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Microbiomes in Crop Yield and Stress Biology

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Over the next two decades, the world is predicted to experience an unprecedented global food crisis due to the rapidly growing world population, a food security issue further compounded by global climate change. Global climate change has far-reaching consequences on plant life and agriculture as a whole. Diverse environmental stresses, including plant pathogens, droughts, flooding, salinity, soil acidification, cold and heat, directly limit crop production. By identifying beneficial microorganisms, crops may be more resilient to such unfavorable stressors, thus, de-escalating the food security problem. In this Special Issue, we aim to focus on plant metagenomics, with articles presenting the functional characterization of novel microbes capable of helping plants thrive in both biotic and abiotic stress conditions.

Kwywords: metagenomics; bioinformatics; microbiome; model plant systems; agronomically important crops; functional genomics; climate change; crop production; plant pathogens; abiotic stresses













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Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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