

## Special Issue

# The Role of Protein Quality Control in Plant Abiotic Stress Tolerance

### Message from the Guest Editors

Plants are constantly challenged with diverse environmental stresses that adversely affect growth and development. Mechanisms that effectively circumvent the imbalance in proteostasis are therefore crucial for plant survival under stress conditions. Much attention in the field of plant abiotic stress tolerance has focused on understanding molecular mechanisms underlying intracellular signaling, transcriptional regulation, and epigenetic reprogramming, but recent discoveries have revealed the importance of protein quality control (PQC) for stress responses. This Special Issue aims to establish a wide collection of articles (research articles, reviews, opinions, methodologies, hypotheses, and modelling approaches) that emphasize identifying and unraveling the mechanisms of proteostasis involved in plant responses to various abiotic stress challenges. We would be delighted to receive contributions that decipher the process by analysis and integration of different -omics layers and the functional characterization of components involved in plant stress responses regulated by PQC. Additionally, articles addressing the proteolytic mechanisms in crops are highly welcome for this Issue.

### Guest Editors

Dr. Venkatesh Thirumalaikumar

Boyce Thompson Institute, Cornell University, Ithaca, NY 14853, USA

Prof. Dr. Salma Balazadeh

Institute of Biology, Leiden University, Sylviusweg 72, 2333 BE Leiden, The Netherlands

### Deadline for manuscript submissions

closed (31 October 2023)



## Plants

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/125594](https://mdpi.com/si/125594)

*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)