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Nota di contenuto	Chapter 1. Plant Growth Promoting Rhizobacteria for Sustainable Agriculture -- Chapter 2. Plant Microbes Interactions and Its Effect on Crop Productivity -- Chapter 3. Rhizobacterial biostimulants: efficacy in enhanced productivity and sustainable agriculture -- Chapter 4. The Role of Arbuscular Mycorrhiza in Sustainable Agriculture -- Chapter 5. Biocontrol Efficacy of Biomass and Secondary Metabolites of P. fluorescens Against Predominant Pest Affecting Agricultural Fields -- Chapter 6. Exopolysaccharide-producing Azotobacter for bioremediation of heavy metal-contaminated soil -- Chapter 7. Utilization of Arbuscular Mycorrhizal Fungi to boom the Efficiency and Product nature of Horticultural Crops -- Chapter 8. Microbial Remediation of Persistent Agrochemicals -- Chapter 9. Microbes Based Pesticides for Insect Pest Control and Their Management -- Chapter 10. In-silico Tools and Approach of CRISPR Application in Agriculture -- Chapter 11. Application of Bioinformatics in the Plant Pathology Research -- Chapter 12. New Age Genomic Measures for Uncovering Plant-Microbiome Interactions: Tools, Pipelines and Guidance Map for Genomic Data Mining -- Chapter 13. Bioinformatics: A Tool for

Sustainable Agriculture -- Chapter 14. Recent Advances in Deep Learning CNN Models for Plant Disease Detection.

Sommario/riassunto

This book, the second volume of Advances in Agricultural and Industrial Microbiology is the compilation of modern technologies with scientific advancement in promoting plant growth by rhizobacterial biostimulants, endophytic microbes, and arbuscular mycorrhizal fungi. The volume also highlights the critical roles of soil microbes in the biocontrol of plant pathogens/diseases, bioremediation of toxic agrochemicals, and nitrogen fixation. Agricultural sustainability and environmental management strongly depend on microbial communities. Management of soil fertility is the key aspect that is facilitated by soil microbes and their interactions.The book also has a section focuses on the in-silico approaches and techniques involved in agriculture which enhances the readers' understandings of plant-pathogen interactions, prediction of pathogenicity, improving variety through CRISPER, and its role in the agroindustry. Additionally, the interventions of ICTs (Information and Communication Technologies) have benefited agricultural stakeholders, i.e., farmers to policymakers, in predicting and combating them. The covered topics of the microbial domain and computational tools have high implications for the researchers, students, faculty, and scientists working on these areas.