

## Special Issue

# Phytochemical Innovations and Bioactive Compounds: From Characterization to Therapeutic Applications

### Message from the Guest Editors

Phytochemicals, the cornerstone of plant-derived therapeutics, continue to revolutionize drug discovery and functional food development. This Special Issue, *Phytochemical Innovations and Bioactive Compounds: From Characterization to Therapeutic Applications*, seeks to advance research on cutting-edge methodologies for isolating, characterizing, profiling, and applying these bioactive molecules. Topics include novel extraction techniques (e.g., supercritical fluid extraction, ultrasound-assisted methods), computational approaches (molecular docking, QSAR modelling), phytochemical analysis and chemophenetics, and biotechnological strategies to enhance phytochemical production. Submissions may explore mechanistic insights into antioxidant, antimicrobial, and anticancer properties, clinical evaluations, or sustainable applications of nutraceuticals and functional foods. We encourage studies that bridges traditional knowledge with modern innovations to address global health challenges such as metabolic disorders, antimicrobial resistance, and chronic diseases.

### Guest Editors

Prof. Dr. Nijolė Savickienė

Department of Pharmacognosy, Lithuanian University of Health Sciences (LSMU), Kaunas, Lithuania

Prof. Dr. Lina Raudonė

Department of Pharmacognosy, Lithuanian University of Health Sciences, Sukileliu Av. 13, 50162 Kaunas, Lithuania

### Deadline for manuscript submissions

31 May 2026



## Plants

an Open Access Journal  
by MDPI

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/231088](https://mdpi.com/si/231088)

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

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





# Plants

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Plants* is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

---

### Editor-in-Chief

Prof. Dr. Dilantha Fernando  
Department of Plant Science, University of Manitoba, Winnipeg, MB  
R3T 2N2, Canada

---

### 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, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)