

Marek Bąkowski 2013. The Sesiidae (Lepidoptera) of Poland. Kontekst, Poznan, 277 pp. incl. 109 plates (70 in colour). Hard cover, format B5, ISBN 978-83-62564-36-1. Price: 40 EUR + 7 EUR for postage in Europe¹.

This book brings a complex revision of the clearwing moths (Sesiidae) of Poland. It is a comprehensive treatment of this family for the territory of Poland which comprises 31 species (of the about 110 species known in Europe). The text is supplemented by 36 text figures and 109 plates of adults and preadult stages. The general contribution of the work and its relevant results are clearly summarised in the abstract.

In the Introduction, the author briefly characterises the family Sesiidae, the level of our knowledge and the history of research. Methods of preparation and treatment of all developmental stages and individual morphological structures, the way of preparing images and genetic analyses are clearly described in the Material and Methods. A detailed description of adult morphology follows – attention is paid also to the morphological structures and body parts which are usually not used in diagnoses or taxonomy in other groups of Lepidoptera, e.g., colouring of the ventral and lateral parts of thorax and abdomen, and of the legs. The description of the adult includes genitalia characters of both sexes. The author also pays attention to the description of preadult stages – egg, larva and pupa, including chaetotaxy. In the chapter on Biology, the author primarily reviews the characteristic Batesian mimicry of clearwing species which manifests itself by the wing and body morphology, colouring and ways of moving. He further describes ways of oviposition, larval development and ethological manifestations of adults.

The biology of species is in close relation to their economic importance in several cases. In this regard, *Pennisetia hylaeiformis*, *Synanthedon tipuliformis* and *S. myopaeformis* are especially important in Poland; the author also mentions the possible harmfulness of *Synanthedon vespiformis* to fruit trees, *Paranthrene tabaniformis* and *Sesia apiformis* to poplar plantations and *Synanthedon formicaeformis* to osiers. The chapter on the pest species also contains possible ways for their control.

In the chapter on Distribution, the author discusses the different possible ways species spread from various glacial refugia after the last ice age, and he evaluates relations between distributional range size, trophic mode, and the zoogeographic origin. The excellent chapter on the systematics and phylogeny recapitulates historical development and changes of opinions on the position of the family Sesiidae within Lepidoptera, its relationship to other families and superfamilies and the intrafamilial division. The general introductory chapters of the monograph are concluded by the list of Polish species, keys to the subfamilies and genera based on external characters of adults and genitalia, keys to the genera based on pupae and keys to the genera and species based on larvae.

A substantial part of the book takes a systematic overview of species recorded in the territory of Poland. Morphological characteristics of adults, including male and female genitalia, larvae and pupae are given for individual genera and species; further biology, pheromone behaviour, habitat, distribution, and known records in Poland are summarised under each species. Keys to the species based on adults and pupae are supplied for individual genera. The new aspects taken into account in the book include especially the descriptions of preimaginal stages, in particular the morphology and chaetotaxy of larvae. The work is completed by a very comprehensive and representative overview of the literature which includes a complete Polish sesidological bibliography and all important foreign works. Particular attention was paid to the perfect text figures and especially to the set of plates with figures of adults, genitalia, pupae, larvae and SEM photos of morphological details (eggs, some structures of larvae, antennae and genitalia), all in high quality.

The publication is an example of a perfectly prepared monograph which is not only a precise summary of the published data, but it is mainly based on the author's 20 years of research. It provides new knowledge concerning the morphology of adults and preadult stages and the phylogeny, biology and distribution of clearwing species. Thus the work constitutes an important source of information for further studies of this family in Poland and elsewhere in Europe.

ZDENĚK LAŠTŮVKA

¹ A limited number of copies is available from the author (bakowski@amu.edu.pl).