Diseases of Tropical Pasture Plants

Eds J.M. LENNÉ and P. TRUTMANN. Published by CAB International, Wallingford, UK, 1994. 404 pp. £60. ISBN 0 85198 917 9

The editors of this book, Jill Lenné and Peter Trutmann have considerable experience in pathology of tropical pasture plants. This book reflects the depth of this experience and provides a timely and comprehensive coverage of diseases of tropical pasture legumes and grasses. It is generally well presented and contains much useful information in a readily accessible form with colour and black and white photographs of symptoms for many economically important diseases.

The volume consists of a preface on tropical pastures and the importance of plant diseases, and 5 sections dealing with: fungal, bacterial and mycoplasma diseases of tropical pasture legumes; fungal, bacterial and mycoplasma diseases of tropical pasture grasses; viral and nematode diseases of tropical pasture plants; regional experiences; and management and prospects. The first 2 sections by Jill Lenné review fungal. bacterial and mycoplasma diseases of the most important genera of tropical pasture legumes (Stylosanthes, Centrosema, Desmodium, Macroptilium, Aeschynomene, Leucaena) and grasses (Andropogon, Brachiaria and others). Major diseases of these plants are discussed in detail, giving their distribution and importance, aetiology, symptoms, epidemiology, host range and pathogenic variation in the causal organism and the use of host resistance and other strategies for their management. Diseases of other less economically important pasture plants are also covered as are nematode and viral diseases of tropical pasture plants. Diseases of some of the tropical pasture legumes have been collated and published earlier by Jill Lenné and others, mainly in Tropical Grasslands. In reviewing relevant information on diseases of pasture grasses and legumes in one volume, this well referenced sourcebook fills a definite gap. The book will serve as a useful reference for those interested in tropical pastures. The detailed coverage of the more economically important diseases makes it indispensable for pasture pathologists, plant breeders, agronomists and all those who diagnose, study and manage diseases in tropical pastures. However, complementing the description with more photographs of symptoms and illustration of the causal organism would have made this publication more useful at a practical level.

The 2 sections of the book dealing with regional, international and generic aspects are particularly useful as there is only a limited number of professionals who work on diseases of tropical pasture plants, and information exchange between professionals is generally poor. These sections represent the collective wisdom and make a significant contribution to help improve awareness of global issues in tropical pasture pathology. The chapter outlining the benefits arising out of international cooperation and priorities for future research is well presented. However, the significant omission of the use of molecular approaches to improve host resistance. understand pathogen virulence and host and pathogen diversity and evolution is obvious in the contribution discussing the role of molecular analysis in tropical pasture pathology. The regional experiences provide a summary of the distinctive experience with the development of tropical pastures and an account of their diseases. An obvious criticism is the duplication of material in the regional experiences which have already been discussed in some detail under the major legumes and grasses. Overall, the editors and authors are to be congratulated on producing this timely and useful book.

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