

Special Issue

Molecular Regulation of Seed Development and Germination

Message from the Guest Editor

This Special Issue, *Molecular Regulation of Seed Development and Germination*, will focus on the latest discoveries on molecular mechanisms that control seed development, dormancy, and germination. It aims to outline the role of molecular factors, proteins, and plant hormones, and the interactions of different signaling pathways involved in these processes. Additionally, attention will be paid to how changing environmental conditions and abiotic and biotic stresses influence these mechanisms. This is crucial for understanding the ability of seeds to adapt and survive in different environments and exploring ways to enhance this process through seed priming. The Special Issue will also aim to present new tools and technologies used to study molecular mechanisms of seed development and germination, including the application of genomics, genome editing, and proteomics. These studies have the potential to support the development of more resilient plants, which is particularly important in the context of climate change and the pressing demand for improved agricultural productivity.

Guest Editor

Dr. Justyna Fidler

Department of Biochemistry and Microbiology, Institute of Biology,
Warsaw University of Life Sciences-SGGW, Nowoursynowska 159, 02-
776 Warsaw, Poland

Deadline for manuscript submissions

31 July 2026



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/240812

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)