

Special Issue

Essential Oils Extraction Methods, Chemistry and Bioactivities: New Insights and Findings

Message from the Guest Editors

There is a myriad of secondary metabolites derived and isolated from various plants. They represent a treasure trove of chemistry that can be of both interest and benefit to humans. Essential oils are aromatic, oily liquids extracted from different plant parts. They occur during secondary metabolism, and are normally formed in special cells or cell groups or in glandular hairs found on many leaves and stems. Chemically, a single volatile oil comprises of up to 200 different constituents of terpenoid and non-terpenoid origin, which are synthesized through different biosynthetic routes with distinct primary metabolic precursors. This Special Issue welcomes research papers on essential oil extraction methods associated with chemistry and related bioactivities fields. The focus is on the variability of composition in relation to various factors, such as climatic or harvest time, nutritional status, or the isolation methods. New aspects of analysis, chemical characterization, and advancement in the extraction methods are of particular interest, as well as machine learning or artificial intelligence algorithm applications that study the composition–bioactivity correlation.

Guest Editors

Prof. Dr. Rino Ragno

Rome Center for Molecular Design, Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza Università di Roma, P. le A. Moro 5, 00185 Roma, Italy

Dr. Mijat Božović

Department of Biology, Faculty of Science and Mathematics, University of Montenegro, Džordža Vašingtona bb, 81000 Podgorica, Montenegro

Deadline for manuscript submissions

closed (30 June 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/96212

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, 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)