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Rhizobial genomics and biogeography -- Chapter 12. Current status of rhizobial inoculants -- Chapter 13. Screening for effective rhizobia -- Chapter 14. Usage of rhizobial inoculants in agriculture -- Chapter 15. Rhizobial activity beyond nitrogen fixation -- Chapter 16. Working on the taxonomy, biodiversity, ecology and evolution of rhizobia -- Index -- Acknowledgments.

Sommario/riassunto

This book reviews the history and development of rhizobial ecology (diversity, function and interactions with the biotic and abiotic environments), evolution (genome diversification, systematics of symbiotic genes) and application. Further, it describes the new concept of rhizobia, the latest systematic methods, biogeographic study methods, and genomic studies to identify the interactions between rhizobia, legumes and environments. To enable readers to gain a comprehensive understanding of rhizobial biogeography, the book provides effective protocols for the selection and application of high-efficiency rhizobial inoculants. In addition, it presents standard and modern methods used in studies on rhizobial ecology and evolution in dedicated appendices, making it a unique and valuable handbook for researchers.