Record Nr.	UNINA9910279581903321
Autore	Vidhyasekaran P.
Titolo	Handbook of molecular technologies in crop disease management / / by P. Vidhyasekaran
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, an imprint of Taylor and Francis, , [2013] ©2007
ISBN	0-367-80705-X 1-4398-4737-1
Edizione	[First edition.]
Descrizione fisica	1 online resource (462 pages)
Disciplina	632/.3
Soggetti	Phytopathogenic microorganisms - Control Plant diseases - Molecular aspects Plant-pathogen relationships - Molecular aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1 Molecular Diagnostic Technology chapter 2 Molecular- Assisted Qualitative and Quantitative Resistance Breeding and Gene Pyramiding Technologies chapter 3 Transgenic Technology chapter 4 Plant Defense Activators: Precise Application Technology chapter 5 Biological Inducers of Transcription of Defense Genes: Application Technology.
Sommario/riassunto	The effective, environmentally sound approach to battling crop diseaseThe most effective, economic, and environmentally sound approach of managing crop disease in today's world is by breeding crops resistant to disease. The Handbook of Molecular Technologies in Crop Disease Management provides a top-to-bottom detailed view of crops, from their molecular level to ways to manipulate a higher resistance to disease through breeding. This comprehensive, single- source reference text covers the entire field of molecular breeding, transgenic technology, molecular plant pathology, and molecular disease diagnostics, presenting it all in clear, understandable language. The precise diagnosis of crop diseases is essential for the selection of proper disease management strategies. The Handbook of Molecular

1.

Technologies in Crop Disease Management reviews all of the technologies that bolster precision diagnosis of numerous diseases, where they affect the plant, and the latest genetic engineering technology available to help develop plants with broad spectrum disease resistance. This handbook is perfect for teaching as well as being a detailed research resource in molecular plant pathology, genetic engineering, gene transcription, gene pyramiding, disease resistance breeding, disease diagnosis, microbial pesticides, and plant activators. It contains an extensive bibliography and provides several tables and figures to clearly reinforce crucial points. Topics in Handbook of Molecular Technologies in Crop Disease Management include: disease diagnosis technologies diagnosis by culturing pathogen nucleic acid-based diagnosis technologies fungal diseases viral diseases bacterial diseases phytoplasma diseases viroid diseases molecular-assisted qualitative and quantitative resistance breeding and gene pyramiding technologies disease resistance genes dominant and recessive R genes types of molecular markers and their uses selection of genes transgenic plants transgenic technology plant defense activators precise application technology biologic inducers of transcription of defense genes and the application technology biosafety of genetically modified cropsThe Handbook of Molecular Technologies in Crop Disease Management is an indispensable resource for private sector research scientists, plant biologists, biotechnologists, molecular biologists, microbiologists, plant breeders, biochemists, plant pathologists, mycologists, bacteriologists, virologists, botanists, educators, and students.