in the long run trying to buy several other books (some of which are out of print and hard to find) that still would not show as many color figures of saturniids. With a print run of only 1500 copies, I would not wait too long to buy one. Most of us will never be able to obtain most of the species shown in this book for our collections, no matter how intensively we collect, buy, and exchange specimens. However, we can have a complete collection of these moths in the form of fine color figures. For amateurs who rarely have the opportunity to see the foreign literature on Saturniidae, current and historical, this volume offers the best and really the only opportunity to become knowledgeable about the names of the many species that exist, where they are from, and what they look like. I highly recommend this book because it will prove to be both immensely useful and a true pleasure to own. It represents a milestone in the literature on Lepidoptera.

RICHARD S. PEIGLER, Department of Biology, University of the Incarnate Word, 4301 Broadway, San Antonio, Texas 78209-6397 USA