

Special Issue

Plant-Derived Solutions for Neglected Tropical Diseases: An Integrated Omics and One Health Strategy

Message from the Guest Editors

This Special Issue will explore plant-derived treatments for neglected tropical diseases (NTDs) through an innovative, integrated omics and One Health strategy. We are seeking diverse submissions, including original research articles, comprehensive reviews, methodology papers, and perspectives, that showcase how advanced technologies such as next-generation sequencing (NGS) and metabolomics can unlock the therapeutic and diagnostic potential of medicinal plants. By merging genomic and metabolomic data with sophisticated bioinformatics, we aim to understand the intricate mechanisms by which natural compounds combat pathogens and to identify novel biomarkers. This holistic approach, grounded in the interconnectedness of human, animal, and environmental health, offers a path toward sustainable, nature-based interventions for NTD control. Contributions that highlight how this integrated strategy can address urgent global health challenges, moving beyond traditional ethnobotany, are of particular interest.

Guest Editors

Dr. Md Ekhtear Hossain

Department of Biological Sciences and Chemistry, Southern University and A&M College, Baton Rouge, LA 70813, USA

Dr. Md Mehedi Hasan

Department of Pathobiological Sciences, LSU School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803, USA

Deadline for manuscript submissions

28 February 2026



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/253292

Microorganisms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).