

Wenzel, W., M.J. Arman : **Lexicon der Gentechnologie**. - Springer Verlag, Berlin-Heidelberg 1991. 290 pp.

This encyclopedic dictionary published in German contains more than 800 definitions from genetic technology and molecular biology. It also includes headwords of related topics, e.g. plant breeding, clinical application of genetics etc. Important headwords are described in detail, e.g. replication on 9 pages with 2 figures, gene expression in eukaryotes on 8 pages. Other, less important headwords are described in 1-2 sentences. For most headwords the corresponding English translations are presented. Wherever possible the respective publications are cited.

This encyclopedic dictionary will be useful to all scientist and students interested in molecular biology and related topics and who master the German language.

T. GICHNER (*Praha*)

Sleper, D.A., Barker, T.C., Cox, P.J., (ed.): **Plant Breeding and Sustainable Agriculture: Considerations for Objectives and Methods**. (CSSA Special Publication Number 18) - Crop Science Society of America, American Society of Agronomy, Madison 1991. 93 pp.

The publication contains the proceedings of the symposium sponsored by the Crop Science Society of America and held in Las Vegas on 17 October 1989. The following papers were presented: Roles of Public, Industry and International Research Center Programs in Developing Germplasm for Sustainable Agriculture; Sustainability of Genetic Resistance; Selection and Testing Environments for Improved Performance under Reduced-input Conditions; Plant Genetic Interactions in Alternative Cropping Systems: Considerations for Breeding Methods; and Contributions of Plant Breeding to Future Cropping Systems.

All these papers reflect various facets of the role of plant breeding in a sustainable agriculture, defined as an approach to the farm management aiming at farm profitability, yield stability, food and environmental quality and safety, and erosion control. Regarding these objectives, the principal issues for plant breeders should be assessing the germplasm resources achieving sustainable gains in genetic improvement (such as resistance to pests), developing programmes to breed for adaptation to varying production or stress levels, and reassessing breeding objectives and methods to anticipate future changes and needs.

These questions and many others, more or less important, are discussed in the presented papers. Above all, the inevitable support of public and industry, as well as the impact of probable changes in cropping systems are emphasized.

The authors, professors and research workers of several US universities, have written a comprehensive and easy-to-read book fitted with instructive tables summing up many aspects of the contemporary plant breeding and sustainable cropping systems. It may be of interest not only for the plant breeders and agronomy students, but also for economists, environmentalists and state authorities. In a way, this publication can serve as a useful manual for them.

J. JIRÁTKO (*Praha*)