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Titolo	Genomics of Plant-Associated Fungi: Monocot Pathogens // edited by Ralph A. Dean, Ann Lichens-Park, Chittaranjan Kole
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-662-44053-9
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (206 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	Pyrenophora tritici-repentis: a Plant Pathogenic Fungus with Global Impact -- Comparative genomics of cochlidiobolus phytopathogens -- The genomics of colletotrichum -- Fusarium graminearum Genomics and Beyond -- The genomes of Mycosphaerella graminicola and M. fijiensis -- Facilitating the fungus: insights from the genome of the rice blast fungus, Magnaporthe oryzae -- The genomes of the cereal powdery mildew fungi, Blumeria graminis -- Puccinia graminis.
Sommario/riassunto	This book describes how genomics has revolutionized our understanding of agriculturally important plant-associated fungi. 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 that are important cereal and other monocot plant pathogens, and includes: *Pyrenophora tritici-repentis*, *Cochliobolus* sp., *Colletotrichum* sp., *Fusarium graminearum*, *Mycosphaerella graminicola* and *Mycosphaerella fijiensis*, *Magnaporthe oryzae*, *Blumeria graminis*, and *Puccinia graminis*.

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