Europ. J. Protistol. 29, 356 (1993)
July 25, 1993

Book Reviews

Foissner W., Berger H. und Kohmann F. (1992): Taxonomische und ökologische Revision der Ciliaten des Saprobiensystems. (Taxonomic and ecological revision of the ciliates of the saprobian system). Band II. Peritrichia, Heterotrichida, Odontostomatida. Informationsberichte des Bayerischen Landesamtes für Wasserwirtschaft, München, Heft 5/92, 502 pp., DM 80,–. ISSN 0176-4217 (Available from: Bayerisches Landesamt für Wasserwirtschaft, Lazarettstraße 67, D-8000 München 19, FRG).

The second volume of this manual (which will be completed after the edition of two additional future volumes) contains six chapters. The preliminary remarks (p. 9) are followed – as in the first volume (1991) – by a general introduction into methodological and ecological fundamentals. In the present volume some necessary conversion factors, the known relevant dates of protozoan and ciliate productivity and the rules of the zoological nomenclature are treated in detail (pp. 11–44). After short directions to the proper use of the revision (pp. 45–46), the description of the taxonomy and ecology of species (pp. 47–455) builds up the main part of the book. The last two chapters comprise a literature collection (pp. 457–494) and an alphabetical index basing on names of genera and on species epitheta (pp. 497–502). The book is A 4 formatted and printed on friction glazed paper (and therefore rather heavy). It is bound in a ring binder. The soft binding faciliates rebinding into smaller and more practicable subunits and allows – if necessary after new insights into the phylogeny or in the taxonomy of ciliates – also a reorganization. Unfortunately, the pages of the manuals are not consecutively numbered; each volume begins anew with its own page 1.

The main part of the present volume provides data on the subclass Peritrichia and the orders Heterotrichida and Odontostomatida. Each sub-chapter starts with a general introduction into the history and into the main characters of the corresponding taxon. Each introduction is completed by a key. The keys combining drawings and general features are very easy to handle. The systematic record comprises 71 single species and species complexes and four genera (*Caenomorpha, Epalxella, Metopus* and *Saprodinium*), whose members belong all to the same saprobian class. The description of the individual species normally comprises four to six printed pages. They all include a list of synonyms, the status of nomenclature and taxonomy, a differential diagnosis, a list of similar species which are easily mistaken for the present, the ecological data (occurrence, autecological features, saprobic classification) and – very important – a generous illustration. The figures include historic drawings as well as modern photographic documentations. The quality of the photographs is exorbitant, and the use of all common microscopical techniques (bright field, phase contrast, Nomarski optics, SEM) allows an identification independent from the availability of a special microscopical equipment.

There is no question that the usefulness and the quality of the present (and future) taxonomic volumes deserve and will find a large audience. One of the best arguments for this is the fact that even younger students (which are generally very sensitive for competence) belong to the circle of users and customers. From this point of view one has to hope that this series will serve also as reference in teaching courses.

N. Hülsmann, Berlin, FRG

Lee J. J. and Soldo A. T. (1992): Protocols in Protozoology. $ 35 (Members), $ 40 (non members), $ 50 (hard-bound). Society of Protozoologists, Allen Press, Lawrence Kansas.

Yes, you *do* have to get a copy of this if you are working with protozoa. It is designed as an easily upgradable laboratory manual which will direct and guide the protozoologist in the practical aspects of her or his work. Until now, the only book that I have been able to turn to for technical guidance is Kirby's 1950 ringbound volume. The long time gap between publication of the two works is evidence enough of the need for something like this.

The book comes as an unwieldy loose leaf file with about 30 mm of included pages. The protocols vary in length, some squeezing onto two sides of a single sheet, others up to 20 pages or so. The protocols are divided into 5 categories (Isolation and Culture – the biggest section with about 100 protocols, Ecology with 15 protocols, Fixation and Staining with 22 protocols, Molecular and Genetic with 9 protocols, and Educational with 3 protocols). The information in the protocols is usually straightforward, highly informative, and certainly very helpful. A substantial contribution has come from the ATCC (c/o Tom Nerad and Pierre-Marc Daggett) and they share much of their experience in culturing and preserving protozoa with the readership. In some instances (e.g., Protargol staining) we have several different protocols as used by different authors and this adds to the richness of the volume. Despite its strengths, there is a feel of loose editing in the book. Some of the accounts really do not reflect contemporary laboratory practices (photomicrography). There are gaps in this book and certain other elements have not been critically evaluated. Regarding gaps ... with a subject that is purportedly shifting in the molecular direction, very little of this volume is dedicated to the techniques of the molecular laboratory.

The ecological techniques completely exclude reference to epifluorescence as a means of getting good counts of protozoa. In reference to pathogenic protozoa, there is nothing to draw the attention of the readers to the containment facilities which are required by various national authorities. The absence of such a statement does, I believe, create a risk. There is a very long list updating the saprobiety indices of protozoa compiled by Foissner – but many of the taxa referred to (especially amoebae and flagellates) do not have a clear identity. Fortunately, later in the volume, C. Graham Clark compensates this by explaining how riboprinting may be used to identify protozoa.

The editors are ready for criticisms of gaps, and they appeal to practising protozoologists to draw attention to weaknesses and to prepare their own contributions, reminding them that the loose leaf format is designed to allow new contributions to be added. This volume is intended, then, to be only the beginning of a much larger contribution to the literature. Savings in cost have been achieved by authors and editors preparing camera-ready copy. The result is not as attractive as with properly typeset material and despite efforts to achieve consistency there are variations in style in some chapters, the number of typos is a bit higher than is usual in a published work, odd little breaks or grammatical constructions appear in the text, and some of the line drawings are poor. But these are ultimately minor criticisms and should not be allowed to detract from the value of a volume that is grand in its concept and for which the Society of Protozoologists, editors, and authors must be applauded. It is an immensely rich source of ideas and techniques. It is this richness which will guarantee this volume a place in most protozoological laboratories.

D. J. Patterson, Sydney, Australia

0932-4739/93/0029-0356$3.50/0