

BOOK REVIEW

Hausmann, K., Hülsmann, N. and Radek, R. (with contributions by Machemer, H., Mulisch, M. and Steinbrück, G.). 2003. *Protistology*. E. Schweizerbart'sche Verlagsbuchhandlung, Berlin & Stuttgart. 379 p. Prices: €64,-/US\$ 78,- (hardcover, ISBN 3-510-65208-8); €49,-/US\$ 59,- (student's paperback edition, ISBN 3-510-65209-6).

The third edition of Hausmann's *Protozoology* is now named *Protistology* to reflect the revived knowledge that single-celled eukaryotes are a distinct organization type different from multicellular life. Hence, *Protistology* has been completely revised to include "all eukaryotic unicellular organisms, regardless of whether they are heterotrophs (protozoa), phototrophs (algae) or saprophytes (fungi), which live as individual organisms embodying a single-celled way of life". Certainly, this is a great challenge embracing 12 phyla with more than 100,000 described species. Can it be mastered by a small team of authors, and is it possible to squeeze the vast protistological knowledge on 379 pages? It is! Using a well-balanced combination of concise text and carefully selected figures, the authors produced a textbook usable for both students and professionals and in courses and research. They do not hesitate to put much importance on organismic biology in our molecular time, and have thus included not only modern but also old figures, most notably some of Haeckel's famous, beautiful "Kunstformen" plates. This nice mixture of old-fashioned and modern illustrations gives the book a special charm.

The contents of *Protistology* includes three main parts, viz., an overview with definitions, history, and basic knowledge of the cellular organization of protists; the second part describes evolution and diversity of protists; and part three contains selected topics, some written by the "contributors", such as com-

parative morphology and physiology, morphogenesis and reproduction, molecular biology, behaviour, and ecology. A well-prepared glossary, bibliography, and a detailed index close the book.

It is difficult to find drawbacks, considering the efforts of the authors to keep volume and price within reasonable limits. Possibly, some figures would profit from more detailed labels; some plates with colour micrographs would have shown the beauty of protists more impressively; an indication how to cite the book (with or without "contributors") would be helpful; some important literature is lacking (e.g. Röttger's useful book on terms) or a little bit outdated (e.g. Werner's *The Biology of Diatoms* from 1977 should have been replaced by Round's et al. *The Diatoms* from 1990); ecologists might complain that their fast-evolving field is not fully represented; and I would not agree that *species* composition is very similar in the plankton, neuston, and benthos of marine and limnetic habitats".

Some words must be said on the outstanding technical quality of the book: it has an attractive layout, drawings and micrographs are well reproduced, and all is firmly bound together. This is rare in modern times, where drawings are frequently reproduced in asphaltic black, a layout is lacking, the pages become loose if the book is used more than 10 times.

Altogether a beautiful and perfect mixture of old-fashioned and modern protistology which will attract, due to the concise supply of information and excellent illustrative material, not only professionals and colleagues from a variety of disciplines, but also students who will profit from the low price of the paperback edition. Both the authors and the publisher can be congratulated for producing a fine piece of work at an affordable price.—WILHELM FOISSNER, *Universität Salzburg, Institut für Zoology, Hellbrunnerstrasse 34, A-5020 Salzburg, Austria.*