
 Book Reviews

Starck, D.; Fiedler, K.; Harth, P.; Richter J.: Biologie. Eine Vorlesungsreihe für Mediziner und Naturwissenschaftler. Weinheim, Deerfield Beach, Basel Verlag Chemie 1981. 1118 pp., 666 figs., 80 tabs. Hard bound DM 88,-.

The textbook "Biologie" results from lectures of the Department of Human Medicine at the University of Frankfurt am Main. Thirty-three authors, biologists and physicians discuss within ten big chapters (46 contributions on evolution, cells, pathways, locomotion, information, microbiology, ecology, diseases as a biological problem, productivity of plants, behaviour) problems of biology. Evolution is the connecting link between all contributions.

"Biologie" does not intend to be a complete textbook on general biology, but it elaborates biological relationships in a very good manner. All themes for the examination of medical students in biology in the FRG (GK 1) are included.

The book, which contains a lot of very instructive illustrations and is clear and easy to read, is suitable for use at undergraduate level for students of biology and medicine and of anyone with an interest in biology. M. Herrmann, Erfurt

Strathern, J. N.; Jones, E. W.; Broach, J. R. (eds.): The Molecular Biology of the Yeast *Saccharomyces*. Monograph 11a: Life Cycle and Inheritance. Cold Spring Harbor: Cold Spring Harbor Lab. 1981. 751 pp. Hard bound \$ 90,-.

The idea to write a monograph on the biology of yeast emerged for the Molecular Biology of Yeast Meeting at Cold Spring Harbor in 1979. The book must have received from this conference its title which is, however, somewhat misleading, as the treatise covers virtually the whole experimental biology of yeast, including cell biology, genetics and biochemistry. Actually, the monograph is published in two parts. The first part which is reviewed here, is devoted to the life cycle and inheritance both fields being considered in a broad sense. In 15 reviews each written by a highly qualified expert

an overview is presented on these aspects of yeast biology. It is the explicit aim of the editors and the authors to further future research in this rapidly expanding branch of science. To this end they have provided a wealth of useful information in extensive tables, while at the same time they discuss the basic insights and concepts in depth. The authors also place much emphasis on what is unknown and on what the perspectives are for ongoing research. As a result, the reader gets the impression that he really is at the border of our present knowledge. This feeling is corroborated not only by the inclusion of a lot of very recent references but also by the presentation of many data that still await publication. An important point the authors wish to make is that many basic problems in yeast have been successfully attacked by a concerted approach from different directions. The large number of cross-references in the different contributions is certainly meant as an illustration of this point. At the same time, these cross-references forge the reviews together to one comprehensive treatise and make it possible for the reader to construct in his mind an integrated picture of the life of the yeast cell.

Another feature that demonstrates the unity of yeast biology is the contribution of genetics to nearly every field of research. Progress in the investigations on the cell cycle, meiosis and sporulation, mitochondrial function and replication etc. would have been impossible without the use of mutants. Approximately 300 genes have been mapped on 17 chromosomes and many others have been characterized though their position in the genome is unknown. It is, therefore, appropriate that in a number of appendices the known genes and gene products are listed and that the subject index is followed by a gene index.

The Molecular Biology of the Yeast *Saccharomyces* is really an important book and one can look forward with great expectations to the second part which deals with metabolism and gene expression. A. F. Croes, Nijmegen