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 closed (31 August 2025)



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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

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