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Titolo	Geminiviruses : Impact, Challenges and Approaches // edited by R. Vinoth Kumar
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Descrizione fisica	1 online resource (240 pages)
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Soggetti	Virology Plant diseases Microbial genetics Microbial genomics Plant Pathology Microbial Genetics and Genomics
Lingua di pubblicazione	Inglese
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Nota di contenuto	1. Classification, taxonomy and gene function of geminiviruses and their satellites -- 2. Rolling circle replication and transcription processes in geminiviruses -- 3. Distribution of geminivirus in Indian subcontinent -- 4. Geminivirus occurrence in Australia, China, Europe and Middle Eastern countries -- 5. Mastreviruses in the African world: Harboursing both monocot and dicot species -- 6. Global weed-infecting geminiviruses -- 7. Evolutionary factors in the geminivirus emergence -- 8. Geminivirus - Vector relationship -- 9. Replication of DNA-satellites and their role in viral pathogenesis -- 10. Geminiviruses versus host's gene silencing mechanism -- 11. Geminivirus resistance strategies -- 12. Integrated pest management approaches.
Sommario/riassunto	This book provides in-depth information on all key aspects of geminivirus biology, e.g. the genetics and evolution, global diversity and spread of these plant pathogens, as well as the molecular mechanisms underlying their virulence. Geminiviridae is one of the largest viral families, comprising numerous plant-infecting viruses that cause diseases in crops and weeds. These diseases have been reported

from nearly all continents, in particular Asia, Europe, Africa and America. The book summarizes the current state of knowledge on the interactions between plant host and virus. In addition, it discusses advances regarding the trans-replication of satellite molecules and its effect on geminiviral pathogenesis, as well as pest management strategies to combat these diseases in the field. Given its scope, the book is a must-read reference guide for all researchers and advanced students working in virology, agriculture and plant biotechnology.
