

## BOOK REVIEW

**Schumann G.L., D'Arcy C.J. 2006. Essential Plant Pathology. APS Press  
– The American Phytopathological Society. St. Paul, Minnesota, USA. 338 pp.  
ISBN 0-89054-342-9.**

In the "Preface" (p. IX–XIII) the authors indicate that humans could not survive on the Earth without plants which directly and indirectly support our life. As historical examples they mention: (1) the Irish potato famine of the 1840s due to potato late blight caused by *Phytophthora infesta*; and (2) Dutch elm disease caused by *Ophiostoma novo-ulmi* and *Ophiostoma ulmi* that killed over 5 million elm trees in North America. These and other examples clearly emphasize the reasons why we should study plant diseases and develop the field of plant pathology.

In Chapter 1 "What is wrong with my plant" (p. 1–19) the authors provide information on: How do we diagnose plant diseases? What are biotrophs and necrotrophs? What are disease cycles and how we can use them in plant protection?

The subsequent six chapters have similar titles but their topics refer to different categories of causative agents of diseases: Chapter 2 – "What are the causes of plant diseases? – Fungi" (p. 21–48); Chapter 3 – "Bacteria" (p. 49–66); Chapter 4 – "Nematodes" (p. 67–84); Chapter 5 – "Viruses" (p. 85–106); Chapter 6 – "Parasitic flowering plants" (p. 107–117). Chapter 7 – "Abiotic factors" (p. 119–139). Chapter 8 – "What types of plant diseases are there?" (p. 141–175) – in which the following categories are defined and characterized e.g. damping-off, vascular diseases, cankers, galls, root rots, wood decay and postharvest diseases. Chapter 9 – "How do plants interact with pathogens" (p. 177–225) discusses ecological, physiological and genetic interactions between plants and pathogens and how we can create disease-resistant plants. Much attention is given in this chapter to genetic engineering, genetically modified organisms (GMO) and biotechnology. Chapter 10 "How do people influence plant disease epidemics?" (p. 227–254) discusses the topic of prediction of plant diseases and describes: "How people affect the ability of pathogens to cause disease?" and "How do plant disease epidemics affect people?". Chapter 11 "How can we prevent or manage plant disease epidemics?" (p. 255–297) illustrates the ways how we can avoid, exclude and eradicate pathogens or how we can protect plants and maintain them healthy by creating integrated and sustainable disease management programs.

The book contains three appendixes: Appendix 1 – "Disease Classics" (p. 299); Appendix 2 "Examples of diseases of main plants" (p. 299–307); Appendix 3 "Rapid assays for pathogens" (p. 309–315).

This excellent and highly useful book is supported by CD-ROM with many valuable photographs and drawings. I strongly recommend this book to the attention of plant protection specialists, university professors and students, and to all agricultural libraries,

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