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Titolo	Downy Mildew Disease of Crucifers: Biology, Ecology and Disease Management // by Govind Singh Saharan, Naresh Mehta, Prabhu Dayal Meena
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-7500-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (357 pages) : illustrations, tables
Disciplina	635.349
Soggetti	Agriculture Plant diseases Fungi Mycology Microbiology Invertebrates Plant biotechnology Plant Pathology Invertebrate Zoology Plant Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	- Introduction -- The Disease- Downy Mildew -- The Pathogen- <i>Hyaloperonospora parasitica</i> (Gaum.) Goker [H. brassicae (Gaum.) Goker] -- Electron Microscopy, and Ultra Structures -- Physiologic Specialization (Pathogenic variability) -- Perpetuation, and Survival -- Infection, and Pathogenesis -- Disease Cycle -- Epidemiology, and Forecasting -- Association or Mixed Infection or Downy Mildew, and White Rust Disease Complex -- Biochemistry of the Host Pathogen Interaction -- Host Resistance -- Disease Management -- Techniques -- Future Strategies, and Priorities of Downy Mildew Disease Management.
Sommario/riassunto	The book reviews key developments in downy mildew research, including the disease, its distribution, symptomatology, host range,

yield losses, and disease assessment; the pathogen, its taxonomy, morphology, phylogeny, variability, sporulation, survival and perpetuation, spore germination, infection, pathogenesis, seed infection, disease cycle, epidemiology, forecasting, and fine structures. The book also elaborates the mechanisms of host resistance (biochemical, histological, genetic, and molecular, including cloning and the mapping of R-genes), disease resistance breeding strategies, and the genetics of host-parasite interactions. It explores disease management based on cultural, chemical, biological, host resistance, and integrated approaches; and provides suggestions for future research areas. This book offers a comprehensive guide to an economically important disease, reviewing in detail the extant body of literature. Divided into 16 chapters, each of which includes a wealth of photographs, graphs, histograms, tables, figures, flow charts, micrographs etc., it represents an invaluable source of information for all researchers, teachers, students, industrialists, farmers, policymakers, and all others who are interested in growing healthy and profitable cruciferous crops all over the world.
