

BOOK REVIEW

THE SATURNIIDAE OF AMERICA. CERATOCAMPINAE, by Claude Lemaire. 1988. 480 pp., 64 pls., 379 text figs. Mus. Nac. Costa Rica. Soft cover. \$80.00.

This is the third volume by Lemaire in his series of monographs of the New World Saturniidae; its predecessors concerned Attacinae (=Saturniinae) (1978) and Arsenurinae (1980). All three follow the same format; the two earlier volumes were illustrated in black and white, but the present one shows the moths in color.

The use of Ceratocampinae may come as a surprise to some, rather than Citheroniinae, which has been used by recent workers. Fourteen subfamily names are listed as being available for this group of moths; the oldest, by 25 years, is Ceratocampinae. Two additional available family-group names also have priority over Citheroniinae.

This subfamily is second only to Hemileucinae in numbers of species; 170 are covered in this volume, and they are placed in 27 genera. The group is restricted to the New World, with the taxa being distributed from southern Canada to southern South America. The highest percentage of endemic species is found in Mexico and Central America, the next largest group in the general area of southeastern Brazil.

The introductory section of the book gives morphological characters for the subfamily, geographic distribution, a summary of knowledge of the early stages (with six color plates showing caterpillars of 24 species), a discussion of taxonomy and name usage, and phylogeny, followed by a key to genera. Each genus has its bibliography, followed by most of the subjects listed above. Following keys to included species, each taxon is treated in a similar fashion. Drawings of male and female genitalia, plus distribution maps, are always present; antennae, venation, and legs are illustrated for most genera. Each species (and subspecies when present) is illustrated in color, usually with several examples being shown.

While the text is in French, each taxon, from subfamily to subspecies, has a diagnostic summary in English; in addition, there is a Spanish summary for the subfamily and for each genus. This makes the book readily understandable to those who do not read French; Lemaire is to be highly commended for including these extremely useful additions.

The taxonomic approach is based on study of specimens from the entire New World. This method, rather than defining genera by use of species from a restricted geographic area, has led to some name changes. On the generic level, the only change for the North American fauna is that *Syssphinx* is used instead of *Sphingicampa*. Lemaire takes a conservative approach to nomenclature; his treatment of some species and subspecies differs from some recently published papers. It is a pleasure to see how he handles these problems, utilizing his knowledge and perspective, and shedding new light on some areas that need this type of analysis.

This volume, like the two before it, is handsomely done; the color plates are a great improvement over the earlier black and white illustrations. In a work of this size it is not surprising that a few errors have inadvertently been made; an included erratum sheet covers most of these. Lemaire is to be congratulated; we look forward to each additional volume in this series by the leading specialist of New World Saturniidae.

This and the two previous volumes will be the standard by which identifications and curating will be followed for decades to come. They will be of interest to anyone curious about this family of moths. Now that the basic taxonomy has been done, the invitation is there for much needed work on ecology, life histories, food plants, and behavior of these interesting moths, to mention a few possible fields of study.

Copies may be obtained by sending a check for \$80.00 (U.S.), made to Fundacion Neotropica, Museo Nacional de Costa Rica, Aptdo. 749-1000, San Jose, Costa Rica; for airmail delivery, add \$5.00 to the price. To obtain Vols. 1 (Attacinae) and 2 (Arsenurinae), I suggest contacting the author directly, as he had these volumes privately printed. The address of this Lepidopterists' Society member is La Croix des Baux, F-84220 Gordes, France.

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