Special Issue

Interactions of Mycorrhizal Fungi and Other Soil Microorganisms with Plants

Message from the Guest Editors

Soil microorganisms have important effects on soil nutrient cycling, and also improve plant growth. Mycorrhizal fungi are particularly closely related to plants and have a greater effect on plant growth by improving plant nutrients and stress tolerance. However, there are certain pathogens in soil to inhibit plant growth. In addition, the aboveground plants could regulate belowground microbial community. Plants allocate 20–40% of total photosynthetic products to soil for microbial growth. Thus, the interactions between aboveground plants and belowground microbial community might be an interesting research topic. This research topic welcomes the submission (original research articles, reviews and opinions) related, but not limited to, the following subjects:

- Symbiotic relationship between plants and mycorrhiza;
- The interaction between plants and rhizosphere microorganisms;
- Effect of plant succession on soil microbial community;
- Soil-borne diseases and their effects on plant growth.

Guest Editors

Dr. Xingjia Xiang

Dr. Ruibo Sun

Dr. Jia Liu

Deadline for manuscript submissions

closed (30 April 2025)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/188123

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

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).

MDPI