

BOOK REVIEW

VALLENDUUK H.J. & MÖLLER PILLOT H.K.M.: *CHIRONOMIDAE LARVAE. GENERAL ECOLOGY AND TANYPODINAE*. KNNV Publishing, Zeist, 2007, 144 pp. ISBN 978-90-5011-259-8. Price EUR 69.50.

This book on chironomid larvae is the result of long-term study by two highly experienced authors. The authors have revised existing identification keys and added information on the biology and ecology of larvae occurring in The Netherlands and surrounding countries. As written in the introductory chapter, the book is intended for “normal everyday identification as quick as possible”, which it achieves admirably.

The second chapter deals with the general ecology of chironomid larvae and presents basic information on their life histories, morphology, methods of sampling and effects of selected environmental factors. Unlike the other chapters in the book this chapter treats general traits and examples of some exceptions in a simplified manner. The omission of day-length as an important factor in determining diapause in some chironomids is an example of this simplification. Nevertheless this does not detract from the very positive contribution of the whole work. Users of the book can find more details in the literature cited.

The keys to 3rd and 4th instar larvae of Tanypodinae are very well elaborated and perfectly supported by excellent drawings. I have checked the keys using permanent mounts of larvae and they work perfectly. Moreover the authors are aware of the difficulties of identifying some genera when only larvae are available – eg. those of the *Conchapelopia* agg., and inform the user of these difficulties in notes and comments. This is the correct

approach as sometimes it is impossible to identify a single specimen to species level and it is then necessary to study a large sample of larvae in order to obtain a measure of the individual variability within the population. In these complicated groups identification to species depends on pupal characteristics. This information is in chapter 5.2., not in the form of a key but of comprehensive illustrations of thoracic horns useful for identifying prepupae and pupal exuviae. Identification of species of the genus *Procladius* is also very difficult as there are many names for different populations based on, for the most part, very incomplete descriptions of original material. Taxonomically oriented workers may miss detailed synonymy of the species, which is not included in this book. However, this is not the aim of the book. There is much valuable information in the chapter “Systematics, biology and ecology of genera and species”, which further facilitates the identification of larvae and accords with my experience of Tanypodinae in the Czech Republic.

Regarding the photographs, most are of high quality and illustrate well what can be seen under a microscope. In this respect they are helpful for identification. However, scanning electron micrographs would have been more informative.

In conclusion this book presents clear morphological description of Tanypodinae larvae and a very practical key for their identification, which is supported by valuable comments on their ecology. I can recommend it as a very useful tool for students studying chironomid larvae as well as professionals interested in the macrozoobenthos.

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