

Special Issue

Advances in Microbial Solutions for Sustainable Agriculture

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 engineering, siderophore production, phosphate solubilization, and the production of active chemical signals. The idea of the now-how development of eco-friendly 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.

Guest Editor

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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