

## Special Issue

# Plant Stress Responses: Molecular Genetics and Enzyme Regulation

### Message from the Guest Editor

This Special Issue aims to provide a comprehensive platform for advancing our understanding of how plants perceive and respond to environmental stresses through molecular genetics and enzyme regulation. We welcome contributions that explore the identification and functional analysis of stress-responsive genes, transcription factors, signal transduction pathways, and the role of enzymes in modulating metabolic and physiological responses under stress. Special emphasis will be given to studies that elucidate regulatory networks involved in hormonal signaling, reactive oxygen species (ROS) homeostasis, and epigenetic modifications. We also encourage research that integrates multi-omics technologies—genomics, transcriptomics, proteomics, and metabolomics—with the aim of unravelling complex stress adaptation strategies. We seek to foster the development of novel molecular tools and strategies for breeding stress-resilient crops, thereby contributing to sustainable agriculture in the face of climate change. Researchers working on model and non-model plants are invited to submit original research articles and reviews that align with the scope of this Issue.

### Guest Editor

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### Deadline for manuscript submissions

31 December 2026



## Plants

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## 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.

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### Editor-in-Chief

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