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BOOK REVIEW: VÍCTOR J. MONSERRAT: LOS NEUROPTERIDA DE LA PENÍNSULA IBÉRICA Y BALEARES. MONOGRAFÍAS S.E.A. VOL. 16, SOCIEDAD ENTOMOLÓGICA ARAGONESA, ZARAGOZA, 2022, 715 PP.

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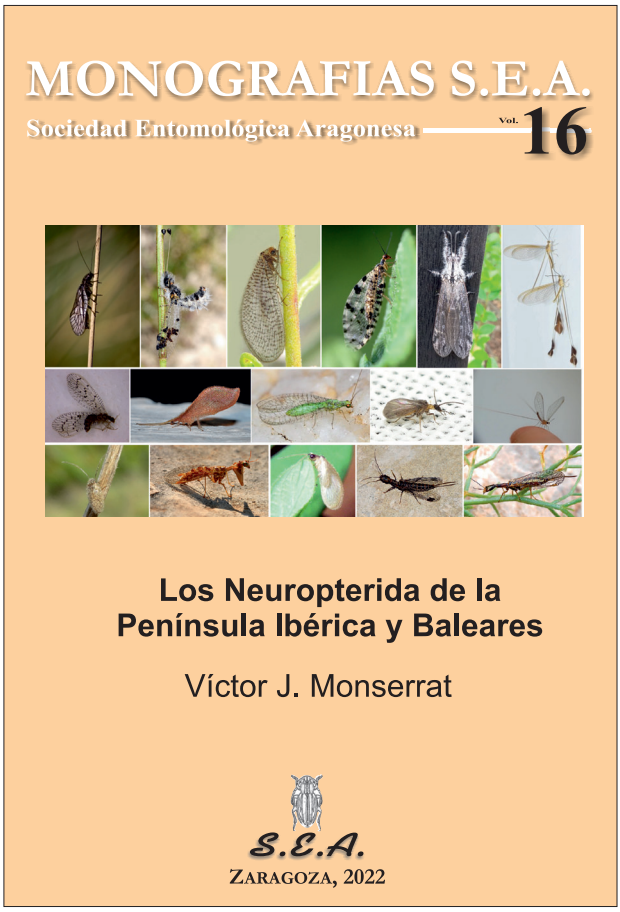
Izvleček - Víctor J. Monserrat: Neuropteridi Iberskega polotoka in Balearov –recenzija monografije
Monografija Los Neuropterida de la Península Ibérica y Baleares, ki jo je pripravil Víctor J. Monserrat, predstavlja celovit pregled favne nadreda Neuropterida na Iberskem polotoku in Balearih. Delo, ki je rezultat več kot petdesetletnega raziskovalnega dela avtorja, vključuje taksonomske ključe, opise, distribucijske podatke, ekološke značilnosti ter skoraj 4600 referenc. Recenzija povzema glavne vsebine in poudari pomen monografije za nadaljnje raziskave te skupine žuželk v evropskem prostoru.
Ključne besede: Neuropterida, Iberski polotok, Baleari, sistematika, taksonomija, entomologija

After World War II, only a handful of books with reliable data were published that monographically dealt with the fauna of Neuropterida of Europe, either at a regional level or for the whole of Europe (e.g., Meinander 1962 – eastern Fennoscandia; H. Aspöck & U. Aspöck 1964 – Central Europe; Kis et al. 1970 – Romania; H. Aspöck et al. 1980 – Europe; Rintala et al. 2014 – Finland). In recent decades, new knowledge has accumulated, requiring revised versions of publications dealing with biology, especially taxonomy and faunistics of the Neuropterida. This is exactly what Víctor J. Monserrat has managed to do. His book entitled "The Neuropterida of the Iberian Peninsula and Balearic Islands" is written in Spanish with English abstract. The monograph on the insect superorder Neuropterida of the region represents the life work of Víctor Monserrat who studied neuropterids for five decades. This comprehensive book, which consists of 715 pages, is divided into the following main chapters: Introduction including material and methods; General information on the superorder; Order Megaloptera; Order Neuroptera; Order Raphidioptera.



The objective of the monograph is to offer all the updated knowledge on the neuropterid fauna of the Iberian Peninsula and Balearic Islands (IP and BI), enable the reader to identify a specimen to the species level, and provide him with all the existing information on the topic. This monograph is accompanied by color plates, distribution maps, a huge number of figures and 4,578 bibliographical references. This is the largest number of references ever cited in a publication about neuropterids. Monserrat has done a tremendous amount of work over the past 5 decades – from field collection, office study, revision, description of existing and new taxa, and publication of the results. The Iberian neuropterid fauna is extremely rich, represented by 16 families and 207 species.

Each family is thoroughly presented and includes the following content: morphology of adults and preimaginal stages, biology and behavior, parasites and predators, phenology and life cycles, taxonomy, systematic position and phylogeny, paleontological data, geographic distribution, keys to species level of both, adults and larvae, comments on the species expected for IP and BI and the species requiring confirmation or mistakenly listed for the fauna. Let me be allowed to discuss only some, selected taxa that have been subject to changes in recent times.

The book comprehensively covers the green lacewings - Chrysopidae, which is a relatively difficult family in taxonomic terms. The author has provided descriptions and keys for valid species of genera such as *Chrysoperla* Steinmann, 1964, *Cunctochrysa* Hölzel, 1970 and *Chrysopa* Leach and Brewster, 1815. In addition, Monserrat clarified the status of some enigmatic or interesting species, such as *Chrysopa nitens* Navás, 1909, *Cunctochrysa cosmia* (Navás, 1918), or – in collaboration with colleagues – a pair of species, namely *Chrysoperla renoni* (Lacroix, 1933) and *C. ankylopteryformis* Monserrat & Díaz-Aranda, 1989. The current name for the genus *Pseudomallada*

Tsukaguchi, 1995 is *Apertochrysa* Tjeder, 1966. At the time of publication of the monograph, Duelli and Henry (2022) published a revision of the genus *Apertochrysa*, so their findings are not included but the next edition of the monograph should be updated.

The monograph did not adopt the new classification for the antlions, which synonymizes Ascalaphidae with Myrmeleontidae (Machado et al., 2019). Monserrat followed the arguments of Jones (2019) and some other authors, and as a result, the owlflies are considered a separate family, Ascalaphidae. Furthermore, according to Monserrat's understanding, the spoonwings and threadwings are two different, closely related families, Nemopteridae and Crocidae. The author offers a convincing argumentation for this.

The next family to mention is the dustywings (Coniopterygidae), where there is no consensus on the understanding of the validity of some taxa. Monserrat (2016) presents his view of the problematic of the definition of the species *Coniopteryx parthenia* (Navás & Marcet, 1910) sensu Meinander, 1970, *C. pygmaea* Enderlein, 1906 and *C. hoelzeli* H. Aspöck, 1964. Enderlein (1906) described *C. pygmaea* as a new species and the description with brilliant figures was perfectly done for that time more than a hundred years ago. It is therefore surprising that despite the excellent description, H. and U. Aspöck doubt the validity of this species (e.g., H. Aspöck and U. Aspöck 2014), with the support of a third zoologist, Günther (1993). Contrary to the generally accepted view that slide genital preparations are not recommended in neuropteran studies (e.g., Aspöck 1971), Günther (1993) prepared figures of the slide preparations of Enderlein's syntypes to prove the correctness of his own interpretation. He described and figured the taxon he conceived under the name *C. pygmaea*. Günther's drawings and his interpretation based on deformed genitalia due to the pressure of the cover glass on the specimen, is unreliable. It is very strange that *Lacewing Digital Library* (Oswald) takes Günther's opinion into account despite the unreliable argumentation. I completely agree with Víctor Monserrat's opinion (Monserrat 2016), where the argued and questioned elements are described in detail. Therefore, for my opinion there is no doubt that *C. hoelzeli* is a junior synonym of *C. pygmaea*; the publications of Enderlein (1906), Günther (1993) and H. Aspöck and U. Aspöck (2014) speak for themselves.

It is worth mentioning that Monserrat has only recently (alone or in co-authorship) discovered new species on the IP, e.g., *Venustoraphidia conviventibus* Monserrat & Papenberg, 2012 (fam. Raphidiidae), *Nevrorthus reconditus* Monserrat & Gavira, 2014 (fam. Nevrorthidae); *Mantispa incorrupta* Monserrat, 2014 (fam. Mantispidae), *Helicoconis bachi* Monserrat, 2016 (fam. Coniopterygidae), *Myrmeleon almohadarum* Badano et al., 2016 (fam. Myrmeleontidae), etc.

It is admirable that the 50-year-long project on the Neuropterida of the IP and BI is the work of a single man. This concisely written monograph is the first book of its kind with such a comprehensive and holistic presentation of the superorder, with a huge number of references. Other European countries with largest population - Germany, UK, France, Italy - do not yet have a recent such book on the native Neuropterid fauna. I highly recommend this monographic work by Víctor Monserrat to anyone – beginner or professional already deeply involved in the Neuropterida group.

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