Record Nr. UNINA9910483215603321 Fungal Metabolites / / edited by Jean-Michel Mérillon, Kishan Gopal **Titolo** Ramawat Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-25001-9 Edizione [1st ed. 2017.] 1 online resource (164 illus., 83 illus. in color. eReference.) Descrizione fisica Reference Series in Phytochemistry, , 2511-834X Collana Disciplina 547 Soggetti Bioorganic chemistry **Biochemistry** Biotechnology Entomology Plant breeding Bioorganic Chemistry Plant Biochemistry Mycology Protein Science Plant Breeding/Biotechnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia From the Contents: Biosynthesis of the ergot alkaloids -- Toward Nota di contenuto awakening cryptic secondary metabolite gene clusters in filamentous fungi -- Fungal secondary metabolites - strategies to activate silent gene clusters -- Phytotoxic secondary metabolites and peptides produced by plant pathogenic fungi. This handbook compiles authoritative information about fungal Sommario/riassunto metabolites and their chemistry and biotechnology. The first in the reference work series "Phytochemicals", and written by a team of international expert authors, this book provides reference information ranging from the description of fungal natural products, over their use

e.g. as anticancer agents, to microbial synthesis, even spanning to the production of secondary metabolites on industrial scale. On the other

hand it also describes global health issues related to aflatoxin

production in foods and agriculture, including perspectives for detoxification. The handbook characterizes different compound classes derived from fungal secondary metabolites, like ergot alkaloids and aflatoxins. The discussion puts a special emphasis on how potentially useful compounds can be obtained and what applications they can find, on the one hand, and how potential dangers can be encountered on the other hand. The comprehensive chapters in this handbook will thus appeal to readers from diverse backgrounds in chemistry, biology, life sciences, and even medicine, who are working or planning to work with fungal (secondary) metabolites and their application. They provide the readers with rich sources of reference information on important topics in this field.