

## Book reviews

Amy Y. Rossman, Mary E. Palm & Linda J. Spielman, 1987. A literature guide for the identification of plant pathogenic fungi. American Phytopathological Society, St. Paul, Minnesota. 252 pages. ISBN 0-89054-080-2. Price \$ 30.00 (inside USA \$ 24.00).

A plant pathologist, confronted with the need of naming plant pathogenic fungi, often wonders where to start looking. It is not always easy to find one's way in the floras, host-pathogen lists and scattered treatments of various groups of fungi in the mycological literature. This literature guide produced by the American Phytopathological Society links the mycological literature and those who want to use it. The book contains an introduction with directions for the use of the guide, followed by a chapter on general literature, arranged alphabetically per group (Aphyllophorales, Ascomycotina, Deuteromycotina, . . .). The main part of the book consists of a list of references alphabetically by genus. The teleomorphic and the anamorphic states of a fungus are treated separately. Each entry lists literature by author, and notes on the pathogenic properties of the genus, often listing the major species and references to general literature. At the end of the book are indexes by author and generic name. Although a guide of the present size cannot be complete, there were no serious omissions that I could trace. The citations are updated to 1986. The taxonomic and nomenclatural concepts used are those of Ainsworth & Bisby, Dictionary of Fungi 7th ed. (1983), with a few exceptions where recent data were available. The present book is, of course, not an identification guide. It seems very practical and can be warmly recommended to mycologists and plant pathologists in charge of identification of pathogenic fungi.

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I.M. Smith, J. Dunez, R.A. Lelliott, D.H. Phillips & S.A. Archer (Eds), 1988. European handbook of plant diseases. Blackwell Scientific Publications, Oxford, London, Edinburgh, Boston, Palo Alto, Melbourne. 583 pages. 106 illustrations, two indexes. ISBN 0 632 01222 6. Price: cloth £ 55.00.

According to the publisher's pamphlet, this book was 'written as the definitive reference source for the practising plant pathologist, and those taking advanced training in plant pathology'. Its publication was sponsored by the British Society for Plant Pathology and the European and Mediterranean Plant Protection Organization. Du Pont de Nemours (SA) funded the illustrations.

The epithet European was, rightly, attached to 'handbook' and not to 'diseases'. This indicates that the book deals with diseases prevailing in European crops. Pathogens forming a potential threat to European crops, 'quarantine organisms', are briefly treated.

Although aiming at crops of a specific region, the book's contents are organized according to categories of pathogens and not according to crop types. There are four chapters on viruses and viroids, one on mycoplasma-like and rickettsia-like organisms and spiroplasmas, two on bacteria, one on oomycetes and chytridiomycetes each, five on ascomycetes and three on basidiomycetes. Deuteromycetes are incorporated in the chapters on fungi to which their teleomorphs belong (or probably would belong, if known). Plant-parasitic nematodes, although often treated as pathogens, are not included.

Within chapters, entries are grouped according to the taxonomic hierarchy of the disease agents. Of each pathogen, a concise description is given, involving biological characteristics (such as morphological stages, host species and disease symptoms) and epidemiology, economic importance of the disease and control methods, with literature references. The references are listed at the end of each chapter. The descriptions were contributed by some two hundred scientists, mainly from Europe, each thoroughly familiar with the practical aspects of the particular disease.

The detail each pathogen receives is related to its 'importance' for Europe, 'importance' meaning the resultant of both the impact of the disease and the significance of the crop. Importance of the pathogens is also reflected in their distribution over the chapters (for the viruses) and in the typography of the headings of the descriptions. So these different letter types do not serve to indicate equivalent divisions and subdivisions of text, and this may be somewhat confusing to the reader who tries to find his bearings.

The contents page only gives the titles of the chapters and sections of chapters. Individual entries are not numbered. This, again, is a hindrance in finding one's way in the text. Fortunately, there are two extensive indexes: one for the pathogens, giving accepted names as well as synonyms, and one for the hosts, at family, genus and species levels. Thus, finding the description of a particular pathogen (or disease, if the aetiology is not yet clear) should not pose any problem.

Entries are written for the pathologist, but often a small section is included giving special research interests, which are not directly related to disease problems or crop protection. Such sections indicate briefly why and/or how a pathogen is used as a model system in fundamental research or as a laboratory tool. For instance for *Agrobacterium tumefaciens*, mention is made of its role in elucidating host-pathogen interactions and biological control and of its use in genetic manipulation of plants.

The book is not extensively illustrated but is voluminous enough as it is.

The descriptions only give major aspects and are relatively short (two pages at a maximum). Numbers of references per pathogen are also limited. Thus, the book cannot be meant for specialists, working on specific diseases. However it will certainly serve its purpose in giving the reader a preliminary idea about a disease and its incitant, in which he or she is newly interested. In addition, it gives access to the relevant literature. So the book is indeed a reference source, as it is intended to be.

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