

BIOLOGÍA Y MORFOLOGÍA DE LAS ORUGAS: LEPIDOPTERA, Vol. 6: Syssphingidae—Saturniidae—Endromidae—Lasiocampidae—Drepanidae—Thyatiridae—Notodontidae—Hypsiidae, by Carlos Gómez de Aizpúrua. 1988. Boletín de Sanidad Vegetal, Fuera de Serie No. 12. Published by Ministerio de Agricultura, Pesca y Alimentación, Centro de Publicaciones, 1 Paseo de la Infanta Isabel, 28014-Madrid, Spain. In Spanish. 248 pages, 402 color photographs. Soft cover, 18.5 × 25 cm, ISBN 84-7479-722-5; 3000 pesetas (about \$30 U.S.).

This book is part of a series on insect larvae published in Spain by the Ministry of Agriculture, Fisheries, and Nutrition as a volume in their Bulletin of Plant Protection. Its primary intended use is undoubtedly in the applied areas of entomology like agriculture and forestry, but the value of this book to taxonomists and lepidopterists also will be good. I have not seen the other volumes.

For each of the 50 species of Spanish moths treated, there is a map of the distribution in all of Europe, a graph of the 12 months showing the seasonal life cycle, a table listing morphological characteristics (more on color and pattern than on structure) of their caterpillars, a brief bibliography, and 8 or more color photographs, interspersed throughout the text. The greatest appeal and value of this book are these abundant and excellent photographs of caterpillars. For virtually all species the pupa, adult (usually one pinned and spread, one in living repose), and top and side views of the mature larva are shown. Lepidopterists interested in lasiocampids and notodontids will delight in seeing the 21 species of Lasiocampidae and 13 species of Notodontidae that fly in Spain displayed in so many fine color photographs. Interestingly, few cocoons are shown, the pupae having been extracted from their cocoons to be photographed. Good life history data are given in the text, including foodplants, flight times, and habitats, classification, and historical facts. There are no overall introductory chapters, but short ones for each family, and an index at the end.

The genus *Malacosoma* is usually misspelled as *Malocosoma* in this book. The type-species *M. franconica* is erroneously attributed to Esper, instead of to Denis & Schiffermüller, an error perpetuated by many authors (see Fletcher, D. S. & I. W. B. Nye, 1982, *In* Nye, I. W. B., ed., *The Generic Names of Moths of the World*, Vol. 4. Brit. Mus. Nat. Hist., London, xiv + 192 pp.). In the saturniids, I noted errors on the range maps for two: *Saturnia pyri* does not occur in the British Isles and the introduced *Samia cynthia* is not widespread across the northern edge of Africa. Therefore, I suspect that there are errors on maps for other species less familiar to me.

It may be of interest here to explain the historical reason why some European authors persist in classifying *Actias isabellae*, and sometimes *Aglia tau*, under the family name Syssphingidae, instead of Saturniidae. In the standard reference series edited by A. Seitz, *The Macrolepidoptera of the World*, Max Draudt in his 1930 volume apparently could not force himself to classify *Copiopteryx* and *Actias* into separate subfamilies, the long-tailed hindwings that they share convincing him (erroneously) of a relationship. So he put them together in Syssphingidae (which we now call Arsenurinae plus Ceratocampinae, within the Saturniidae) where *Copiopteryx* belongs but *Actias* does not. Standard references are all too often considered to be "the last word" in taxonomy, so here confusion persists 62 years later! Another taxonomic point I take this opportunity to make is that on phylogenetic grounds alone, the generic name *Graellsia* must be considered a synonym of *Actias* (because to separate out the European species leaves the American and Asian ones as a paraphyletic, i.e. unnatural, assemblage), although technically the two names are subjective synonyms (see Nässig, W. A. 1991, *Nota Lepid.* 14:131–143.).

This volume and probably the others in the series would be fine to add to the shelves of all European entomological libraries and also worthwhile to many non-European

lepidopterists. The quality and usefulness of the many color photographs should overshadow any difficulty or inability by some to read Spanish.

RICHARD S. PEIGLER, *Department of Zoology, Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, Colorado 80205.*