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Plant-Associated Microorganisms: Exploring Their Beneficial and Harmful Impacts on Plant Production in Response to a Changing Climate

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Deadline for manuscript submissions:

20 September 2024

Message from the Guest Editors

This Special Issue aims to gather recent data and innovations in the research on plant-soil microorganism interactions, as well as identify new prospects, directions, and challenges in plant and microbial biotechnologies. Understanding these interactions will help design treatments that promote crop yield and quality under changing climate conditions. We welcome the submission of original research articles, reviews, opinion, and methods, focusing on (but not limited to) the following topics:

- Microbial application for plant growth promotion and/or protection;
- Innovative and more effective microbial formulations towards agriculture sustainability;
- Drivers, roles, processes, and mechanisms in plant-microbe interactions;
- Molecular, genomic, and metagenomic analysis of plant-associated microbe biodiversity;
- Physiological, biochemical, and molecular functions of symbiotic microorganisms in plants to mitigate the adverse impact of environmental stresses;
- Impact of symbiotic microbes application on plant susceptibility to pathogen infection;
- Impact of microorganisms on nutrient transformations in soil toward promoting plant fitness.



mdpi.com/si/181457

Special Issue



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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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