

Special Issue

Multidisciplinary Perspectives on the Authentication, Quality Control, and Standardization of Medicinal Plants

Message from the Guest Editor

Medicinal plants have long been used in traditional medicine and continue to serve as valuable sources for drug discovery and therapeutic development. Despite their importance and growing global demand, significant challenges remain, including variability in plant materials, adulteration, lack of standardization, and inconsistent quality. These issues emphasize the need for reliable scientific approaches to ensure the authenticity, safety, and efficacy of medicinal plants and their products. Advances in analytical chemistry, molecular biology, metabolomics, chemometrics, and pharmacognosy now provide effective tools for the accurate identification and quality evaluation of herbal materials, supporting better standardization and consistency. This Special Issue aims to highlight research and reviews that address these challenges. Contributions are invited from fields such as botany, pharmacognosy, natural product chemistry, analytical chemistry, molecular and omics sciences, ethnopharmacology, pharmacology, toxicology, pharmaceutical sciences, clinical research, and regulatory science to advance the scientific foundation for medicinal plant use.

Guest Editor

Dr. Maryam Malmir

Research Institute for Medicines (iMed.U LISBOA), Faculty of Pharmacy, Universidade de Lisboa, 1649-003 Lisbon, Portugal

Deadline for manuscript submissions

20 December 2026



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/280288

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)