Special Issue

Plant and Human Probiotics: Consequences on the Autochthonous Microbiota

Message from the Guest Editors

According to the definition given by Food and Agriculture Organization of the United Nations (FAO) and WHO probiotics are "live microorganisms, which, when administered in adequate amounts, confer a health benefit on the host". While human probiotics are well known for their beneficial effects, plant probiotics are microorganisms that are able to improve plant nutrient acquisition, suppress soil-borne diseases, and increase plant tolerance to environmental stresses. Several studies have been published pertaining to the selection, identification, and characterization of human and plant probiotics, and to their impact on the host. However, once probiotics are introduced into the host, preexisting balances among the resident members of the microbiota are interrupted, and new, intricate and complex interactions, involving the host, the environment and the probiotics, are created. Many open questions remain regarding how the microbial community is altered after the use of human and plant probiotics within the autochthonous microbiome. This Special Issue accepts original research and reviews that aim to fill in this gap of knowledge.

Guest Editors

Dr. Elisa Gamalero

Dr. Elisa Bona

Dr. Giorgia Novello

Dr. Francesco Vuolo

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/114134

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



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).

