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Nota di contenuto	1. Endophytic in Agrobiolgy: An Introduction -- PART 1: Crop Productivity -- 2. Role of Endophytic Bacteria on the Crop Productivity and Soil Health -- 3. Plant Growth Promotion by Endophytic Bacteria in Non-Indigenous Crops -- 4. Role of Endophytic Fungi in Agricultural Productivity -- 5. Endophytic Bacteria: Role in Phosphate Solubilization -- 6. Phytohormone Production from Endophytic Bacteria and Their Application in Plant Growth Promotion -- 7. Beneficial Effects of Bacterial Endophytes on Forest Tree Species -- 8. Role of Bacterial Endophytes in Plant Disease Control -- 9. Endophytic Actinomycetes for Sustainable Agricultural Applications -- PART 2: Metabolites Production -- 10. Endophytic Fungi: A Remarkable Source of Biologically Active Secondary Metabolites -- 11. Endophytes: Potential Source of Therapeutically Important Secondary Metabolites of Plant Origin -- 12. Endophytic Microorganisms: Source of Volatile Organic Compounds for Improvement of Plant Health -- 13. Potential of Endophytic Lignin Degrading Fungi: Role on Lignocellulosic Biorefineries -- 14. Conclusion -- Index.
Sommario/riassunto	This book reviews the latest developments in our understanding of microbial endophytes and their potential applications in enhancing productivity and disease protection. It covers all the latest discoveries regarding endophytes, their interactions with plants and application in agricultural productivity and protection. Our understanding of endophytes has increased exponentially in recent decades. These

microbes, such as fungi, bacteria, and actinobacteria, establish a symbiotic or parasitic association with plants. A better understanding of endophytic microorganisms may help to elucidate their functions and potential role in developing sustainable systems of crop production and improved protection against biotic stresses. Endophytes play a vital role in plant growth and health promotion. Endophytic bacteria are of agrobiological interest because they create host-endophyte relationships, which can open exciting prospects for newer biotechnological applications. Endophytes have also proven to be a beneficial and sustainable alternative to agrochemicals due to their role in the biocontrol of pests and diseases. Further, endophytes are essential to the production of several secondary metabolites in grasses, in the process of gummosis in trees, and the production of useful metabolites such as alkaloids, pestaloside, cryptocandin, enfumafungin, subglutinols, etc. for the host plant. They are also involved in the production of enzymes, biosurfactants, biocontrol agents and plant growth promoters. As such, it is imperative that we explore these products' industrial applications in the fields of biotechnology, pharmacy and agriculture. This volume will offers a valuable guidance for botanists, microbiologists, biotechnologists, molecular biologists, environmentalists, policymakers, conservationists, and those working for the protection of plant species of agricultural and medicinal importance.
