Special Issue

Plant-Microbe Interaction: The Cellular Mechanism Influence Plant Health

Message from the Guest Editors

In ecosystems, healthy plants host a diverse community of microbes. The complex communication between plants and microbes has evolved since plants first colonized the earth. When a microbe and a plant host interact, molecules such as metabolites, peptides, and proteins flow bidirectionally between them. These interactions can be mutualistic, commensal. competitive, or parasitic, significantly influencing the genomes and regulatory mechanisms of both species through adaptive responses. One of the central goals in studying plant-microbe interactions is to understand how they manipulate each other at multiple molecular levels to enhance their fitness. Key research areas include the plant innate immune system, microbial pathogenesis, and synergistic interactions. This special issue aims to highlight recent advances in natural and agricultural plant-microbe interactions, using cuttingedge approaches to uncover underlying molecular mechanisms. We welcome all relevant original research and review articles that contribute to advancing the understanding of plant-microbe biology and its applications.

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2025)



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