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Plant Immune Networks in Response to Microbial Interaction

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Message from the Guest Editors

Plant–microbe interactions are diverse and multifaceted, with significant implications for various aspects of life on Earth, including agriculture, food security, and environmental sustainability. Certain microbes have established mutually beneficial relationships with plants, showcasing a form of mutualism, including mycorrhizal fungi and rhizobia. However, some microbes are pathogens, capable of causing diseases in plants. This dynamic has given rise to an ongoing evolutionary competition, as plants evolve defense mechanisms to counteract pathogenic attacks, while pathogens continuously develop strategies to bypass these defenses. Understanding the molecular mechanisms underlying these interactions is crucial for agricultural productivity, sustainable agriculture, biological control, climate resilience, and conservation efforts.

Studies on the molecular aspects of plant–microbe interactions have the potential to revolutionize agriculture and enhance global food security while minimizing the negative impacts on the environment. Overall, this Special Issue focuses on a fascinating and promising area of scientific inquiry with far-reaching implications.



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Special *Issue*



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Message from the Editor-in-Chief

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