

Hiatt, A. (ed.): **Transgenic Plants: Fundamentals and Application**. - Marcel Dekker, New York - Basel - Hong Kong 1993. 340 pp.

This book is not proceedings from a conference, but it consists of series of general articles on plant transgenesis written by invited contributors, who are on the top of the study of the actual topic of plant transgenesis. Most of the authors are members of biotechnological companies (Monsanto Co., St. Louis, Missouri, Mogen International NV, Leiden, Calgene, Davis, Plantech Res. Institute, Yokohama, Plant Genetics Systems, Gent.) or Universities. The book consists of 16 articles which are divided into 5 groups: I. Transgenic Manipulation and Metabolism, II. Viral Pathogen Resistance, III. Techniques for Transforming of Photosynthetic Organisms, IV. Molecular Farming and V. Ribozymes and antisense RNA. It gives new outlook on several contemporary aspects of plant transgenesis. Very nice example is the production of antibodies by transgenic plants. Except scientific values, these antibodies can have several practical uses. Such antibodies that can be obtained in large quantities could potentially be used for industrial-scale purification process and utilized for human beings. They can be also used directly in the plant genome as a mechanism of resistance to viruses, but also to bacterial and fungal diseases. There are articles of general and broad value, as very good outlook of hormone manipulation in transgenic plants, which brings several new aspects of differentiation process, expression of genes by viral based vectors or ribozymes, antisense RNA and even antisense ribozymes. There are also several new topics of transgenesis in application to plant breeding, like the use of genetic transformation to alter fatty acid metabolism in plants, expression of modified seed storage proteins in plants or induction of virus resistance in plants by different transgenes. The book is written by clear-cut style and it is of value to plant molecular biologists, genetists, physiologists, phytopathologists and all those who are interested in modern problems plant molecular biology as well as agricultural biology.

M. ONDŘEJ (*České Budějovice*)