

1. Record Nr.	UNINA9910298330403321
Titolo	Genomics of Plant-Associated Fungi and Oomycetes: Dicot Pathogens / / edited by Ralph A. Dean, Ann Lichens-Park, Chittaranjan Kole
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-662-44056-3
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (244 p.)
Disciplina	571.92
Soggetti	Microbial genetics Microbial genomics Mycology Agriculture Plant pathology Plant breeding Microbial Genetics and Genomics Plant Pathology Plant Breeding/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Genomics of Sclerotinia sclerotiorum -- The Genome of Botrytis cinerea, a ubiquitous broad host range necrotroph -- Alternaria Comparative Genomics: The Secret Life of Rots -- Verticillium alfalfae and V. dahliae, agents of Verticillium wilt diseases -- Fusarium oxysporum -- Illuminating the Phytophthora capsici genome -- The Phytophthora sojae genome sequence: foundation for a revolution -- Phytophthora ramorum -- Phytophthora infestans -- Hyaloperonospora arabidopsidis: a model pathogen of Arabidopsis. .
Sommario/riassunto	This book describes how genomics has revolutionized our understanding of agriculturally important plant-associated fungi and oomycetes. It illustrates some fundamental discoveries about these eukaryotic microbes with regard to the overall structure of their genomes, their lifestyles and the molecular mechanisms that form the basis of their interactions with plants. Genomics has provided new

insights into fungal lifestyles and led to practical advances in plant breeding and crop protection, such as predictions about the spread and evolution of new pathogens. This volume focuses on fungi and oomycetes that are typical dicot plant pathogens, and includes: *Sclerotinia sclerotiorum*, *Botrytis cinerea*, *Alternaria* sp., *Verticillium alfalfae* and *Verticillium dahliae*, *Fusarium oxysporum*, *Phytophthora capsici*, *Phytophthora sojae*, *Phytophthora ramorum*, *Phytophthora infestans*, *Hyaloperonospora arabidopsidis*.
