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Titolo	Bacterial Metabolites in Sustainable Agroecosystem // edited by Dinesh K. Maheshwari
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Descrizione fisica	1 online resource (396 p.)
Collana	Sustainable Development and Biodiversity, , 2352-4758 ; ; 12
Disciplina	589.90012
Soggetti	Microbial ecology Botanical chemistry Industrial microbiology Agriculture Microbial Ecology Plant Biochemistry Industrial Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Techniques to study Microbial phytohormones -- Azospirillum sp. as a challenge for agriculture -- Emergence of Methylobacterium spp. as potential organism in Agriecosystems -- Role of bacterial phytohormones in plant growth regulation and their development -- Soil bacteria and phytohormones for sustainable crop production -- The Importance of Phytohormones and Microbes as Biofertilizers -- Phytohormone producing PGPR for Sustainable Agriculture -- Indole-3-Acetic Acid and 1-Aminocyclopropane-1-Carboxylate Deaminase: Bacterial traits required in rhizosphere, rhizoplane and/or endophytic competence by beneficial bacteria -- Role of Abscisic acid producing PGPR in sustainable agriculture -- Microbial phytohormones have a key role in mitigating the salt-induced damages in plants -- Exploitation of phytohormone producing PGPR in development of multispecies bioinoculant formulation -- Significance of Biosurfactants as antibiofilm agents in eradicating phytopathogens -- Biofilm formation

and biosurfactant activity in plant-associated bacteria --  
Bioremediation strategies employed by Pseudomonas species.

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Sommario/riassunto

The interest in eco-friendly, sustainable and organic farming cater high yield and quality in sustainable agriculture so as to relieve food scarcity. The plant growth and health promoting bacteria (PGHPR) are able to produce phytohormones and biosurfactants as effector metabolites in plant- microbe interactions and phyto-stimulation for their exploitation in agro-ecosystem. Bacterial phytohormones and biosurfactants are vital for plant growth and development, trigger nutrient availability, root colonization and imparting protection from phytopathogens in rhizosphere. This volume entitled "Bacterial Metabolites in Sustainable Agroecosystem" depicts various aspects of bacterial metabolites overlook on quest of research and concept up-gradation that can build emerging paradigm of future "Green Revolution".

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