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| Nota di contenuto | Part I Biochemistry and Molecular Biology Toolbox -- Chapter 1 Isolation, Identification and Biochemical Characterization of Azospirillum spp. and other Nitrogen-Fixing Bacteria -- Chapter 2 Molecular Tools for Identification and Characterization of Plant Growth Promoting Rhizobacteria with emphasis in Azospirillum spp -- Chapter 3 In situ Localization and Strain-Specific Quantification of Azospirillum and other Plant Growth Promoting Rhizobacteria Using Antibodies and Molecular Probes -- Chapter 4 Molecular Tools to Study Azospirillum sp. and other Related Plant Growth Promoting Rhizobacteria -- Chapter 5 Genomic Tools for the Study of Azospirillum and other Plant Growth Promoting Rhizobacteria -- Part II Physiology and Metabolism Toolbox -- Chapter 6 Chemotaxis and other Forms of Taxis Behaviors in Azospirillum spp -- Chapter 7 Phytohormones and other Plant Growth Regulators Produced by PGPR: The Genus Azospirillum -- Chapter 8 Inorganic Nitrogen Metabolism in Azospirillum spp -- Chapter 9 Nitric Oxide in Azospirillum and Related Bacteria: Production and Effects -- Chapter 10 Cell Aggregation, Attachment and Plant Interaction -- Chapter 11 Methods for Studying Biofilms in Azospirillum and other Plant Growth Promoting Rhizobacteria -- Chapter 12 Methods for |

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Siderophores Production by Azospirillum: Biological Importance,
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Promoting Rhizobacteria -- Chapter 18 Stress Physiology in
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Agriculture -- Chapter 25 Inoculant Preparation and Formulations for
Azospirillum spp -- Chapter 26 Protocol for the Quality Control of
Azospirillum spp. Inoculants.

Sommario/riassunto

The functional analysis of plant-microbe interactions has re-emerged in the past 10 years due to spectacular advances in integrative study models. This book summarizes basic and technical information related to the plant growth promoting rhizobacteria (PGPR) belonging to the genus Azospirillum, considered to be one of the most representative PGPR last 40 years. We include exhaustive information about the general microbiology of genus Azospirillum, their identification strategies; the evaluation of plant growth promoting mechanisms, inoculants technology and agronomic use of these bacteria and some special references to the genetic technology and use.
