Record Nr. UNINA9910876851503321 **Titolo** Insect-plant interactions and induced plant defence Chichester:: New York,: Wiley, 1999 Pubbl/distr/stampa **ISBN** 1-282-34815-9 9786612348150 0-470-51567-8 0-470-51568-6 Descrizione fisica 1 online resource (292 p.) Collana Novartis Foundation symposium: 223 Altri autori (Persone) ChadwickDerek GoodeJamie 632/.7 Disciplina Soggetti Plants - Disease and pest resistance - Developing countries Plant defenses - Developing countries Insect-plant relationships - Developing countries Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "Symposium on Insect-Plant Interactions and Induced Plant Defence. held at the Novartis Foundation, London, 13-15 October 1998"--P. v. "Editors: Derek J. Chadwick (organizer) and Jamie A. Goode"--P. v. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto INSECT-PLANT INTERACTIONS AND INDUCED PLANT DEFENCE; Contents; Participants; Chairman's introduction; Evolutionary aspects of plant- carnivore interactions; Attraction of parasitic wasps by caterpillar-damaged plants; General discussion I; Specificity of herbivore-induced plant defences; Aphids, predators and parasitoids; Functional interactions in the use of direct and indirect defences in native Nicotiunu plants; Plant production of volatile semiochemicals in response to insect-derived elicitors; Induced biosynthesis of insect semiochemicals in plants Diversity and variability of terpenoid defences in conifers: molecular genetics, biochemistry and evolution of the terpene synthase gene family in grand fir (Abiesgrandis) The hydroxamic acid pathway: General discussion 11: Cross-talk between the signal pathways for pathogeninduced systemic acquired resistance and grazing-induced insect resistance; The role of phytoalexins in plant motection 1; Future use of plant signals in agricultural and industrial crops; Genetics and evolution

of insect resistance in Arabidopsis; Exploiting insect responses in identifying plant signals; Final discussion Index of contributorsSubject index

Sommario/riassunto

Insect-Plant Interactions and Induced Plant Defence Chair: John A. Pickett 1999 This book examines the sophisticated mechanisms that plants use to defend themselves against attack by insects and pathogens, focusing on the networks of plant signalling pathways that underlie these defences. In response to herbivory, plants release a complex blend of as many as 100 volatile chemicals, known as semiochemicals ('sign chemicals'). These act as an airborne SOS signal, revealing the presence of the herbivore to the predators and parasitoids that are its natural enemies. Plants also have endogenous def