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BOOK REVIEW

MORSE J.C., YANG L. & TIAN L. (eds): AQUATIC INSECTS OF CHINA USEFUL FOR MONITORING WATER QUALITY. Hohai University Press, Nanjing, 1995, XII + 570 pp. ISBN 7-5630-0240-5. Price ¥ 55.40.

A summarization of the present knowledge of the aquatic insects of China is generally needed since up-to-date data are very scarce and scattered throughout the world literature. The present volume is intended to fill this gap. It is written like a counterpart or a derivative work of the famous volume entitled *An Introduction to the Aquatic Insects of North America*, 2nd edition (1984) edited by R.W. Merritt and K.W. Cummins.

The book consists of 22 chapters compiled by 33 authors, 15 of which are from the People's Republic of China, 16 from the USA and Canada, and 2 from Europe. General information on morphology, behavioural adaptations, habitat, ecology and distribution, life histories, phylogenetic relationships, and collecting and rearing methods are contained in chapters devoted to aquatic and riparian species of the following orders: Collembola, Ephemeroptera, Odonata, Plecoptera, Orthoptera, Hemiptera-Nepomorpha, Megaloptera, Neuroptera, Trichoptera, Lepidoptera, Coleoptera, Hymenoptera, and Diptera.

Naturally, the elaboration of individual chapters varies from a mere compilation to valuable reviews carefully summarizing the present knowledge (such as the chapter on Plecoptera by P.P. Harper). Since I am not able to expertly comment on all chapters of the volume, I focused on single chapter (Ephemeroptera, pp. 117–134, written by Gui Hong).

Of course it is a problem that the Chinese fauna is much less well known than most of the rest of the Palaearctic and even less than many of the adjacent Oriental faunas, also in the Ephemeroptera. Moreover, the earlier authors (Navás, Ulmer, Hsu and others) dealt only with adults, largely omitting larval stages. Although the existing papers at least provide a reasonable idea of which genera or species occur or are to be expected in the country or adjacent region, the elaboration of this chapter is particularly disappointing.

No attempt to summarize recent literature data has been made. References on Ephemeroptera end in the year 1938 ignoring present papers on Chinese fauna by You Da-Shou, Su Cuirong, Wu Tian, Hsu Yin-Chi and others and even the author's own valuable latest catalogue (Gui Hong, 1985: *J. Nanjing Teachers Univ.* 4: 79–98). Moreover, there is a relatively extensive knowledge of mayfly fauna of Taiwan or Korea (papers by Yang Kang, Yeon Bae and others). Correct determination of larvae at the generic level according to the key presented here is doubtful as 19 genera of the 35 recorded from China are missing although their larvae have been described (e.g. genera *Teloganodes*, *Thalerosphyrus*, *Vietnamella*, *Cryptopenella*, *Indialis*, *Choroterpides* and others).

Illustrations are adopted unchanged from the American version and thus some genera not occurring in the Old World are figured (Fig. 10.11 – *Lachlania*, Fig. 10.12 – *Tricorythodes*). Also the Table 10A contains many specific errors or insufficient information in the columns "Number of Known Chinese Species" and "Known or Expected Chinese Distribution". Biotic indices presented here for several genera were determined for completely different biotopes in the United States (North Carolina) and their value for Chinese biotopes is at least doubtful.

The chapter on the Ephemeroptera (and other chapters as well) contain an extremely high number of typographical errors, inconsistencies in citing references (text references not included in "References" sections and vice versa, missing calendar years etc.) or usage of invalid names. Obviously, the editing job has been done in a very superficial way and the authors of individual chapters are not to be given the entire blame.

Regarding the insufficient knowledge of aquatic insects in China and the fact that this country is now facing enormous environmental problems, the idea to compile such a comprehensive volume is really excellent. Hopefully, the next edition will provide a much improved version facilitating the study of faunal composition, ecological requirements and bioindicatory value of the aquatic insects of this part of the world.

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