

## Special Issue

# What Makes the Life of Stressed Plants a Little Easier? Defense Mechanisms against Adverse Conditions

### Message from the Guest Editors

Plants experience a wide array of environmental stimuli, have a negative impact on their metabolism and growth. As motionless organisms, plants require various mechanisms to recognize and cope with the circumstances. The adjustments in amino acids, proteins, and carbohydrate metabolism, the maintenance of redox balance as well as structural adaptation seem to be the basis of survival in harsh conditions. All defense require signaling involving different molecules. There is a need for intensive research into transcription factors, regulators of gene expression during growth and development. An explanation of roles in stress responses remains fragmentary. Many molecules have the potential to act as priming agents or protectants, whose application constitutes a possible method against a range of stressors and provides intracellular acclimatization. Considering the interest in the multiple approaches to stress, the concept of this Special Issue is to broaden and summarize the knowledge of the stress biology. In particular, original and review papers related to structural, transcriptomics, metabolomics, proteomics, and other integrated stress aspects and its mitigation are welcome.

### Guest Editors

Dr. Ewa Muszyńska

Dr. Kinga Dziurka

Dr. Mateusz Labudda

### Deadline for manuscript submissions

closed (30 September 2022)



## Plants

an Open Access Journal  
by MDPI

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/77070](https://mdpi.com/si/77070)

*Plants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[plants@mdpi.com](mailto: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)