1. Record Nr. UNINA9910144012103321

Titolo	Secondary metabolites [[electronic resource]] : their function and evolution / / [editors, Derek J. Chadwick and Julie Whelan]
Pubbl/distr/stampa	Chichester [England] ; ; New York, : Wiley, 1992
ISBN	1-282-34782-9 9786612347825 0-470-51434-5 0-470-51435-3
Descrizione fisica	1 online resource (330 p.)
Collana	Ciba Foundation symposium ; ; 171
Altri autori (Persone)	ChadwickDerek WhelanJulie
Disciplina	574.19 574.1924
Soggetti	Metabolism, Secondary Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	SECONDARY METABOLITES: THEIR FUNCTION AND EVOLUTION; Contents; Introduction; Microbial secondary metabolism: a new theoretical frontier for academia, a new opportunity for industry; Evolution of secondary metabolite production: potential roles for antibiotics as prebiotic effectors of catalytic RNA reactions; Why are secondary metabolites synthesized? Sophistication in the inhibition of cell wall biosynthesis by vancomycin group antibiotics; Origins of secondary metabolism; Genes for polyketide secondary metabolic pathways in microorganisms and plants Genes for the biosynthesis of B-lactam compounds in microorganismsRegulation of gibberellin formation by the fungus Gibberella fujikuroi; Genetic regulation of secondary metabolic pathways in Streptomyces; Terpenoid cyclases: design and function of electrophilic catalysts; Role of secondary metabolites from microbes; Self-protection mechanisms in antibiotic producers; Useful functions of microbial metabolites; Secondary metabolites from marine organisms; Roles for secondary metabolites in plants; Defensins: endogenous

antibiotic peptides from human leukocytes

Final discussion: Metabolism and cell individualizationOrigins of secondary metabolism; Index of contributors; Subject index

Sommario/riassunto

A comprehensive review of current thinking on the biosynthesis, function and evolution of secondary metabolites in animals, plants and microorganisms. Examines the traditional context of secondary metabolites as natural products having no obvious part to play in the producing organism's life cycle. Covers issues related to genetic and antibiotic applications.