

## Special Issue

# Essential Oil of the Plants: Chemical Composition, Antimicrobial Activity, and Biological Applications

### Message from the Guest Editors

*Antibiotics* are about to launch a Special Issue dedicated to research related to the potential use of essential oils or their major components obtained from plants, highlighting their chemical composition, antimicrobial activity, and biological applications. Essential oils are oily aromatic liquids obtained from different parts of plants (flowers, seeds, leaves, bark, shoots, herbs, fruits, and roots), a large part of them are made up of a variable mixture of terpenoids, derived from their secondary metabolism. In traditional medicine, they have been used as stomachic, antispasmodic, carminative, antiparasitic, antimicrobial, and antihypertensive agents, even as insecticides, among other traditional applications. In this Special Issue, we are interested in research that highlights the variety of compounds present in essential oils and demonstrates their biological activities through in vivo and in vitro studies using innovative methods and technologies.

### Guest Editors

Dr. Luis Alberto Ortega-Ramirez

Departamento de Ingenierías, Instituto Tecnológico del Valle del Yaqui, Bâcum, Sonora, Mexico

Prof. Dr. Jesûs Fernando Ayala-Zavala

Coordinaci3n de Tecnología de Alimentos de Origen Vegetal, Centro de Investigaci3n en Alimentaci3n y Desarrollo (CIAD), Hermosillo, Mexico

### Deadline for manuscript submissions

closed (31 March 2025)



## Antibiotics

an Open Access Journal  
by MDPI

Impact Factor 4.6  
CiteScore 8.7  
Indexed in PubMed



[mdpi.com/si/166681](https://mdpi.com/si/166681)

*Antibiotics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[antibiotics@mdpi.com](mailto:antibiotics@mdpi.com)

[mdpi.com/journal/  
antibiotics](https://mdpi.com/journal/antibiotics)





# Antibiotics

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 8.7  
Indexed in PubMed



[mdpi.com/journal/  
antibiotics](https://mdpi.com/journal/antibiotics)



## 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 disciplines 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)