

## BOOK REVIEWS

**Berger, Helmut.** 2001. *Catalogue of Ciliate Names. 1. Hypotrichs.* Verlag Helmut Berger, Salzburg, i-viii and 206 pp. ISBN 3-902147-00-8 (softcover). Price not including sales tax: Printed version: 31. EURO = 426.57 ATS (Austrian shillings) or ca. \$28. (U.S. dollars); Pdf-version: (download via Internet for 20 Euro = 275.21 Austrian shillings (about \$18. U.S.), excluding postage. [Copies may only be purchased via the E-mail: berger.helmut@protozoology.com or using Internet address: http://www.protozoology.com]

This little book is another significant contribution to the nomenclature of ciliated protozoa from the Austrian "school" of protozoologists. It has been privately published so that its contents can be transferred to the Internet some time in the future without copyright complications. Dr. Berger hopes that the publication of this work will encourage others to publish similar catalogues on other groups. In it, he treats over 2,400 names that have been applied to "hypotrich" taxa, ranging from infra-specific categories to suprageneric categories. The book is divided into four major sections: Genera and Lower Categories; Suprageneric Taxa; References; and an Index. To these are added an Introduction, a one-page Summary of New Nomenclatural Acts, which summarizes transfers of eight species to different genera, and a two-page Addenda.

Chapter 3 on Genera and Lower Categories (p. 5–102) is composed of a series of entries with six basic parts: 1) the basionym; 2) the name of the author(s); 3) the year of publication; 4) the page of the original description; 5) the category of the taxon in brackets; and 6) for genera and subgenera, the kind of type designation and the type species. Reference is made to recent literature where genera and species may be monographed. Combinations are listed, but Dr. Berger does not claim these to be exhaustive as they are extremely difficult to pull from the literature in a comprehensive fashion. Furthermore, there are no comments on the validity of names and synonymies. Dr. Berger suggests that perhaps 50% of the lower categories may be invalid if his experience during a recent revision of the oxytrichids is typical (Berger 1999). Chapter 4 on Suprageneric Taxa (p. 103–114) includes categories from the family up to the class.

There are about 500 references (p. 117–150) as complete citations, many of them from 1999 and one or two from 2000. The Index (p. 151–206) is arranged so that one can find a "name" either as a genus-species or species-genus combination, and in the case of subgenera, all combinations of genus-subgenus-species are listed.

I was puzzled by two small taxonomic matters that may be excused in a book primarily treating nomenclature. First, Dr. Berger chose "hypotrichs" in his title and treats them (p. 1–2) as a natural assemblage. However, Small and Lynn (1985), and more recently Lynn and Small (1997) among others, have es-

tablished clear differences among the hypotrichs and stichotrichs based on morphology and morphogenetics, differences that have been corroborated recently by molecular sequence data (e.g. Bernhard et al. 2001; Shin et al. 2000). This might have been mentioned briefly in the Introduction. Further on p. 6, Dr. Berger mentions *Balantidioides*, *Phacodinium*, *Plagiotoma*, and *Transitella* but indicates these will be indexed with the heterotrichs. Yet, Lynn and Small (1997) among others had transferred *Plagiotoma* to the Subclass Stichotrichia and removed *Phacodinium* from the heterotrichs, and the latter is now confirmed to be related to the hypotrichs and stichotrichs (Shin et al. 2000). *Transitella* was clearly shown to be unrelated to heterotrichs in the morphogenetic and ultrastructural study of Iftode et al. (1983) while Foissner, Adam and Foissner (1982) suggested that *Balantidioides* and *Transitella* referred to the same species and the latter name was a junior synonym. It may not have been appropriate to include these genera in an index on the nomenclature of the "hypotrichs", but it is equally inappropriate to include them in an index of the heterotrichs.

Nevertheless, the text is very carefully edited and although the book is physically small (12 cm × 18.5 cm), the type is easy to read, laid out in a two-column format for Chapters 3 and 4. It will be an extremely useful resource for those of us engaged in systematic work on the ciliates. Dr. Berger is to be commended for this "labour of love." We can only hope that his example will have the hoped-for result of encouraging others to construct catalogues of the names of other major groups of ciliates.—DENIS H. LYNN, *Department of Zoology, University of Guelph, 50 Stone Road East, Guelph, Ontario N1H 5C5, Canada.*

### LITERATURE CITED

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