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Nota di contenuto	Chapter 1. The Artemisia genus: Panacea to Several Maladies -- Chapter 2. Bacopa monnieri: the Neuroprotective Elixir from the East: Phytochemistry, Pharmacology and Biotechnological Improvement -- Chapter 3. Current knowledge of Cinnamomum species: a review on the bioactive components, pharmacological properties, analytical and biotechnological studies -- Chapter 4. Swertia spp. : A potential source of high-value bioactive components, Pharmacology and Analytical techniques -- Chapter 5. The Genus Calophyllum: Review of

Ethnomedicinal uses, Phytochemistry and Pharmacology -- Chapter 6. Plant Derived Quinones as a Source of Antibacterial and Anticancer Agents -- Chapter 7. Drugging protein-protein interaction interface with natural products: a computational approach -- Chapter 8. CQDs derived from natural sources: Excellent bio-imaging agents -- Chapter 9. Microbial Natural products: Recent insights into novel applications -- Chapter 10. Bioactive peptides and carbohydrates from natural products: a source of functional foods and nutraceuticals -- Chapter 11. Metabolites of fluorescent pseudomonads and their antimicrobial and anticancer potentials -- Chapter 12. Medicinal fungi: A natural source of pharmacologically important metabolites -- Chapter 13. Ganoderma: A propitious medicinal poroid mushroom -- Chapter 14. Pharmaceutically important metabolites from marine Fungi -- Chapter 15. Endophytic fungi: a trove of novel bioactive compounds -- Chapter 16. Novel Products from Microalgae -- Chapter 17. Lactic Acid Production and its Application in pharmaceuticals -- Chapter 18. Microbial Clot Busters: an Overview of Source, Production, Properties and Fibrinolytic Activity -- Chapter 19. Carbohydrate biopolymers: Diversity, applications and challenges -- Chapter 20. Biotechnological aspects of nanoparticles driven from natural products for drug delivery system and other applications -- Chapter 21. Methods and Techniques for the Chemical Profiling and Quality Control of Natural Products and Natural Product Driven Drugs -- Chapter 22. Characterization of Bioactive Secondary Metabolites of Fungal Endophytes -- Chapter 23. Modulation of Cellular Protein Quality Control Pathways Using Small Natural Molecules -- Chapter 24. Elaborating on the potential for mushroom-based products market expansion: Consumers' attitudes and purchasing intentions -- Chapter 25. The Role of Algae in Nutraceutical and Pharmaceutical Production -- Chapter 26. Microbial interventions to induce secondary metabolites biosynthesis in medicinal and aromatic plants -- Chapter 27. Peptaibols: Antimicrobial peptides from Fungi.

Sommario/riassunto

This book highlights different natural products that are derived from the plants and microbes that have shown potential as the lead compounds against infectious diseases and cancer. Natural products represent an untapped source of strikingly diverse chemotypes with novel mechanisms of action and the potential to serve as anticancer and anti-infective agents. The book discusses a range of biotechnologically valuable bioactive compounds and secondary metabolites that have been derived from plant and microorganisms from various ecological niches. It also reviews the latest developments in the field of genomics, bioinformatics and industrial fermentation for harnessing the microbial products for commercial applications. In turn, the book's closing section reviews important biotechnological applications of various natural products. Combining the expertise of specialists in this field, the book's goal is to promote the further investigation of natural sources for the development of standardized, safe and effective therapies.
