

Special Issue

Plant Tissue Culture and Secondary Metabolites Production II

Message from the Guest Editors

Plant cell tissue and organ culture is an irreplaceable fundamental technique, supplementary to conventional plant breeding, for optimized large-scale clonal propagation, germplasm conservation, somatic embryogenesis, and plantlet disease elimination. This technique has been intensively utilized for plants that are important from a phytochemical point of view for the biotechnological delivery of pharmacologically relevant secondary metabolites. Secondary metabolites play a key role in the diverse defense mechanisms of the plant organism in response to environmental stimuli such as climatic fluctuations, pathogenic organisms, predatory herbivores, as well as competing plants. Therefore, by providing the opportunity of the controlled modification of environmental conditions, *in vitro* culture is a well manageable experimental system, able to be utilized as a source of secondary metabolite delivery for industrial application, as well as for food, cosmetic, and pharmaceutical purposes. This Special Issue will highlight the modern use of different plant cell tissue and organ culture approaches for the successful production of plant secondary metabolites.

Guest Editors

Dr. Laura Pistelli
Dr. Kalina Danova
Dr. Ilaria Marchioni

Deadline for manuscript submissions

closed (28 February 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/114206

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)