Record Nr. UNINA9910640383703321 **Titolo** Microbial biodiversity, biotechnology and ecosystem sustainability / / edited by Cristobal Noe Aguilar [and three others] Pubbl/distr/stampa Singapore:,: Springer,, [2023] ©2023 **ISBN** 981-19-4336-2 Edizione [1st ed. 2023.] 1 online resource (529 pages) Descrizione fisica Disciplina 660.62 Soggetti Microbial biotechnology Microbial diversity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Dryland Microorganisms: Ecology and biotechnological potential -- Chapter 2. BIODIVERSITY AND ECOSYSTEM SERVICES IN THE WESTERN GHATS, INDIA -- Chapter 3. Origin and Evolution of Peninsular India. Western Ghats and its Diverse Life forms -- Chapter 4. Microbial Diversity and conservation of local Biodiversity Heritage Sites in Western Ghats with community participation-a novel conservation effort of Kerala -- Chapter 5. Methods for exploring the microbial diversity of Western Ghats in India and their extended applications in various fields -- Chapter 6. ENDOPHYTIC MICROORGANISMS OF WESTERN GHATS - DIVERSITY AND BIOSYNTHETIC POTENTIAL --Chapter 7. Lichen flora in Western Ghats of Kerala - A source of Innovation -- Chapter 8. PLANTS AND MICROORGANISM BIO-COMPOUNDS ON AGRICULTURE APPLICATIONS BY NANOTECHNOLOGY -- Chapter 9. IMPACT OF PLANT INVASION ON SOIL MICROBIAL DIVERSITY AND ECOSYSTEM SUSTAINABILITY: EVIDENCE FROM WESTERN GHATS -- Chapter 10. MICROBIAL BIODIVERSITY IN AGRICULTURAL PRODUCTION PROCESSES -- Chapter 11. COASTAL SEDIMENTS OF LA PAZ BAY BCS: BACTERIA RESERVE WITH BIOTECHNOLOGICAL POTENTIAL -- Chapter 12. MICROORGANISMS BIOINDICATORS OF WATER QUALITY -- Chapter 13. Modelling the Migration of Pathogens in Agricultural

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Sommario/riassunto

This book gives insight into several aspects of the microbiology, biotechnology, and ecosystem sustainability of special and underexplored regions, that captivate human beings by their natural richness, their extensive biodiversity, the extraordinary forms of adaptation of the living beings that they inhabit, and even that keep living secrets as is the very origin of life. The chapters emphasize all aspects of biological diversity-its description, analysis, and conservation, and its controlled rational use by humankind. Also, the book is elaborated from a wide and multidisciplinary point of view. It presents reviews, research papers, comments, and research notes on biodiversity, ethnobiology, geoscience, chemistry, biological conservation, biotechnology, and ecosystem sustainability Two hotspots are the reference for this enriching book that describes details of extraordinary areas of the planet, from Cuatrociénegas, Coahuila (Mexico) to the Southern Western Ghats (India). The book will contribute to dealing with the practicalities of conservation management, economic, social, and political issues. It provides a forum for examining conflicts between sustainable development and human dependence on biodiversity in agriculture, environmental management, and biotechnology, and encourages contributions from developing countries to promote broad global perspectives on matters of biodiversity and conservation. .