1. Record Nr. UNINA9910298262203321 Recent Advances in the Diagnosis and Management of Plant Diseases **Titolo** [[electronic resource] /] / edited by L.P. Awasthi Pubbl/distr/stampa New Delhi:,: Springer India:,: Imprint: Springer,, 2015 **ISBN** 81-322-2571-6 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (302 p.) 570 Disciplina Soggetti Agriculture Plant diseases Plant anatomy Plants - Development Plant Pathology Plant Anatomy/Development Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto 1. Commercialization of Microbial Biopesticides for the Management of Pests and Diseases -- 2. Management of Plant Diseases in Organic Agriculture -- 3. Morphological and Molecular Diagnosis of Fusarium sps. Causing Wilt Diseases of Crop Plants -- 4. Damping-off Disease of Seedlings in Solanaceous Vegetables: Current Status and Disease Management -- 5. Downy Mildew of Cucurbits and Their Management -- 6. Current Status of the Diseases of Lentil (Lens culinaris Medik) --7. Botrytis Grey Mould of Chickpea (Cicer arietinum L.) -- 8. Fungal Diseases of Okra (Abelmoschus esculentus L.) and their Integrated Management (IDM) -- 9. Sheath Blight Disease of Paddy and their Management -- 10. Diagnosis and Management of Bacterial Plant Diseases -- 11. Recent Developments in Bacterial Blight of Pomegranate and its Management -- 12. Plant Viral Disease Management through Botanicals -- 13. Yellow Vein Mosaic Disease - A New Threat to Mesta (Hibiscus Sp.) Cultivation -- 14. Biology, Epidemiology, and Management of Soybean Mosaic Virus in Soybean

(Glycine max (L.) Merrill) -- 15. Boerhaavia diffusa, Derived Antiviral: A

Novel, Ecofriendly Approach for the Management of Viral Infections -16. Nematode Diseases of Crops -- 17. Recent Advances in Diagnosis
and Management of Diseases of Vegetable Crops -- 18. Novel
Detection Techniques for Plant Pathogens and Their Application in
Disease Management -- 19. New Molecular Techniques for Detection
and Diagnosis of Plant Pathogens -- 20. Plant Nutrition in Management
of Plant Diseases with Special Reference to Wheat -- 21. Nutritional
Disorders of Citrus and Their Management.

Sommario/riassunto

This book is a compilation of the most challenging and significant chapters on the diagnosis and management of important bacterial. fungal, viral, viroid, phytoplasma, non parasitic diseases and various physiological disorders, in various crops. The chapters have been contributed by eminent plant pathologists, having wide experience of teaching and research on various crops with different types of diseases, which cause great economic losses. The book would be very useful for students, teachers and researchers of plant pathology. This book highlights recent advances made in the development of new types of resistance in host plants and alternative strategies for managing plant diseases to improve food quality and reduce the negative public health impact associated with plant diseases. Having entered into 21st century advancements in the Diagnosis of Plant Pathogens and Plant Disease Management need to be closely examined and adequately applied, so that newer challenges facing plant pathology could be adequately addressed in attaining food security for the growing population. Substantial advancements have been made in terms of expanding knowledge base of the biology of plant-microbial interactions, disease management strategies and application and practice of Plant Pathology. Application of molecular biology in Plant Pathology has greatly improved our ability to detect plant pathogens and in increasing our understanding, their ecology and epidemiology. Similarly, new technologies and resources have been evolved for the development of sustainable crop protection systems by different control strategies against various pests and pathogens that are important components of the integrated pest management programme. Natural products and chemical compounds discovered as a result of basic research and molecular mechanisms of pathogenesis have led to the development of "biorational" pesticides. Biological control has been found to be the most significant approach to plant health management during the twentieth century and promises using modern biotechnology, to be even more significant in the twenty-first century.