

## Special Issue

# Application of Plant Extracts in Pest Control

### Message from the Guest Editors

Plant extracts and essential oils (EOs) have gained recognition as environmentally friendly and effective solutions for pest management. These plant extracts and EOs offer advantages such as low toxicity, minimal residue, affordability, easily degradable, and high safety for human health. Most phytochemicals from herbs and woody plants are alkaloids, flavonoids, lignans, phenylpropanoids, quinoids, tannins, terpenoids, steroids, saponins, glycosides, or volatile oils responsible for their biological activities. The extraction of phytochemicals with insecticidal activity from plants is one of the important developments of natural product research. This Special Issue aims to explore more plant essential oils and extracts with insecticidal activity to isolate and identify chemical substances with specific insecticidal activity, the development of effective pesticide formulations and non-target effect studies, as well as the latest progress in field applications. The mechanism of action of plant extracts will also be considered.

### Guest Editors

Dr. Yongjian Xie

College of Advanced Agricultural Sciences, Zhejiang A & F University, Hangzhou 311300, China

Dr. Xiangrong Tian

Shaanxi Key Laboratory of Economic Plant Resources Development and Utilization, College of Forestry, Northwest A&F University, Yangling 712100, China

### Deadline for manuscript submissions

31 January 2026



## Plants

an Open Access Journal  
by MDPI

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/178525](https://mdpi.com/si/178525)

*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, 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)