

BOOK REVIEW

HECKMAN CH.W.: *ENCYCLOPEDIA OF SOUTH AMERICAN AQUATIC INSECTS: PLECOPTERA*. Kluwer Academic Publishers, Dordrecht/Boston/London, 2003, viii + 329 pp. ISBN 1-4020-1520-8. Price USD 197.00.

This volume is the fifth part of this Encyclopedia dealing with the order stoneflies, Plecoptera, characterized also by its subtitle “Illustrated Keys to Known Families Genera and Species in South America” as in the treatment of Ephemeroptera by the same author. Similarly this book consists of two main chapters. The introductory one deals with the history and main objectives of the project and includes a five page general section called “An appeal for quality in taxonomic works”. The principal part of this book deals with the determination of both larvae and adults of genera of 6 South American stonefly families (namely Perlidae, Notonemouridae, Gripopterygidae, Austroperlidae, Eustheniidae and Diamphipnoidae) and their genera and species. Attention is also paid (p. 11–21) to some general characteristics of the order in the chapters on Morphology, Ecology, Preservation and Examination, Taxonomic Problems and the rather trivial Suggestions for Improvement. The keys conclude with a list of about 136 references and an index of scientific names.

Unfortunately, like the previous volume, this treatment contains obvious errors, dubious statements and misquotes. The introductory chapter explains how to describe stoneflies but it is clear that nobody who has described a stonefly or has any familiarity with Neotropical Plecoptera reviewed the

manuscript, which is confirmed by the acknowledgements. For instance, an obsolete higher classification of the order (Setipalpia vs. Filopalpia) is used instead of a modern one (Arctoperlaria vs. Antartoperlaria); nomenclature of wing veins is not uniform (cf., e.g., Figs 5.3 and 5.7), Fig. 5.15 shows the articulation of accessory thoracic gills in larvae etc. The author even claims to use the Neotropical checklist of weevils by O’Brien & Wibmer (1978) for stonefly families.

Numerous illustrations are not original but reproductions except for scale, positioning and loss of some detail and this fact is not acknowledged, and some of them (e.g., Figs. 5.31, 5.83) are of a very poor quality.

I fully agree with author’s statement on p. 7: “Many of the better taxonomic publications are rather long but length is no guarantee of quality. There are some excellent concise works, which can be used with great reliability for identification of species. Some very long works, including incredible amounts of detail, on the other hand, are very poorly organized and omit much essential information while including a vast amount of trivia”. In my opinion, this well characterizes this book on South American stoneflies.

As noted by Peters (*Aquatic Insects* **26**: 139–142, 2004), “There are two positive things to say about this book. First, it puts a lot of obscure figures into one place – for better or worse. Second, in the introduction Heckman appeals for more funding for basic taxonomy, and this book demonstrates the need”.

T. Soldán