Special Issue

Plant Extracts and Their Derivatives with Antimicrobial Activities

Message from the Guest Editors

Plants are a primary source of bioactive molecules that possess pharmacological properties. They have been used for the treatment of many clinical conditions. Traditional herbal remedies have been utilized for centuries for multiple affections. They are now widely recognized, along with their derivatives, for their pharmacological effects, of which their antimicrobial properties have attracted increasing attention. Although much remains to be discovered, naturally occurring bioactives exert their antimicrobial effects by disrupting cell membranes, interfering with microbial DNA replication, inhibiting enzymatic activity, and modulating the host immune system. Nevertheless, further advances in this field are urgently needed, as well as the testing of their actual effects in in vivo models and humans. This Special Issue particularly welcomes manuscripts that present complete phytochemical profiling of plant extracts and isolated bioactive phytoconstituents with antimicrobial properties, coupled with chromatographic, spectroscopic, and spectrometric analytical techniques, as well as in silico and in vivo investigations and other relevant work in this field.

Guest Editors

Dr. Latifa Bouissane

Molecular Chemistry, Materials and Catalysis Laboratory, Faculty of Sciences and Technologies, Sultan Moulay Slimane University, BP 523, Beni-Mellal 23000, Morocco

Prof. Dr. Natália Cruz-Martins

1. Faculty of Medicine, University of Porto, 4099-002 Porto, Portugal 2. Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, 4710-057 Braga, Portugal

Deadline for manuscript submissions

closed (31 July 2025)



an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed



mdpi.com/si/229890

Antibiotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antibiotics@mdpi.com

mdpi.com/journal/ antibiotics





an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.7 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery. use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. Antibiotics is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Editor-in-Chief

Prof. Dr. Nicholas Dixon

School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Infectious Diseases) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)

