Record Nr. UNINA9910523009203321 Orchids phytochemistry, biology and horticulture: fundamentals and **Titolo** applications / / edited by Jean-Michel Mérillon, Hippolyte Kodja Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2022 **ISBN** 3-030-38392-X Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (661 pages) Collana Reference Series in Phytochemistry, , 2511-8358 635.93415 Disciplina 584.72 Soggetti **Botanical chemistry** Orchids Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Part I: Biogeography, Biodiversity & Environmental Factors: The Role of Ecological Factors in Distribution and Abundance of Terrestrial Orchids: - Which Environmental Factors Drive Distribution of Orchids? A Case Study from South Bohemia, Czech Republic:- Diversity, Ecology, and Conservation of Mauritius Orchids; - Diversity of Orchids from Continental Sub-Saharan Africa; -Orchid Biodiversity and Genetics;-Part II: Biology: Orchid-Associated Bacteria and Their Plant Growth Promotion Capabilities; - Mycorrhiza in Orchids; - Phytoalexins in Orchids; - Part III: Horticulture: Micropropagation of Some Orchids and the Use of Cryopreservation; -Cymbidium: Botany, Production, and Uses:- Biotechnology Approaches on Characterization, Mass Propagation, and Breeding of Indonesian Orchids Dendrobium lineale (Rolfe.) and Vanda tricolor (Lindl.) with Its Phytochemistry:- Preferences of Orchid Consumers and the Substitute Products' Influences:- Part IV: Agri-Food Applications: Vanilla: Culture, Reproduction, Phytochemistry, Curing, Pest, and Diseases;- Vanillin: Biosynthesis, Biotechnology, and Bioproduction

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Sommario/riassunto

This reference work provides an authoritative and comprehensive review of the latest developments in orchids' biology, biotechnology and phytochemistry, and it also explores the applications of orchids in medicinal chemistry, nutrition and cosmetics industry. Chapters from expert contributors are organised into six sections and cover the entire gamut of orchid research and uses. In this work, readers will learn about topics such as biogeography and diversity of orchids, their biology and environmental factors, their horticulture and phytochemistry, and their use in agri-food, medicinal and perfumery industries. This book will appeal to graduate students, scholars, researchers interested in botany, agriculture, pharmacy, biotechnology and phytochemistry. Industrial scientists and those involved in marketing flowers and phytochemicals, plants and their extracts will also understand the importance of this reference work.