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Altri autori (Persone)	SantamaríaÓscar Martín-GarcíaJorge
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Nota di contenuto	Chapter 1. Endophytic filamentous fungi as sources of metabolites for agricultural applications -- Chapter 2. Yeast as a source of metabolites for agricultural applications -- Chapter 3. Mycorrhizal fungi as a source of metabolites for agricultural applications -- Chapter 4. Fungal metabolites as plant growth promoters in crops -- Chapter 5. Fungal metabolites as inductors of plant abiotic stresses tolerance in crops -- Chapter 6. Fungal metabolites as crop pathogen controllers -- Chapter 7. Fungal metabolites as crop pest controllers -- Chapter 8. Trichoderma as a source of metabolites for applications in agriculture -- Chapter 9. Penicillium genus as a source of metabolites for agricultural applications -- Chapter 10. Aspergillus genus as a prolific source of bioactive metabolites for agricultural applications -- Chapter

11. Fusarium genus as a source of metabolites for agricultural applications -- Chapter 12. Clonostachys genus as a source of metabolites for agricultural applications -- Chapter 13. Fungal Phytopathogens as a source of metabolites for agricultural applications.

Sommario/riassunto

This book delves into the fascinating world of fungal metabolites and their biotechnological potential for sustainable agriculture. Through this book, readers will learn about the production and characterization of metabolites by endophytic and rhizospheric fungi, including filamentous fungi like Trichoderma, Penicillium, and Aspergillus, as well as mycorrhizal fungi and yeasts. The chapters cover topics such as the promotion of plant growth, increased tolerance to abiotic stresses, and biological control through the application of fungal metabolites. Expert contributors provide an in-depth analysis of how these metabolites can be produced in bioreactors or applied directly as agricultural bioinoculants. Particular attention is given to the environmental and health benefits of using fungal metabolites in crop improvement. Researchers in the field of agricultural biotechnology, plant sciences, and environmental sustainability will find this book invaluable. It offers a comprehensive discussion from biological, chemical, and applied perspectives, making it a must-read for anyone interested in advancing sustainable agriculture practices.