

# Special Issue

## Chemical Communication in Plant–Microbe Beneficial Interactions Between Plants and Rhizosphere Microorganisms

### Message from the Guest Editors

Rhizosphere microbiomes are crucial for plant health, such as growth promotion, disease resistance, etc. Harnessing the power of beneficial microbes in the rhizosphere to improve plant performance is a vital goal of sustainable agriculture. However, the precise management of rhizosphere microbes for crop growth and health remains challenging because we lack a comprehensive understanding of the plant–rhizobacteria relationship. In this Special Issue, we will present the latest findings on the interaction between microbes and roots, the root colonization of chemotaxis, attachment, root exudates, rhizomicrobiome, bacterial chemotaxis, biofilms, etc. High-quality original research, reviews, mini-reviews, and perspectives related to this multi-disciplinary area are welcome.

Prof. Dr. Yunpeng Liu

---

### Guest Editors

Prof. Dr. Haichao Feng

College of Agriculture, Henan University, Zhengzhou, China

Prof. Dr. Yunpeng Liu

Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing, China

---

### Deadline for manuscript submissions

30 November 2025



**Microorganisms**

---

an Open Access Journal  
by MDPI

---

**Impact Factor 4.2**  
**CiteScore 7.7**  
**Indexed in PubMed**



[mdpi.com/si/222796](https://mdpi.com/si/222796)

*Microorganisms*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[microorganisms@mdpi.com](mailto:microorganisms@mdpi.com)

[mdpi.com/journal/  
microorganisms](https://mdpi.com/journal/microorganisms)





## Microorganisms

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.2  
CiteScore 7.7  
Indexed in PubMed



[mdpi.com/journal/  
microorganisms](https://mdpi.com/journal/microorganisms)



## 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).