Book Review

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Compendium of Brassica diseases


Forty-nine specialists from different parts of the world are the authors of a new book in the Disease Compendium Series, edited by APS Press. Many cultivars of different species belonging to the Brassicaceae family are widely grown throughout the world and their production rapidly increases. They are of great economic importance as leaf or root vegetable crops, condiments and spices, fodder crops for livestock feeding, or oilseed production. The knowledge of production and diseases management of Brassica crops is therefore critical. The new comprehensive Compendium provides useful information to everyone who is interested in this problem.

The book is divided into three parts: introduction, infectious diseases and non-infectious diseases. In Part I, taxonomic hierarchy and genetic relationship of Brassica species are reviewed. A nomenclatural summary of crop species, relevant synonymy, infraspecific taxa, and common names are given in Table 3. Characteristics and production management of the four major species, B. oleracea, B. rapa, B. juncea, and B. napus, are described. In addition, other species of the Brassicaceae family, e.g. B. nigra, B. carinata, Raphanus sativus, Sinapis alba and Armoracia rusticana are also included. In this part, very useful practical information is provided concerning planting, fertilisation, irrigation, pest management, harvest and storage.

Part II contains descriptions of the most important diseases caused by fungi, Oomycetes, Plasmodiophora, bacteria, phytoplasmas, viruses, and nematodes. Diseases are arranged according to common names in alphabetical order. Within each of about 35 specific diseases, symptoms, causal organisms, disease cycle, epidemiology, and management are discussed.

Part III describes non-infectious disorders that are caused by abiotic factors, and also includes sections on storage problems and genetic abnormalities. The described visual symptoms of nutritional deficiencies were used for the construction of a useful key (Table 9).

The compendium does not deal with damages caused by insect pests, except for insect vectors, which are described in the sections dealing with diseases caused by viruses and phytoplasmas.

A glossary explaining abbreviations and terminology, and an index complete the book. The 171 colour and 8 black-and-white photographs are very instructive. Selected references are given at the end of each section by its authors.

The purpose of this Compendium to provide a thorough, authoritative, and practical reference for anyone who needs to diagnose and manage disease problems in Brassica crops has been perfectly achieved. It can also serve as a good manual for teaching activities.

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