Special Issue

Microbial Interactions in Plant Adaptation to Abiotic and Biotic Stress

Message from the Guest Editor

Plant-associated microbiota are critical in supporting plant health and resilience to adversity. While specific species contribute beneficial traits, these traits are often associated with the broader bacterial community around plants.

This Special Issue aims to consolidate knowledge on plant-microbe-environment interactions, focusing on factors and mechanisms governing these interactions in model species and crops.

We welcome original research articles and reviews covering topics such as:

- Plant adaptation to stress and its influence on associated microbial communities.
- The impact of microbial communities on plant responses to abiotic or biotic stress.
- Mechanisms involved in specific plant-microbe interactions affecting plant adaptations to stress.
- Microbe-microbe interactions influenced by plant stress.
- Novel approaches and techniques for studying plantmicrobe-environment interactions.

Looking forward to your contributions.

Guest Editor

Dr. Ayalew B. Mentewab Biology Department, Spelman College, Atlanta, GA, USA

Deadline for manuscript submissions

30 September 2025



Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2 CiteScore 7.7 Indexed in PubMed



mdpi.com/si/203964

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

mdpi.com/journal/ microorganisms





Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2 CiteScore 7.7 Indexed in PubMed



About the Journal

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.

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

