1. Record Nr. UNINA9911009337803321

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Titolo	Detection, Diagnosis and Management of Air-Borne Diseases in Agricultural Crops / / edited by Udai B. Singh, Ravindra Kumar, Gyanendra Pratap Singh, Harikesh Bahadur Singh
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9670-63-2
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (485 pages)
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Disciplina	571.92
Soggetti	Plant diseases Agriculture Agricultural biotechnology Plant Pathology Agricultural Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Application of Artificial Intelligence in the Detection and Management of Airborne Diseases in Agricultural Crops -- 2. Real-Time PCR: An emerging and quick technique for detection of airborne pathogenic microbes -- 3. Diagnosis and Detection of Major Air-borne Fungal Phytopathogens -- 4. Advances and implications of genomic prediction for air-borne disease in food crops -- 5. Taro Phytophthora Leaf Blight: Leveraging Diversity, Epidemiology, and Management Practices -- 6. Genetic and Molecular Aspects of Fungicide Resistance in Cochliobolus heterostrophus, the Pathogen of the Southern Corn Leaf Blight Disease -- 7. Unveiling the Dynamics of Rice Blast: Insights into Pathogenesis, Epidemiology, and Management -- 8. Unmasking hidden enemies: Management, Detection and Diagnosis -- 9. Bio-Control Agents: A Path towards Curbing Air-Borne Diseases of Field Crops -- 10. Biocontrol Agents-Mediated Management of Air-Borne Plant Diseases -- 11. Diagnosis, Diversity and Management of Grapevine viruses -- 12. Management of Air-borne Fungal

Phytopathogens by Uniting the Mechanisms of Endophytic Fungi -- 13. Phytomicrobiome produced chemosignals: Role and implication in plant protection -- 14. Bacterial endobiome mediated induction of in-planta resistance towards the management of late blight of potato -- 15. A Systems Approach to the Detection and Management of Rice Brown Spot Disease.

Sommario/riassunto

This edited volume covers latest information and developments on the Detection, Diagnosis and Management of Air-Borne Diseases of Agricultural Crops across the globe. The main aim of this book is to address the scientific and practical significance of detection, diagnosis and management of air-Borne plant pathogens. With the advancement of science, OMICs approaches playing crucial role in the efficient and accurate detection of pathogen propagules present in the air or on the plant surface. This book volume cover almost all molecular techniques used for detection and diagnosis of air-borne phyto-pathogens. Similarly, all possible management practices with detailed description are discussed in the present book volume. Special attention has been given on the microbe-mediated management of air-borne disease. Among the more recent strategies, resistance induced by environment-friendly elicitors of microbial origin and/or rhizosphere/phyllosphere microbes has emerged as a promising supplement in the approaches to crop protection. This book covers all spheres of microbial management viz., bio-resources, diversity, ecology, and functioning of microbial biocontrol agents, host–parasite interaction, strategies to characterize microbial bioinoculants, application of microbial bio-pesticides and regulatory mechanisms pertaining to commercialization of biopesticides. This book is of interest to teachers, researchers, crop protection scientists, capacity builders and policymakers. Also, the book serves as additional reading material for under-graduate, post-graduate, and post-doctorate fellow of agriculture, forestry, ecology, life science, and environmental sciences.