

- SCHWAMMENHÖFEROVÁ, K., ONDŘEJ, M.: Kinetics of the mitotic cycle of root meristems in isolated barley embryos. — In: NOVÁK, F. J. (ed.): Využití rostlinných explantátů ve šlechtění. Pp. 607–618, Československá akademie věd, Ústav experimentální botaniky, Praha 1977.
- SCHWAMMENHÖFEROVÁ, K., ONDŘEJ, M.: Mitotic cycle kinetics of root meristems of isolated barley embryos and intact seedlings. Labelling of nuclei by ^3H -thymidine and its cytogenetic consequences. — Biol. Plant. **20** : 351–358, 1978.
- SCHWAMMENHÖFEROVÁ, K., ONDŘEJ, M.: Mitotic cycle kinetics of root meristems of isolated barley embryos and intact seedlings. Labelling of nuclei by tetraploidy. — Biol. Plant. **20** : 409 to 417, 1978.

BOOK REVIEW

VAN DEN HOEK, C.: *Algen. Einführung in die Phykologie.* — Georg Thieme Verlag, Stuttgart 1978. 481 pp. 26.80 DM.

This book (Introduction to Phycology) is a very good and useful addition to the series of algological manuals issued in various countries in the last few years. It presents a modern and concise review, which in no case merely increases the number of the existing algological textbooks.

The introductory chapters summarize the present knowledge concerning phylogenetic relations and important characteristics of individual algal groups; the relations and life cycles of the main types of algae form a very important part of the whole book. Further chapters are arranged according to the algal system. They contain a wealth of recent results of studies of the fine structure of cells, *etc.* The data are complemented by drawings and schemes carefully selected from a number of recent papers, as well as by perfect original diagrams and tables. One may only criticise the references to the sources of the figures; it would be better to quote the original authors, not only the book from which the drawing has been taken.

A proportional elaboration of all parts is rather rare in manuals of phycology. The approach by van den Hoek also betrays the author's greater professional erudition in some algal groups, which he knows in detail from his own experience (marine algae as compared with freshwater flagellates, chlorococcal algae, *etc.*). However, almost in the whole book we find a quite exceptionally even presentation of the selected most important data.

One of the assets of the book is also its didactic and comprehensive elaboration. The main diacritical features are summarized for each group, followed by clearly presented cytomorphological and physiological data and specific features of the generation process. Short characteristics of selected typical species are added, reviewing the morphological and biological variability within each taxonomical unit. All parts of the book are written understandably, the presentation of all data is accurate and unambiguous, as is the tradition of van den Hoek's papers.

According to the author, who collaborated at the publication with H. M. Jahns, the main objective has been to publish a basic review of the system of algae, including the most modern results and knowledge acquired during the last 15 years. Therefore, the recently defined higher taxonomical units (*Haptophyceae*, *Eustigmatophyceae*, *Prasinophyceae*) are included in the system. One can only doubt whether their high rank (*Haptophyta* and *Eustigmatophyta* are classified as divisions) corresponds with the contents of other divisions such as the heterogeneous *Heterokontophyta* or *Chlorophyta*. The rank of classes for the groups mentioned would seem more proportional with the system presented.

The manual is written for students, but on a high scientific level. The publication therefore does not only fulfill the original purpose of the authors, but, I believe, it will be read with great pleasure even by an experienced specialist in phycology.

J. KOMÁREK (Třeboň)