Special Issue

Microbiomes and Mycobiomes in Crop Health and Disease

Message from the Guest Editor

Although the impact of pathogens on human and animal biomes has been extensively explored, we only have a limited understanding of how a healthy plant biome transitions to a pathobiome under pathogenic pressure. Recent studies regarding crop plants' biomes challenge Koch and Hill's 'one microbe-one disease' postulate by suggesting that interactions between pathogens and healthy plant biomes can influence or favor the development of diseases. This Special Issue addresses the contribution of metagenomic approaches to emerging research questions raised through the study of pathogens within the plant biotic environment. The topics explored include, but are not limited to, (1) defining the range of bacterial and fungal pathobionts, as well as the temporal dynamics of the transition to a diseased biome in diverse crop systems, and (2) understanding the impact of a pathogen on the 'microbe-microbe' relationships in a healthy biome, and how pathobionts may influence disease incidence and severity.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2023)



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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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