

Special Issue

Plant Stress Responses and Signaling Networks in Environmental Adaptation

Message from the Guest Editors

Plants are constantly challenged by diverse environmental stresses, including drought, salinity, extreme temperatures, heavy metals, and pathogen attacks. To survive and thrive under these adverse conditions, plants have evolved intricate signaling networks and adaptive mechanisms that regulate growth, development, and productivity. Understanding these stress responses and signaling pathways is crucial for advancing sustainable agriculture and ensuring global food security. This Special Issue of *Plants* aims to bring together cutting-edge research and comprehensive reviews that deepen our knowledge of plant stress physiology, molecular signaling, and adaptive strategies. By highlighting recent advances, we seek to foster interdisciplinary dialogue and provide new insights into how plants perceive, respond to, and overcome environmental challenges. Contributions that integrate physiological, biochemical, molecular, and omics approaches are particularly welcome. We invite researchers worldwide to submit original research articles, reviews, and perspectives that will collectively advance the field and inspire innovative solutions for crop improvement and resilience.

Guest Editors

Dr. Golam Jalal Ahammed

College of Horticulture and Plant Protection, Henan University of Science and Technology, Luoyang 471023, China

Dr. Slađana Jevremović

Institute for Biological Research “Siniša Stanković”—National Institute of Republic of Serbia, University of Belgrade, 11108 Belgrade, Serbia

Deadline for manuscript submissions

31 December 2026



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/266275

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)