

# Special Issue

## Microbial Communities and Indicators of Agroecosystem Health

### Message from the Guest Editor

Agriculture is vital for humanity due to its role in the assurance of food for a continuously increasing population. The ecosystems where food is produced are constantly under both biological and abiotic pressure, which alter the stability of soil microbiomes and their resilience ability. Fungal communities represent a critical component of agroecosystems; these microorganisms have been related to numerous ecosystem services. The fungal activity of these microorganisms is visible in the flow and transformation of organic matter, in the functionality of biogeochemical cycles and the flow of nutrients through their hyphal networks. The diversity and abundance of fungal components in agroecosystems are directly related to the entire ecosystem health and stability status, and are visible at higher levels in the plant's growth and development traits. The activity of fungi in agriculture is related to both beneficial effects (symbiosis, conversion of organic residues, antibiotic production, biocontrol) and negative effects (pathogenesis), which are visible in plant potential yield and ecosystem functionality.

### Guest Editor

Dr. Vlad Stoian

Department of Microbiology, Faculty of Agriculture, University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Cluj-Napoca, Romania

### Deadline for manuscript submissions

31 August 2025



**Microorganisms**

an Open Access Journal  
by MDPI

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



[mdpi.com/si/217007](https://mdpi.com/si/217007)

*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).