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Titolo	Co-Evolution of Secondary Metabolites // edited by Jean-Michel Mérillon, Kishan Gopal Ramawat
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Descrizione fisica	1 online resource (204 illus., 138 illus. in color. eReference.)
Collana	Reference Series in Phytochemistry, , 2511-8358
Disciplina	572.42
Soggetti	Biotechnology Botanical chemistry Bioorganic chemistry Plant diseases Plant ecology Pharmaceutical chemistry Plant Biochemistry Bioorganic Chemistry Plant Pathology Plant Ecology Medicinal Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intraspecific Diversity in Plant Secondary Metabolites -- Changes in Secondary Metabolites during adaptation of plants to life on land -- Secondary Metabolites in Pollination -- Allelochemicals -- Abiotic stress signals on secondary metabolites in plants -- Evolution of chemical ecology -- Co-evolution of host-parasite metabolites -- Vertebrates and sensory perception -- Genetics of secondary metabolites -- Secondary Metabolites in Host-parasite interaction -- Secondary metabolites in insect-plant interactions -- Bioactive molecules in plant defence.
Sommario/riassunto	This Reference Work is devoted to plant secondary metabolites and

their evolutionary adaptation to different hosts and pests. Secondary metabolites play an important biological role in plants' defence against herbivores, abiotic stresses and pathogens, and they also attract beneficial organisms such as pollinators. In this work, readers will find a comprehensive review of the phytochemical diversity, modification and adaptation of secondary metabolites, and the consequences of their co-evolution with plant parasites, pollinators, and herbivores. Chapters from expert contributors are organised into twelve sections that collate the current knowledge in intra-/inter-specific diversity in plant secondary metabolites, changes in secondary metabolites during plants' adaptation to different environmental conditions, and co-evolution of host-parasite metabolites. Among the twelve themed parts, readers will also discover expert analysis on the genetics and chemical ecology evolution of secondary metabolites, and particular attention is also given to allelochemicals, bioactive molecules in plant defence and the evolution of sensory perception in vertebrates. This reference work will appeal to students, researchers and professionals interested in the field of plant pathology, plant breeding, biotechnology, agriculture and phytochemistry.

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