# Special Issue

# Specialized Metabolites in Root cultures

### Message from the Guest Editors

Triterpenoids and steroids, including phytosterols, represent a characteristic group of natural compounds of high structural diversity. The functions of these compounds in plants are ascribed both to primary (general) and secondary (specialized) metabolism, e.g., the participation of sterols in the structure and fluidity regulation of cellular membranes, and triterpenoids — in diverse strategies of plant chemical defense. Both triterpenoids and phytosterols exert numerous biological activities and display various pharmacological effects. The multifunctionality of triterpenoids makes them promising multitargeting agents in the treatment of certain cancers and inflammatory diseases, as well as microbial infections. In turn, phytosterols can reduce the intestinal absorption of cholesterol and help maintain cardiovascular health. For this reason, these compounds have become valuable with regard to the production of various food additives. Thus, there is an increasing interest in the pharmaceutical, nutraceutical, and cosmeceutical applications of triterpenoids and phytosterols.

### Guest Editors

Prof. Dr. Anna Szakiel

Department of Plant Biochemistry, Institute of Biochemistry, Faculty of Biology, University of Warsaw, 1 Miecznikowa Str., 02-096 Warszawa, Poland

Dr. Marek Długosz

Department of Plant Biochemistry, Institute of Biochemistry, Faculty of Biology, University of Warsaw, 1 Miecznikowa Str., 02-096 Warszawa, Poland

### Deadline for manuscript submissions

closed (20 February 2022)

**Plants**

**an Open Access Journal by MDPI**

**Impact Factor 4.1**
**CiteScore 7.6**
**Indexed in PubMed**

mdpi.com/si/65598

*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

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)