Mukerji, K.G., Chamola, B.P., Upadhyay, K. (ed.): **Biotechnological Approaches in Biocontrol of Plant Pathogens.** - Kluwer Academic/Plenum Publishers, New York 1999. 255 pp. NLG 235.00. ISBN 0-306-46104-8.

The use of ecologically safe and environmentally friendly methods of protecting crops from pests and pathogens is gaining importance. Control methods using chemical pesticides may lead to development of resistant pathogenic strains and their accumulation can cause serious ecological and health problems. Therefore, the control of plant diseases by the use of existing organism in their natural habitat is an urgently needed component of plant disease management. Biocontrol of plant diseases offers answers to many persistent problems in agriculture including problems of resource limitation, non-sustainable agriculture system and over-reliance on pesticides. In this book different aspects of the biotechnological approaches in biocontrol of plant pathogens are discussed.

The book contains 12 chapters incorporating latest in the respective fields. The first chapter discusses the host specificity and pathogenesis of various fungi and proposes several possible mechanisms for localised resistance. Second chapter exemplifies the potential and limits of biological control of postharvest diseases by presenting the study of two yeasts exhibiting protective activity against *Penicillium* sp. and *Botrytis cinerea* in postharvested apples. The third chapter is focused on the diseases of canola and rapeseed and the investigation of the various fungal and bacterial microorganisms as potential control agents. The fourth chapter deals with possibilities of application of microbial agents for biological weed control. Chapter 5 "Bacteria as biocontrol agents of insects" is aimed to the groups of bacteria, which cause disease and death in insects, especially to *Bacillus thuringiensis* and *B. sphaericus.* Next article reviews the research on the mechanism of action of biocontrol plant growth promoting rhizobacteria. The potential of mycorhizal fungi as biological control agent for soil-borne diseases is discussed in following chapter. The eighth chapter "Biocological control of bacterial plant disease" pays attention to the molecular techniques and their uses in the biocontrol of plant bacterial diseases, especially crown call, bacterial blights, bacterial wilt, bacterial soft rot and ice nucleation active epiphytic bacteria, which incite frost injury of sensitive plants. The following chapter "Protoplast fusion in disease control" provides extensive overview of fungal protoplast fusion technology needed for development of effective biocontrol strains of fungi by technique of genetic recombination. In next chapter, the using of tissue culture techniques focused on recovery of disease-free plants and/or transgenic resistant plants are discussed. The final two chapters concern transgenic antagonists of *Fusarium* spp. and a use of bioluminescence in biocontrol of soil-borne diseases.

The book provides a detailed overview about resent research and commercial use of biocontrol of plant diseases. The information provided in this book is valuable to advanced students, scientists, agriculturists, administrators and farmers.

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