

Book Reviews

Taxonomische und ökologische Revision der Ciliaten des Saprobiensystems (Band I: Cyrtophorida, Oligotrichida, Hypotrichia, Colpodea). W. FOISSNER, H. BLATTERER, H. BERGER & F. KOHMANN (1991). Bayerisches Landesamt für Wasserwirtschaft, Munich. Pp. 471. ISSN 0176-4217. DM 75.

This has to be one of the most beautiful books on the protozoa ever published. The authors are acknowledged experts on the ciliates, for which they have here amassed an extraordinary amount of illustrative material (most of it their own); and, with the patronage of the 'Bavarian State Department for Water Management' they have produced a truly authoritative guide to the identification of several groups of ciliates. It has long been known that some ciliate species are more common in certain habitats. Some for example are more-or-less restricted in their distribution to the oxygenated open water of lakes, while others thrive in deoxygenated sediments rich in decomposing detritus. Historically, these observations developed into a full-blown saprobic classification based on the indicator value of a range of ciliate species. But this practice suffered from two major drawbacks: ciliates are often difficult to identify; and many species are apparently tolerant of very broad ranges in many environmental factors. And the two problems were of course connected, insofar as accumulated misidentifications produced chimeric species with erroneously broad environmental 'requirements'. If a saprobic classification is to have any value (and that value is still much debated), its strongest foundation must be an accurate identification of the species concerned.

This volume is the first in a series of four large monographs. The guide is not exhaustive in its taxonomic coverage; it is, after all, designed to enable identification of ciliates which have some indicator value. But each of the four volumes will cover about ninety species, and it is unlikely that most working aquatic biologists will suffer greatly from the omissions. This is not the first time that someone has attempted to provide a guide to the ciliates which have some indicator value. The difference with this guide is its thoroughness, and the breathtaking quality of the illustrative material. Each species has a taxonomic history, a full description of morphology, dimensions etc., a summary of published information concerning its ecological distribution and finally, a suite of illustrations. In many cases, individual species are described by line drawings, light micrographs (interference contrast and silver-stained infraciliature) and scanning-electron micrographs.

The only potential problem is that it is written in German. On the other hand, the illustrative material is so complete and largely self-explanatory, and translation of the legends at least requires very little effort. In any case, non-German speakers cannot really grumble—it's in German because it is sponsored by Bayer Landesamt für Wasserwirtschaft, and without the latter it is unlikely that it would be available for this remarkably low price. The authors and the sponsors should both be congratulated for a magnificent product and I very much look forward to seeing the completion of the series.

Note: Some publicity material is available in which Volume I is given the English title *The Ciliate Atlas—Morphology and Ecology of the Ciliated Protozoa used as Indicators of Water Quality*.