

Book Review

D. PRUSKY, S. FREEMAN & B. DICKMAN (EDS.):

Colletotrichum. Host specificity, pathology, and host-pathogen interaction.

APS Press, The American Phytopathological Society,
St. Paul, Minnesota, USA, 2000, 393p.,
ISBN 0-89054-258-9.

(The book is deposited in the library of the Society)

Fungi from the genus *Colletotrichum* and its teleomorph *Glomerella* are considered very important plant pathogens. They cause economically significant damage to crops in tropical, subtropical and temperate regions. Cereals, grasses, legumes, ornamentals, vegetables and fruit may be attacked by this pathogen. The ability to give rise to latent or quiescent infections has caused *Colletotrichum* to be ranked among the most important post-harvest pathogens.

This book includes recent results of research on *Colletotrichum*. Lectures were performed at the International Workshop on Host Specificity, Pathology, and Host-Pathogen Interaction of *Colletotrichum*, supported by BARD (United States - Israel Binational Agricultural Research and Development Fund) in Jerusalem from 29, August. to 1. September, 1998. Problems in the areas of systematics and sexual stage, infection process, host specificity, population genetics, epidemiology, pathogenicity genes, regulation of pathogenicity and host-resistance, important *Colletotrichum* diseases, mycoherbicides and their use, new strategies to the study and the control of new epidemics (i.e. *C. acutatum* in fruit crops, *C. coccodes* in vegetables, and *C. lindemuthianum* in beans) were presented. Important contributions have been summarized and appear as 23 chapters in eight thematic parts of this book. The chapters are supplemented with tables, figures, photos and literature.

The first part "Systematics, Vegetative Compatibility and Sexual Stage" includes four chapters. The authors (from Spain, New Zealand, USA and Israel) present results of the research on systematics in the past, presence and future of systematics, describe the importance of phylogeny in understanding host-fungus relationships, genetic regulation of sexual compatibility in *Glomerella graminicola* and vegetative compatibility in *Colletotrichum*.

The results of the research to the cell biology of the *Colletotrichum* infection process, early molecular communication between *C. gleosporoides* and the host and regulation of melanin biosynthesis genes during appressorium formation by *C. lagenarium* are presented in the second part "Infection Process" (three chapters, by the authors from UK, USA and Japan).

Very interesting are the three following parts which deal with host specificity and genetic diversity, pathogenicity genes and regulation of pathogenicity and host resistance. Besides its considerable economic impact, *Colletotrichum* has become a valuable experimental pathogen to study genetic, molecular and biochemical aspects of plant - fungus associations. This part contains seven chapters (authors from USA, Israel, Australia, France).

The two following parts present results of the research on preparation and utilization of mycoherbicides and problems of control (two chapters, authors from UK and Israel).

The part "Major *Colletotrichum* Hosts" contain 7 chapters (authors from USA, UK, Israel). In these chapters results of studies of *Colletotrichum* diseases on strawberry, citrus, almond, coffee, bean, potato and maize are included.

The book contributes to the understanding of problems dealing with *Colletotrichum* and future development in the the areas of biology, pathology and control.

This book has been reproduced directly from a copy submitted in final form to APS Press, no editing or proofreading has been done by the Press.

Jiřina Krátká