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Advances in Microbial Solutions for Sustainable Agriculture

Guest Editor:

Dr. Ivica Dimkić

Research Associate Professor, Chair of Biochemistry and Molecular Biology, University of Belgrade, Faculty of Biology, Studentski trg 16, 11158 Belgrade, Serbia

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Message from the Guest Editor

Through numerous mechanisms, beneficial microbes, including antibiosis, toxin production, and nutrient sequestration, directly suppress the proliferation of pathogens and the symptoms of infections in plants. Biological control of plant diseases is not only an alternative to chemical pesticides, but it may also provide control of diseases that cannot be managed by other control strategies. On the other hand, plant growth promotion may come about through direct regulation of phytohormonal activity, increasing root surface area, increasing tolerance to plant diseases, rhizosphere siderophore production, engineering, phosphate solubilization, and the production of active chemical signals. The idea of the now-how development of ecofriendly biopesticides and biofertilizers, and other agricultural biotechnologies, together with molecular studies on the resistance of plants to biotic and abiotic stress and the investigation of interkingdom signaling between plants and plant-associated bacteria, with special attention to emerging phytopathogens, will be the most characteristic activities and outcomes of this Special Issue.













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Editor-in-Chief

Prof. Dr. Dilantha FernandoDepartment of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

Message from the Editor-in-Chief

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