
 Book reviews

Nisbet, B.: Nutrition and Feeding Strategies in Protozoa. London, Canberra: Croom Helm Ltd. 1984. 280 pp., several figs. and tabs. Hard bound £ 19.95.

The structural and chemical complexity of the protozoan cell is surprising when compared to cells of multi-cellular organisms: e.g. dozens of organelles function and cooperate in a single ciliate cell. From the broad spectrum of capacities the author chose the aspects of nutrition and feeding. In the introductory chapter she sets the scene on protozoa in general and then treats in succession the habitats and niches in which protozoa exist: freshwater and marine, soils, water purification systems, and animals as host organisms. In addition, the likely food sources in these habitats are examined. Thereafter, the author describes the incorporation of nutrients into protozoan cytoplasm: autotrophy, heterotrophy (with an interesting chapter on the role of the endocytotic vacuole as a dynamic unit of digestion), and metabolic pathways. The second half of the book is devoted to the systematic groups: *Ciliophora* (filter-feeding, carnivorous and herbivorous ciliates), *Mastigophora* (green and colourless flagellates), *Sarcodina* (amoebae and radiolarians), and the spore-forming, parasitic protozoa. The last chapter reviews interrelationships in communities, e.g. predator-prey relationships and the influence of heat and cold on communities. The book ends with a bibliography of 25 pages.

It is never mentioned for whom the book is intended. The text is written in a clear style and a student with some experience will understand most of it. There is no glossary which indeed would be helpful. Some material presented is not, or only indirectly related with the theme: classification, photosynthesis, metabolic pathways, life cycles, etc. The same is true regarding the figures: while many of them supplement the text well, others could be easily omitted, e.g. 6 similar photomicrographs of foraminiferan testae, occupying 2 pages. By using the space more critically, more explanations and more examples could have been presented. Another problem is the index: many organisms and even concepts which are treated in the text cannot be found here, and some topics are

treated more frequently in the text than is indicated in the index.

The price of the book is rather high; taken altogether I see it as a review of a subject, which is fascinating on itself but deserves a better treatment.

C. K. Stumm, Nijmegen

Birge, A.: Bakterien- und Phagengenetik. Eine Einführung. Berlin, Heidelberg, New York, Tokyo: Springer 1984. xvi + 311 pp., 111 figs. Soft bound DM 68,-.

Earlier in this journal (TAG 62, 154; 1982), C. Kari reviewed critically what was then "Bacterial and Bacteriophage Genetics". A German translation has now been published which is, surprisingly, 48 pages shorter than the original book. This was done by reducing the extension of many page-covering diagrams to more normal proportions and by using a smaller type face for the title headings. As a result, about 20 references in total could be added to the list of general and specialized publications at the end of each chapter, making the text once more up-to-date. With respect to the contents, I agree fully with Kari's judgement: the book "is a clear, concise but still a comprehensive review of the field, and gives the reader excellent insight into the main points of bacterial and bacteriophage genetics".

Certainly, it must be a difficult task to translate such a text from English to German, and it seems impossible to do it consistently. In general, Matzura and Zyprian, who are molecular geneticists themselves, succeeded amazingly well. In many details, however, they failed, had to fail, because good German equivalents were lacking: amplification, branch migration, nick, mobilization, transition, became Amplifikation, Branch-Migration, Nick, Mobilisation, Transition. These are 5 examples out of dozens, and I am not able to offer a better translation, either. Despite these problems, which make reading of the "German Birge" not easier, I strongly recommend the book to students, teachers and all those who are fascinated by genetics.

C. Stumm, Nijmegen