Special Issue

Analytical Chemistry of Medicinal and Edible Plants

Message from the Guest Editors

In this Special Issue, we invite researchers who have developed and/or applied various chemical, electrochemical, spectroscopic, and nuclear analytical methods, as well as sample preparation protocols, to present their results on the chemical profile of plants with potential applications in medicine, pharmacy or used as ingredients in functional foods. The scope of this Special Issue includes metabolomics, the identification of plant metabolites, primary and secondary phytochemicals, and their pharmacological activity. The development of new analytical approaches to elucidate the bioavailability of bioactive compounds and their positive effect on living organisms is an important topic of this Special Issue. In addition, the identification of environmental/climatic factors influencing the content of bioactive compounds using various chemometric methods is welcome. We welcome studies dedicated to the relationship between the content of nutrients in plants and their health-promoting or medicinal properties, as well as statistical methods to elucidate the chemical profile of these plants to explain or reveal their potential suitability for use in medicine and nutrition.

Guest Editors

Dr. Galia Gentscheva

Department of Chemistry and Biochemistry, Medical University-Pleven, 5800 Pleven, Bulgaria

Prof. Dr. Irina B. Karadjova

Faculty of Chemistry and Pharmacy, University of Sofia Saint Kliment Ohridski, 1164 Sofia, Bulgaria

Deadline for manuscript submissions

30 May 2026



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/244216

Plants

Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 plants@mdpi.com

mdpi.com/journal/plants





Plants

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 7.6 Indexed in PubMed



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)

