

Nester, E.W., Verma, D.P.S. (ed.): **Advances in Molecular Genetics of Plant-Microbe Interactions**. Volume 2. - Kluwer Academic Publishers, Dordrecht - Boston - London 1993. 617pp.

This book presents Proceedings of the 6th International Symposium on Molecular Plant-Microbe Interaction, which has been held in Seattle, Washington USA, in July 1992. The book gives relatively up-to-date outlook of the present state of art in the molecular biology of plant-microbe interactions. It contains proceedings of altogether 69 lectures on molecular biology of plants and plant-related microorganisms. Papers pooled in the book are mostly review papers of prominent scientists, which include also some new experimental data. The book is divided into 9 sections: Section 1 is mostly general. It includes papers on cell-to-cell interactions, which are on the very basis of plant-pathogen interaction as well as plant-plant interactions. Section 2 gives new aspects of *Agrobacterium* transformation, particularly the role of individual virulence genes and the mechanism of transfer of T-DNA into the plant genome and its interactions with plant genes. The third section is devoted to plant-*Rhizobium* interaction. Next sections are dealing with bacterial-plant and fungal-plant interactions, mostly from the point of view of pathogenesis as studied both from the side of the pathogen and from the side of the plant. Recent results on cloning of both plant and bacterial genes involved in these interactions are described. Of greatest interest is the section 9 concerning biotechnology. There are 10 original papers on plant transgenesis for plant breeding and on different aspects of field and biotechnological utilization of plant interacting microorganisms. It contains chapters on antibodies produced in transgenic plants. Of great importance are also papers on resistance of transgenic tobacco to *Rhizoctonia solani* caused by *Serratia marcescens* chitinase gene, bacterial resistance of transgenic plants producing T4 lysozyme, or on transgenic plants resistant to phaseolotoxin of *Pseudomonas syringae* pv. *phaseolytica* by producing pathogen-derived target enzyme ornithine carbamoyl transferase. The book is very useful for scientists working in the field of plant-microbe interactions, including *Agrobacterium* transformation, nitrogen fixation or interaction with plant pathogens.

M. ONDŘEJ (*České Budějovice*)