

Special Issue

Antimicrobial and Anti-Biofilm Potentials of Plant Extracts, Natural Products and Their Formulations

Message from the Guest Editors

Anti-microbial resistance (AMR) is a global health issue, declared by the World Health Organization as one of the top ten global public health threats facing humanity. The AMR phenomenon is also linked to the capability of microorganisms to live in a polymicrobial community called biofilm which represents a survival strategy to promote long-term successful infection. The currently used antimicrobials are becoming ineffective; therefore, there is a huge effort to find new antimicrobials capable of eradicating microbial biofilms, avoiding the increase in drug-resistant bacteria. Plant extracts and natural products represent a source of compounds which can be studied biologically and chemically to bring to light bioactive compounds endowed with antimicrobial and anti-biofilm activities. The purpose of this Special Issue is to provide a platform to showcase the most recent advances in new antimicrobial and anti-biofilm approaches based on natural products and their extracts, as well as their formulations.

Guest Editors

Dr. Valentina Puca

Department of Pharmacy, University "G. d'Annunzio" of Chieti-Pescara, 66100 Chieti, Italy

Dr. Marilisa Pia Dimmito

Department of Pharmacy, University "G. d'Annunzio" of Chieti-Pescara, 66100 Chieti, Italy

Deadline for manuscript submissions

15 October 2025



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/201090

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).