# **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 fundi, 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**

Dr. Shahzad Munir

State Key Laboratory for Conservation and Utilization of Bioresources in Yunnan, Yunnan Agricultural University, Kunming 650201, China

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Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

mdpi.com/journal/biomolecules





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Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

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