Record Nr.	UNINA9910688416703321
Titolo	Structure, Chemical Analysis, Biosynthesis, Metabolism, Molecular Engineering and Biological Functions of Phytoalexins / / edited by Philippe Jeandet
Pubbl/distr/stampa	Basel : , : MDPI - Multidisciplinary Digital Publishing Institute, , 2018
ISBN	3-03842-756-X
Descrizione fisica	1 online resource (vii, 195 pages)
Disciplina	581.29
Soggetti	Phytoalexins - Metabolism
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Ever since the concept of phytoalexins was proposed by Muller and Borger in 1940, these compounds have attracted considerable attention due to the central role they play in the defense mechanisms of various plants. Besides displaying antifungal activity in numerous plant- pathogen interactions, phytoalexins have been implicated in human health and disease as antioxidant, anticancer and cardioprotective agents as well as being supposed to act positively in neurodegenerative illnesses. More than 25 years after the work of Siemann and Creasy which established a relationship between the concentration of the phytoalexin resveratrol in wine and the beneficial effects of wine consumption on health, the relevant literature on phytoalexins and their role in health and disease has increased tremendously. Knowledge on phytoalexins relies on fields as diverse as organic synthesis, analytical chemistry, plant molecular pathology, biocontrol, biochemistry and various aspects of biomedicine and biotechnology. It is almost impossible to review all of these aspects and, therefore, an attempt is made in the present book to illustrate some of them with a particular emphasis on the induction mechanisms of phytoalexin biosynthesis, methods for their analysis in complex matrices, fungal metabolism and phytoalexin bioactivity. This book will serve as a resource for teachers, researchers and students concerned with the study of phytoalexins.

1.