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Altri autori (Persone)	JoshiRohit UpadhyayJyoti
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Nota di contenuto	Chapter 1: Medicinal potential of traditional rice of India for widespread health benefits -- Chapter 2: Diversity, distribution and genetic resources in Glycyrrhiza glabra Linn. (Mulethi) -- Chapter 3: Genetic resources and breeding strategies for lavender (Lavandula angustifolia Mill) -- Chapter 4: Genetic resources and variations in Picrorhiza kurroa Royle ex Bentham -- Chapter 5: Saussurea costus (Falc) Lipsch: Botanical, biochemical, therapeutical aspects and conservation strategies -- Chapter 6: Distribution, challenges and conservation of an industrially important medicinal plant, pushkarmool -- Chapter 7 - Beyond the Bark: Endophytic Fungal Diversity in Taxus and their Crucial Role in Medicinally Relevant Secondary Metabolites -- Chapter 8-

Delving into Medicinal Plant Microbiomes: Utilizing Advanced Approaches to Decipher Functional Potential for Plant Health and Therapeutic Properties -- Chapter 9 - DNA Barcoding of Medicinal Plants for Conservation Purposes -- Chapter 10: Medicinal plant-based nanoparticle synthesis and their diverse applications -- Chapter 11: Exploring the Influence of Nanotechnology on Medicinal Plants: Leveraging Nano-Scale Marvels for Targeted Drug Delivery and Enhanced Therapeutic Efficacy -- Chapter 12- Insight into techniques and applications of metabolomics: a versatile tool for plant research -- Chapter 13: Functional genomics of medicinal plants: A new era towards understanding secondary metabolism -- Chapter 14: Transcriptome analysis unravelling the molecular secrets of medicinal plants -- Chapter 15: Advancements in Medicinal Plants Genome Sequencing to Revolutionize Genomics -- Chapter 16: Big data analysis of medicinal plants: Revolutionizing data mining for applied prospects -- Chapter 17: Phyto-Epigenetics: An approach to unlock myriads of genetic predisposition -- Chapter 18: Challenges, advancement and opportunities in genome editing: A Medicinal plant perspective -- Chapter 19: Intellectual Property Rights Related to Medicinal Plants: Deciphering traditional knowledge landscape -- Chapter 20: Effect and Response of Medicinal Plants to Abiotic Stress: An overview of adaptation strategies -- Chapter 21: Medicinal plants and their clinical uses: From old traditions to targeted drug designing -- Chapter 22: Insights on the Integration of Ethnopharmacology and Omics in Medicinal Plant Research -- Chapter 23: Investigating the Therapeutic Potential of Medicinal Plants in Managing Mental Health Disorders.

Sommario/riassunto

This book delves into diverse facets and applications of medicinal plants. It discusses the metabolic, transcriptomic, and genomic intricacies of medicinal plants, shedding light on their chemical compositions, genetic makeup, and regulatory mechanisms. It includes a chapter on nanotechnology, investigating the influence of nanoparticles on medicinal plants. Subsequent chapters explore functional genomics and genome editing, showcasing innovative approaches to modifying plant genetics. It also discusses plant-associated microorganisms in the microbiome and endophytic fungi. Furthermore, the book addresses the critical issues of genetic diversity, agrotechnology for sustainable production, intellectual property rights, and the impact of various stresses on medicinal plants. This book serves as a valuable resource for researchers, educators, and students of pharmacology, offering a comprehensive understanding of medicinal plants and their evolving role in science and medicine.