



an Open Access Journal by MDPI

# Antimicrobial Activity of Different Plant Extracts, Plant-Derived Compounds and Synthetic Derivatives of Natural Compounds on Pathogenic Microorganisms

Guest Editors:

#### Dr. Joanna Kozłowska

Department of Food Chemistry and Biocatalysis, The Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Sciences, Wrocław, Poland

#### Dr. Anna Duda-Madej

Department of Microbiology, Faculty of Medicine, Wroclaw Medical University, Chałubińskiego 4, 50-368 Wrocław, Poland

Deadline for manuscript submissions: closed (31 March 2023)

### Message from the Guest Editors

The problem with MDR (multidrug-resistant) strains is associated with significant mortality caused by these pathogenic microorganisms, especially in hospital environments. The search for new compounds of natural origin is crucial in solving this problem. Extraction is a simple method to isolate various compounds from raw plant material. Furthermore, different plant extracts have high biological activity, comparable to that of known drugs. However, in search of novel plant-derived compounds characterized with stronger biological activity than plant extracts, chemical modifications of natural compounds are helpful. Additionally, articles which present alternative methods of obtaining natural compounds with antimicrobial activity are also welcome. It will be interesting to compare the antimicrobial activity of natural compounds and their synthetic derivatives but also different plant extracts with pure compounds, which are dominant in plants. Plant extracts and compounds obtained by chemical modifications or biotransformations may be the future of effective treatment of infectious diseases



mdpi.com/si/110870







an Open Access Journal by MDPI

### **Editor-in-Chief**

#### Prof. Dr. Nicholas Dixon

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

#### 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 supragovernmental 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.

## **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 (Pharmacology and Pharmacy) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics )

### **Contact Us**

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