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Titolo	Rhizosphere Biology: Interactions Between Microbes and Plants [[electronic resource] /] / edited by Vadakattu V. S. R. Gupta, Anil K. Sharma
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Collana	Rhizosphere Biology, , 2523-8442
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Soggetti	Biomedical engineering Microbiology Plant pathology Microbial ecology Biomedical Engineering/Biotechnology Plant Pathology Microbial Ecology
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Nota di contenuto	Bacterial Endophytes: Diversity, Functional Importance, and Potential for Manipulation -- Rhizosphere Carbon Turnover from Cradle to Grave: The Role of Microbe–Plant Interactions -- Root–Soil–Microbe Interactions Mediating Nutrient Fluxes in the Rhizosphere -- Diazotrophic Nitrogen Fixation in the Rhizosphere and Endosphere -- Root Microbiome Structure and Microbial Succession in the Rhizosphere -- Rhizosphere Legacy: Plant Root Interactions with the Soil and Its Biome -- Rhizosphere Microbiome and Soil-Borne Diseases -- Root Disease Impacts on Root-Rhizosphere Microbial Communities -- Newly Introduced or Modified Genes in Plants Potentially Modulate the Host Microbiome -- Rhizosphere Plant–Microbe Interactions Under Abiotic Stress -- Arbuscular Mycorrhizal Fungi Interactions in the Rhizosphere -- Microbial–Faunal Interactions in the Rhizosphere -- Inter-Organismal Signaling in the Rhizosphere -- Molecular Mechanisms of Plant–Microbe Interactions in the Rhizosphere as Targets for Improving Plant Productivity -- Inoculation Effects in the Rhizosphere: Diversity

	and Function.
Sommario/riassunto	This book presents a detailed discussion on the direct interactions of plants and microorganisms in the rhizosphere environment. It includes fifteen chapters, each focusing on a specific component of plant-microbe interactions, such as the influence of plants on the root microbiome, and the downstream effects of rhizosphere microbial dynamics on carbon and nutrient fluxes in the surroundings. As such, the book helps readers gain a better understanding of diversity above the ground, and its effect on the microbiome and its functionality.