

ditional photographs are used twice in the book. Either there were no others available to use as fillers or I have nothing better to do than to look for repeats.

A few comments are needed concerning the glossary. The abdomen includes the several posterior segments; the author surely meant the posterior region of the body rather than posterior segment. This also applies to the thorax. The anal angle, apex, and costal margin occur on both wings. It is interesting to learn that a subspecies is "the subset of a population within a species that has its own distinctive features and is usually reproductively isolated." Reproductively isolated from what?

The book serves its intended audience and the photographs will allow identification of most species. The price is a bit steep and those who have more than a passing interest would want to spend a few more dollars for something like Opler's (1999) western field guide. As I reread this critique, I wonder if maybe I am getting old, picky, and cranky. Maybe. But then again, maybe not. Neill considered a coupled pair as in a predicament. This still sounds like a pretty good predicament to me. Do I need a disclaimer? If so, I take no responsibility.

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THE SESIIDAE OF EUROPE. 2001. Zdeněk Laštůvka & Aleš Laštůvka. Apollo Books. Stenstrup, Denmark. 245 pp., 9 colour plates. 17 cm by 24 cm. ISBN: 87-88757-52-8. Retail cost DKK 370.00 (approximately USD 45.00). Hard cover.

Sesiid moths, bee and wasp mimics, are popular amongst lepidopterists and lay persons alike. Often not seen, these creatures quickly catch the imagination and attention of many people. Lepidopterists, intrigued by the mimicry, anonymity, and diversity of so many species, wonder why they don't see more of the moths. Others, when presented with the true identity of these wasps as harmless moths, are awestruck, often responding with "You've got to be kidding!" For many years in the USA, only Beutenmuller's tome extra ordinaire (Beutenmuller, William, 1901, Monograph of the Sesiidae of America North of Mexico, Memoirs American Museum of Natural History, 1(5):215-352) with one plate reproduced in Holland's *Moth Book* (Holland, William Jacob, 1903, Doubleday, Page and Company, New York, 479 pp., 48 color plates) was available as the sole source of information. In Europe, as in the Western Hemisphere, the popularity of sesiid did not subside, and two recent books help fill the desire for knowledge. In 1999 Gem Publishing Company delivered a striking volume on Sesiidae (Spatenka, Karel et al. 1999. Handbook of Palaearctic Macrolepidoptera Volume 1 Sesiidae - Clearwing Moths, Gem Publishing Company, Wallingford, England, 569 pages, 57 color plates). Apollo Books now brings us *The Sesiidae of Europe*, and a fine book it is.

A quick examination of the book reveals a polished colorful hard binding that is Smythe sewn. A Smythe sewn book has threads through the folds of the paper on the inside margin. A Smythe sewn book lies flat when open, and individual pages never fall out. I urge all publishers and authors to take note of the superior quality of Smythe sewn books. The insides are clean, and clearly written with a comfortable typeface and large font. The color illustrations are very sharp. The lighting is so even the specimens appear at first to be paintings, but the pins belie the fact that they are real, nearly perfect specimens. The 1.8x natural size of the specimens allows inspection of all details even on small species. The consistently and artistically drawn interpretations of the genitalia are well done, although I prefer techniques of drawing that show exactly what the genitalia look like. The range maps are easy to use, but the heavily drawn political boundaries compete for attention with the black shading delineating species'

distributions. The production of the book is consistently very high quality.

After reading it in detail I consider the book both an identification manual, and revision of European Sesiidae. Since it proposes many taxonomic changes at the species and subspecies level (summarized in the abstract) it is required for European lepidopterists, and the one synonym: *Synansphecchia* Capuse, 1973 = *Pyropteron* Newman, 1832 will be of interest to students of Sesiidae everywhere. Other reviewers, more familiar with European fauna, are likely to comment on the correctness of the taxonomy and nomenclature. Most revisionary works contain more details, with specific citations, than are included in the section of Phylogeny and Classification. The authors should have explained why they chose the classification used in this book. A systematic list highlighting taxonomic revisions is followed by comprehensive keys; a key to subfamilies, tribes, and genera, followed by keys to the genera.

I like keys that are clearly dichotomous and well written because such keys can be used to show the characters the authors use to differentiate between species. In this book, some couplets are excellent; "Antenna without terminal scale pencil (text figure 1a)" versus "Antenna with terminal scale pencil (text figure 1b)." The previous couplet is truly dichotomous and illustrated, whereas the following couplet should be more clearly written, and since it includes no illustrations, interpretation is left to the reader. "Abdominal rings on segments 2, 4, 6, or additional rings only indicated" versus "Abdominal rings or margins also on other segments." I don't have any European species to test the keys presented in this book.

The book presents several other sections as well. A nicely illustrated section on the morphology is brief with some details, such as the coupling of the wings, unillustrated. A one page summary of the biology of Sesiidae is followed by an excellent list of larval hosts. The last few pages include an easy to use distributional check-list and an excellent bibliography.

The identification part of the book illustrates the great similarity between species. The assertion by the authors on page 8 "In a few isolated cases, even the combination of external and genitalic characters may not lead to a satisfactory result, . . ." is an understatement when compared to the illustrations of male and female genitalia along with wings for the genus *Chamaesphecchia*. My head began to hurt when I considered the similarities as I examined several pages illustrating just a few species. It is clear that without complete facts, including larval host data and other bionomic information, differentiating some of the species of Sesiidae will be nearly impossible.

The meat of the book lies in the species accounts, the color illustrations, and the genitalia drawings. There are about two species accounts per page, and each includes the name of the insect, the author and year of description, reference to color illustration, and taxonomic information. For each species and synonym, the original description is referenced. The full literature citation for the original description should have been included. The type locality is specified, location of the type material, when known, is given, followed by notes about lectotypes and other taxonomic designations.

Each species account is divided into four sections; Diagnosis, Genitalia, Biology and Habitat, and Distribution. A fifth section, Remarks, is sometimes present. The detailed Diagnosis does not often tell how to distinguish one species from another. It is awkward that the reader will be required to reconcile distinguishing characters presented in the keys with the written descriptions in the Diagnosis. The section on Genitalia provides reference to the drawings, and in the case of *Chamaesphecchia*, several entries simply refer the reader to another, nearly identical, species. This is a tough genus. The entries for Biology and Habitat, when known, are detailed and well referenced. The Distribution section is a verbal description of the maps.

I want to know more about Sesiidae. The two paragraphs about collecting and rearing are too brief and lack detailed information. The Introduction quickly mentions the increased knowledge of Sesiidae through the use of synthetic sex pheromones, yet this single phrase is the only place sex pheromones are discussed. The almost casual mention of other workers' knowledge without literature citations could be frustrating to a newcomer to the study of Sesiidae. The references to this as the second edition without clearly identifying the first edition will lead bibliographers 100 years from now, without additional knowledge, to search in vain for the first edition.

As I recommend this book to lepidopterists, especially those interested in Sesiidae, I suggest that readers of English in the Western Hemisphere not be put off by the odd hyphenation, including splitting the word "here" with two letters on each side of the hyphen. I am willing to credit these slips to the software or typesetters rather than think the translation so bad as to question the credibility of the text. This is a good book.

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