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| Edizione | [1st ed. 2025.] |
| Descrizione fisica | 1 online resource (XV, 158 p. 36 illus., 24 illus. in color.) |
| Collana | The Mycota, A Comprehensive Treatise on Fungi as Experimental Systems for Basic and Applied Research, , 2945-8056 ; ; 16 |
| Disciplina | 579.5 |
| Soggetti | Fungi Mycology Microbiology Industrial microbiology Food - Microbiology Agricultural biotechnology Industrial Microbiology Food Microbiology Agricultural Biotechnology |
| Lingua di pubblicazione | Inglese |
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| Nota di contenuto | Chapter 1. Industrial Production by Filamentous Fungi: Organic Acids and Vitamins -- Chapter 2. Industrial Applications of Marine Fungi -- Chapter 3. Fungal Spoilage of Crops and Food -- Chapter 4. Ergot Alkaloids -- Chapter 5. Ectomycorrhizae for the Rescue: Ectomycorrhizosphere Signaling in Agroforestry and Afforestation -- Chapter 6. Your Death, My Life: Understanding the Success Story of Necrotrophic Plant Pathogenic Ascomycota -- Chapter 7. Dance Between Environment and Fungal Pathogens in the Rhythm of Climate Change. |
| Sommario/riassunto | This volume provides an overview of the current state of the art in agricultural and industrial mycology. It highlights the importance and potential of fungi in these fields. Several topics relate to the critical and ambiguous role of fungi in agriculture, including beneficial and pathogenic fungal-plant interactions and food spoilage caused by |

mycotoxins. In addition, this volume provides a fascinating insight into ergot alkaloids. The impact of climate change on the occurrence of pathogenic fungi is also discussed. Fungi play an important role in a wide range of industrial processes, including the fermentation of food and beverages and the biotechnological production of metabolites and enzymes. A number of specific applications are discussed in this volume, such as the production of vitamins and enzymes from marine fungi. In addition to mycologists working in industry, agriculture and academia, the book will be of interest to students of biotechnology, microbiology and mycology. Chapter 3 is available open access under a Creative Commons Attribution 4.0 International License via link. springer.com.
