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Titolo	Beneficial plant-microbial interactions : ecology and applications // editors: M. Belen Rodelas Gonzalez, Jesus Gonzalez-Lopez
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Edizione	[1st ed.]
Descrizione fisica	1 online resource (400 pages) : illustrations (black and white, and colour)
Altri autori (Persone)	Rodelas GonzalezM. Belen Gonzalez-LopezJesus
Disciplina	579.178
Soggetti	Plant-microbe relationships Plant growth-promoting rhizobacteria Legumes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	A science publishers book.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Nitrogen Fixing Endosymbiotic Bacteria: Old Chaps and New Findings Biodiversity of Slow-Growing Rhizobia: the Genus Bradyrhizobium Importance of Motile and Biofilm Lifestyles of Rhizobia for the Establishment of Symbiosis with Legumes Nod Factor Production and Abiotic Stress in Rhizobium Strategies of Salt Tolerance in the Rhizobium -Legume Symbiosis Responses of Nodulated Legumes to Drought Mineral Nutrition in the Legume-Rhizobia Nitrogen Fixing Symbiosis Metal Transport in the Rhizobium -Legume Symbiosis Ecology of Denitrification in Plant-Associated Bacteria Protein Secretion Systems in Bacterial-Plant Host Associations Nodular Endophytes: An Untapped Diversity Azospirillum -Plant Interaction: From Root Colonization to Plant Growth Promotion Biocontrol of Fungal Root Pathogens by Fluorescent Pseudomonads Inoculants Based in Autochthonous Microorganisms, a Strategy to Optimize Agronomic Performance of Biofertilizers Bioengineering the Legume Rhizosphere for Metal Phytostabilization of Contaminated Areas Arbuscular Mycorrhizas and Their Significance in Promoting Soil-Plant Systems Sustainability against Environmental Stresses Arbuscular Mycorrhizal Fungi (AMF) as Tools for Improving the Nutritional Quality of Crops

Ectomycorrhized Plants: Methods and Applications
Metagenomics of Plant-Microorganism Interaction: Source of Novel Recombinant Genes for Biotechnological Application

Sommario/riassunto

Beneficial Plant-microbial Interactions: Ecology and Applications provides insight into the mechanisms underlying the interactions of plants and microbes, the ecological relevance and roles of these symbioses, the adaptive mechanisms of plant-associated microorganisms to abiotic stress and their contribution to plant stress tolerance, and the potential of these interactions as tools in agrobiotechnology. A team of authors with wide experience in the area contribute up-to-date reviews in nineteen chapters devoted to different ecological and applied aspects of the rhizobia-legume symbiosis, ecto- and endomycorrhizas, and plant associations with diazotrophic or adiazotrophic plant-growth promoting rhizobacteria. The book is intended for students, researchers and academic faculty members in the field of agrobiotechnology. Beneficial Plant-microbial Interactions: Ecology and Applications provides insight into the mechanisms underlying the interactions of plants and microbes, the ecological relevance and roles of these symbioses, the adaptive mechanisms of plant-associated microorganisms to abiotic stress and their contribution to plant stress tolerance, and the potential of these interactions as tools in agrobiotechnology. A team of authors with wide experience in the area contribute up-to-date reviews in nineteen chapters devoted to different ecological and applied aspects of the rhizobia-legume symbiosis, ecto- and endomycorrhizas, and plant associations with diazotrophic or adiazotrophic plant-growth promoting rhizobacteria. The book is intended for students, researchers and academic faculty members in the field of agrobiotechnology.