

***Protistology* by Klaus Hausmann, Norbert Hülsmann and Renate Radek with contributions by Hans Machemer, Maria Mulisch and Günter Steinbrück, 3<sup>rd</sup> edition, E. Schweizerbart'sche Verlagsbuchhandlung (Nägele u. Obermiller) Stuttgart, Germany; ISBN 3-510-65208-8 hardcover € 64.-/ U.S. \$ 78.-, and ISBN 3-510-65209-6 € 49.-/ U.S. \$ 59.- student edition as stated in the promotional leaflet.**

Klaus Hausmann, Norbert Hülsmann and Renate Radek have written a contemporary protistology textbook. This is the completely revised third edition of the book by Hausmann and his co-authors. The success of the recent edition of the *Protistology*, like the previous editions, derives from its insight into the complexity and beauty of protists.

The book provides an excellent compilation of current branches of knowledge, with contributions from all the main scientists in protist research, giving us to a deeper understanding of protists. The authors have divided their book into three major parts. The first part gives the reader an introduction and overview of definitions, the history of nomenclature and a historical overview of protistological research, concluding with the unique cellular organization of protists. The second part discusses the context and foundation for understanding evolution and taxonomy, which includes the evolution of unicellular eukaryotes, the development of classification systems and concludes with the proposal of the Protists' system. The third part concerns six selected topics of general protistology, namely: comparative morphology and physiology, nuclei and sexual reproduction, morphogenesis, molecular biology, behavior and ecology. The book as a whole ends with a helpful glossary of terms used almost exclusively in protistology, mentioning leading protozoological journals and periodicals, a bibliography comprising about 500 classical references concerning topics dealt with in the book, and an alphabetically arranged subject index.

At the very beginning, the authors pose the question: what are protists or protozoans? And they are not very convinced they can give an answer in the rest of the book, that covers an assemblage of the factual information on protists. In my opinion, the book gives the convincing answer that protists are almost always unicellular eukaryotic organisms, having a lot in common with other higher eukaryotes, but because of their "fantastic diversity", (quoting the authors) are hard to classify in a clear and equal terms.

Promising molecular biology techniques applied recently have given results that lead at the moment to complication of the taxonomical relations based on morphological features /characters. It seems a plausible expectation that in due time we shall gain a new understanding and insight into these highly differentiated living creatures, defined for the moment as protists.

On the positive side, this edition deals with the emergence and use of techniques currently driving the development of molecular biology, a subject insufficiently examined in previous editions. Examples of extensive biochemical and genetical analysis have added to our pool of knowledge. This is recognized by the authors and should make this book interesting to read, even for postgraduates. Students will benefit greatly from this clearly presented and illustrated text and from the analysis of the historical development of the subject from its very beginnings. I would chiefly recommend this book to students who are interested in unicellular organisms.

An additional strength of the book is undoubtedly in its listing (and illustrations) of many examples of selected topics such as morphology, motility, nutrition, reproduction, molecular biology, behavior and ecology of protists, arranged in a very readable way.

The success of the most recent edition of *Protistology*, as in previous editions, is derived from a clear layout of text and photographs and drawings that serve to illustrate the book. I got the feeling that the authors are certainly fascinated with protists. A good piece of work and the result is a great read.

Finally, I shall agree with the authors “that protists are amazing, lovely and wonderful creatures which can give pleasure and delight...” not only “...just by observing them under a microscope...” but by reading about them in *Protistology* as well.

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