

Special Issue

Microbial Biocontrol and Plant-Microbe Interactions

Message from the Guest Editor

Microbial biocontrol involves the use of microorganisms and their microbial products to suppress plant pathogens, thereby enhancing plant health and productivity. This approach leverages the natural interactions between plants and microbes, including beneficial bacteria and fungi, to create a more resilient agricultural ecosystem. Effective microbial biocontrol agents can outcompete pathogens for resources, produce antimicrobial compounds, and induce systemic resistance in plants. Plant-microbe interactions are complex and can be beneficial, neutral, or harmful. Beneficial interactions often involve endophytic and rhizospheric microbes, which enhance nutrient uptake and improve plant stress tolerance. These interactions can also stimulate plant growth and enhance resistance to diseases.

This Special Issue aims to integrate the application of microbial biocontrol, which is gaining more attention as a sustainable alternative to chemical pesticides, aligning with the principles of integrated pest management. Advanced research into these interactions is essential for optimizing microbial biocontrol strategies and understanding their mechanisms of action.

Guest Editor

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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