Record Nr. UNINA9910144564403321 Titolo Plant resistance to viruses [[electronic resource]] Chichester;; New York,: Wiley, 1987 Pubbl/distr/stampa **ISBN** 1-282-34610-5 9786612346101 0-470-51356-X 0-470-51357-8 Descrizione fisica 1 online resource (227 p.) Collana Ciba Foundation symposium;; 133 Altri autori (Persone) EveredDavid HarnettSara 581.234 Disciplina 582 582.0234 Virus diseases of plants Soggetti Plants - Virus resistance Plant viruses Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "A Wiley-Interscience publication." Note generali "Editors: David Evered (organizer) and Sara Harnett"--P. v. Symposium held at the Ciba Foundation, London, 31 March-2 April 1987. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto PLANT RESISTANCE TOVIRUSES; Contents; Participants; Introduction; Genetics of plant resistance to viruses; Resistance of cowpeas to cowpea mosaic virus and to tobacco ringspot virus; Resistance mechanisms of tobacco mosaic virus strains in tomato and tobacco; The role of pathogenesis-related proteins; Characterization of pathogenesis- related proteins and genes; Mechanism of the hypersensitivity reaction of plants; Resistance systems related to the N gene and their comparison with interferon; Analysis of the N gene of Nicotiana; Mechanisms of cross-protection between plant virus strains

Genetic engineering of plants for protection against virus

diseasesResistance to viral disease through expression of viral genetic

Sommario/riassunto

material from the plant genome; Plant DNA viruses as gene vectors; Final general discussion; Summary; Index of contributors; Subject index Concern about the environmental consequences of the widespread use of pesticides has increased, and evidence of pesticide-resistant virus vectors have continued to emerge. This volume presents a timely survey of the mechanisms of plant resistance and examines current developments in breeding for resistance, with particular emphasis on advances in genetic engineering which allow for the incorporation of viral genetic material into plants. Discusses the mechanisms of innate resistance in strains of tobacco, tomato, and cowpea; various aspects of induced resistance, including the characterization