

1. Record Nr.	UNINA9910502666003321
Titolo	Microbial Products for Health, Environment and Agriculture // edited by Pankaj Kumar Arora
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-16-1947-6
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (381 pages)
Collana	Microorganisms for Sustainability, , 2512-1898 ; ; 31
Disciplina	660.62
Soggetti	Microbiology Microbial ecology Industrial microbiology Microbial populations Environmental Microbiology Industrial Microbiology Microbial Communities Microbial Ecology Biotecnologia microbiana Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. The good side of evil: Harnessing the power of Helminths as therapeutics -- Chapter 2. Microbes: An integral component of flavor production -- Chapter 3. Clinical potential of bacteriophage and endolysin based therapeutics: a futuristic approach -- Chapter 4. Probiotics : Origin, products and regulations in India -- Chapter 5. Fungi and its by-products in food industry: An unexplored area -- Chapter 6. Biogenic synthesis of nanomaterials toward environment-friendly approach -- Chapter 7. Fungal potential for the degradation of synthetic dyes: An overview of renewable alternatives for the production of lignin-modifying enzymes. Advances in biotechnology -- Chapter 8. Industrial scale production of important therapeutic proteins using bacterial expression system -- Chapter 9. Role of microbes and microbial products in cancer therapeutics. Chapter 10. Bacterial

cellulose: A multifaceted microbial product -- Chapter 11. Bioremediation: Going the 'nano' way -- Chapter 12. Recent advances in microbial remediation techniques for xenobiotics-polluted soil -- Chapter 13. Microbial Enzymes as Thrombolytics -- Chapter 14. Plant growth promoting microbes and their potential application in biotechnology -- Chapter 15. Advances in the bioremediation of pharmaceuticals and personal care products (PPCPs)- polluted water and soil -- Chapter 16. Screening of microbial enzymes and their potential applications in the bioremediation process. .

Sommario/riassunto

This edited volume discusses the role of various microbial products in healthcare, environment and agriculture. Several microbial products are directly involved in solving major health problems, agricultural and environmental issues. In healthcare sector, microbes are used as anti-tumor compounds, antibiotics, anti-parasitic agents, enzyme inhibitors and immunosuppressive agents. Microbial products are also used to degrade xenobiotic compounds and bio-surfactants, for biodegradation process. In agriculture, microbial products are used to enhance nutrient uptake, to promote plant growth, or to control plant diseases. The book presents several such applications of microbes in the ecosystems. The chapters are contributed from across the globe and contain up-to-date information. This book is of interest to teachers, researchers, microbiologists and ecologists. Also the book serves as additional reading material for undergraduate and graduate students of agriculture, forestry, ecology, soil science, and environmental sciences.
