Book Reviews

Klingmüller, W. (ed): Erbforschung heute. Weinheim, Deerfield Beach, Basel: Verlag Chemie 1982. 171 pp., 89 figs., 25 tabs. Soft bound DM 33,—.

The framework of this book is a series of lectures given during the last two or three years at the University of Bayreuth. The lecturers were asked to write an illustrated summary of about ten printed pages. The result is a selection of thirteen minireview articles covering a broad spectrum of topics in molecular, classical and applied genetics: recombinant DNA technology, tumor virology, plant breeding, somatic cell genetics, cytogenetics, genetic manipulation with mammalian embryos, mutation research etc.

The book is intended for those people who have read about these things in the science sections of their newspapers or magazines and who are just curious to learn about new developments in a field of high public interest. These readers will find brief but interestingly written reviews on recent developments in plant breeding, on various aspects of cytogenetics, micromanipulation of mammalian embryos and recombinant DNA technology. It will be somewhat difficult for them to understand, though, "genes in pieces", i.e. the structure of the eukaryotic genome, because the information in the chapter on eukaryotic genomes is too thinly spread, i.e. too many things are touched upon without proper discussion or explanation. Other chapters, such as the ones on electronmicroscopy of nucleic acids or on transposons, were obviously not written for the curious nonscientist although they may be a convenient source of information for biologists and chemists who do not regularily read the genetical literature.

The informed nonscientist will look with some expectation at the chapter on mutagenesis since much has been said and written recently about biohazards in the environment. However, the reader will be disappointed because the chapter contains a rather dry and incomplete repetition of some basic knowledge and a superficial discussion of the methods used to detect mutagenic chemicals. The word asbestos, for example, does not appear.

In any case, I shall recommend this book to biology teachers in high schools and colleges as well as to the students who take my course on "Genetics for Social Scientists".

R. Knippers, Konstanz

Luh, Bor S.: Rice: Production and Utilization. Westport, Connecticut: Avi Publ. 1980. 925 pp., 204 figs., 109 tabs.

Nine chapters of this book comprehensively review such various aspects of rice utilization as: 1) rice flours in baking, 2) rice vinegar fermentation, 3) rice snack foods, 4) rice canning, freezing, and freeze-drying, 5) fermented rice products, 6) breakfast rice cereals and baby foods, 7) quick cooking rice, 8) parboiled rice, and 9) enrichment of rice with vitamins and amino acids. The literature on the technology of preparing these products and equipment used are fully discussed.

Perhaps 95% of the world's rice is consumed as a whole, cooked grain. There are numerous ways of cooking rice – boiling, frying, and steaming – to name a few. A chapter on the various methods of cooking whole rice grain would have been useful. Three chapters deal with rice by products: hulls, oil, and bran.

Another three chapters authoritatively review rice quality:
1) properties of rice caryopsis, 2) nutritional qualities of rice endosperm, and 3) rice quality grades. None of these chapters, however, refer to rice scent or aroma, which is an important determinant of quality. Three chapters address postharvest handling problems: 1) drying and storage of rough rice, 2) insect pests of stored rice, and 3) milling.

The 18 chapters on "Rice Grain and Its Utilization" can

The 18 chapters on "Rice Grain and Its Utilization" can stand alone as an excellent reference book for cereal technologists. However, the five opening chapters on 1) rice plant growth and development, 2) genetics and breeding, 3) rice culture, 4) rice plant diseases, and 5) rice insect pests, although quite well written needlessly expand the scope of book and could have been left out.

G.S. Khush, Manila