Special Issue

Microbial Ecology and Assembly Dynamics in the Aquaculture Environment

Message from the Guest Editor

Aguaculture provides more than half of the consumed fish. The hypertrophic culture environment enriches microorganisms and facilitates their metabolism. The various services provided by microbes in this environment, such as determining water quality and contributing to host health, nutrition, and resilience, make them key players in the various aquaculture practices and organisms. While being studied extensively in cultured plants and livestock, a knowledge gap exists concerning the forces that govern the ecology and dynamics of microbial assemblies in the aguaculture environment. Recent studies have associated microbial diversity with resilience and resistance; however, strengthening this association in aguaculture requires more evidential significance from experimental research. This Special Issue of Microorganisms aims to publish novel research works with significant scientific merit in microbial ecology and dynamics in the aquaculture environment concerning host-microbe and microbe-environment interactions and their consequences on the performances and resilience of the culture and cultured organisms.

Guest Editor

Dr. Lior Guttman

Israel Oceanographic and Limnological Research, The National Center for Mariculture, Eilat 8811201, Israel

Deadline for manuscript submissions

closed (30 June 2025)



Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/211957

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).

