

1. Record Nr.	UNINA9910520065603321
Autore	Saharan G. S.
Titolo	Molecular Mechanism of Crucifer's Host-Resistance // by Govind Singh Saharan, Naresh K. Mehta, Prabhu Dayal Meena
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-16-1974-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (809 pages)
Collana	Biomedical and Life Sciences Series
Disciplina	632.3
Soggetti	Plant diseases Stress (Physiology) Plants Plant molecular biology Plant Pathology Plant Stress Responses Plant Molecular Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Molecular Mechanisms of Disease Resistance -- Chapter 2. Molecular Mechanisms of Host Resistance to Biotrophs -- Chapter 3. Molecular Mechanisms of Host Resistance to Hemi-biotrophs and Necrotrophs -- Chapter 4. Biometabolomics of Disease Resistance to Biotrophs -- Chapter 5. Biometabolomics of Host Resistance to Hemi-biotrophs and Necrotrophs -- Chapter 6. Glimpses of Host Resistance Genomics -- Chapter 7. Molecular Mechanisms of Host Resistance at a Glance -- Chapter 8. Techniques for Molecular Mechanism of Host Resistance -- Chapter 9. Future Research Priorities.
Sommario/riassunto	The book is a comprehensive compilation of applied knowledge for developing resistant varieties to all the major biotrophs, hemibiotrophs and necrotrophs pathogens of crucifers through the use of latest biotechnological approaches. The book includes, multi-component resistance, incorporation of non-host resistance gene, function of particular gene in resistance, expression of age related resistance, enhanced gene resistance, sources of alternative gene which enhance disease resistance, through the use of latest biotechnical approaches

like proteomics, omics, transcriptomics and metabolomics. The book also explores the molecular basis of disease resistance, its biometabolomics activities in response to infection and interaction by the various biotrophs, hemibiotrophs and necrotrophs pathogens. The identification of R genes and its incorporation into agronomically superior varieties through use of molecular mechanisms is also explained. This compilation is immensely useful to the researchers especially Brassica breeders, teachers, extension specialists, students, industrialists, farmers, and all others who are interested to grow healthy, and profitable cruciferous crops all over the world.
