

# Special Issue

## Arbuscular Mycorrhizal Fungi–Plant–Rhizosphere Microbial Interactions: Mechanisms and Applications

### Message from the Guest Editor

This Special Issue aims to collate cutting-edge research on AMF-driven plant–microbe interactions, emphasizing their mechanistic underpinnings and agro-environmental applications. Contributions should align with *Microorganisms*' scope by addressing microbial ecology, symbiosis, and sustainable solutions. Topics include (but are not limited to) the following:

- AMF diversity and functional genomics;
- Signaling pathways in tripartite interactions;
- Rhizosphere microbiome dynamics under biotic/abiotic stress;
- AMF-mediated nutrient uptake and soil health;
- Agricultural innovations leveraging AMF–plant–microbe synergies.

Original research and reviews are welcome. We anticipate that this collection will foster interdisciplinary dialogue and advance strategies for climate-resilient agriculture.

### Guest Editor

Dr. Yunjian Xu

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### Deadline for manuscript submissions

31 October 2025



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## 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.

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### Editor-in-Chief

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