
Contents

1 Management of Tomato Foot and Root Rot (TFRR) by Biocontrol Agents with Emphasis on Factors Affecting Its Effectiveness	1
Bouiz garne Brahim and Y. Ouhdouch	
2 Microbial Inoculants for Optimized Plant Nutrient Use in Integrated Pest and Input Management Systems	21
Anthony Oyegoke Adesemoye, Gary Yuen, and Dexter Brown Watts	
3 The Legume Nodule Microbiome: A Source of Plant Growth-Promoting Bacteria	41
Encarna Velázquez, Lorena Carro, José David Flores-Félix, Pilar Martínez-Hidalgo, Esther Menéndez, Martha-Helena Ramírez-Bahena, Rebeca Mulas, Fernando González-Andrés, Eustoquio Martínez-Molina, and Alvaro Peix	
4 Plant Growth-Promoting Microbes: Diverse Roles in Agriculture and Environmental Sustainability	71
Jitendra Mishra, Rachna Singh, and Naveen Kumar Arora	
5 Phosphate Biofertilizers as Renewable and Safe Nutrient Suppliers for Cropping Systems: A Review	113
Gholamreza Mohammadi	
6 Bacterial Probiotics: A Truly Green Revolution	131
Paula García-Fraile, Esther Menéndez, Lorena Celador-Lera, Alexandra Díez-Méndez, Alejandro Jiménez-Gómez, Marta Marcos-García, Xavier Alexis Cruz-González, Pilar Martínez-Hidalgo, Pedro F. Mateos, and Raúl Rivas	
7 Plant-Microbe Interactions in Adaptation of Agricultural Crops to Abiotic Stress Conditions	163
Hassan Etesami and Gwyn A. Beattie	

8	Diversity and Efficiency of Rhizobia Nodulating <i>Hedysarum flexuosum</i> L. in Northwestern of Morocco in Relation to Soil Properties	201
	Anass Elyemlahi, Abdelhay Arakrak, Amin Laglaoui, and Mohammed Bakkali	
9	Increased Soil-Microbial-Eco-Physiological Interactions and Microbial Food Safety in Tomato Under Organic Strategies . . .	215
	Nitika Thakur	
10	Emerging Significance of Rhizospheric Probiotics and Its Impact on Plant Health: Current Perspective Towards Sustainable Agriculture	233
	Gaurav Yadav, Kanchan Vishwakarma, Shivesh Sharma, Vivek Kumar, Neha Upadhyay, Nitin Kumar, Rishi Kumar Verma, Rohit Mishra, Durgesh Kumar Tripathi, and R.G. Upadhyay	
11	The Good, the Bad, and the Ugly of Rhizosphere Microbiome	253
	Muhammad Amjad Ali, Muhammad Naveed, Adnan Mustafa, and Amjad Abbas	
12	Carriers and Their Role in Plant Agrosystem	291
	Pragati Sahai and Vivek Kumar	
13	Microbial Plant Probiotics: Problems in Application and Formulation	317
	Nidhi Bharti, Sushil K. Sharma, Sandeep Saini, Ankita Verma, Yogesh Nimonkar, and Om Prakash	
14	Modulation of Plant Micronutrient Uptake by Arbuscular Mycorrhizal Fungi	337
	Kullaiyan Sathiyadash, Kuppu Rajendran, Veluswamy Karthikeyan, and Thangavelu Muthukumar	
15	Efficacy of Probiotic Supplemented Vermicompost on Germination, Growth, and Biochemical content of <i>Vigna mungo</i> (L.) Hepper.	353
	Ramasamy Karthiyayini and Mani Rama Prabha	
16	Range of Microbial Disease Complexes with <i>Meloidogyne</i> Species and Role of Botanicals in Management.	365
	Safiuddin, Rose Rizvi, and Irshad Mahmood	
17	Endophytic Probiotics and Plant Health: Toward a Balanced Accost	383
	Priyanku Teotia, Manoj Kumar, Ram Prasad, Shivesh Sharma, and Vivek Kumar	

18	Arbuscular Mycorrhizal Fungi (AMF) and Plant Growth-Promoting Rhizobacteria (PGPR) Association in Potato (<i>Solanum tuberosum</i> L.): A Brief Review	401
	Deepmala Pathak, Rafiq Lone, and K.K. Koul	
19	Microbial Biofertilizer Interventions in Augmenting Agroforestry	421
	Kumud Dubey, K.P. Dubey, A. Pandey, and P. Tripathi	
20	Effect of Biofertilizers on Biomass Yield and Quality of <i>Ocimum basilicum</i> L.	443
	Mani Rama Prabha, Ramasamy Karthiyayini, Maluventhen Viji, and Ramachandran Balakumbagan	
21	PGPR: Current Vogue in Sustainable Crop Production	455
	Rizwan Ali Ansari, Rose Rizvi, Aisha Sumbul, and Irshad Mahmood	
22	Application of Bioinoculants for Sustainable Agriculture	473
	Padmavathi Tallapragada and Swetha Seshagiri	
23	Role of <i>Trichoderma</i> spp. as a Biocontrol Agent of Fungal Plant Pathogens	497
	Manish Kumar and Shabbir Ashraf	
24	Microbes as Biocontrol Agents	507
	Adivitiya, Babbal, and Yogender Pal Khasa	
25	Arbuscular Mycorrhizal Fungi for Sustainable Agriculture	553
	Rafiq Lone, Razia Shuab, Salim Khan, Javaid Ahmad, and K.K. Koul	
26	Microbial Options for Improved Crop Production	579
	Digvijay Singh, Joginder Singh, and Arvind Kumar	
27	Plant Growth-Promoting Rhizobacteria: A Probiotic for Plant Health and Productivity	589
	S.K. Gosal, Jupinder Kaur, and Jaspreet Kaur	

Probiotics and Plant Health

Kumar, V.; Kumar, M.; Sharma, S.; Prasad, R. (Eds.)

2017, XI, 600 p. 56 illus., 50 illus. in color., Hardcover

ISBN: 978-981-10-3472-5