

Special Issue

Molecular Mechanisms Associated with Plant Tolerance upon Abiotic Stress

Message from the Guest Editor

Stress-induced damage in proteins, lipids and nucleic acids leads to an increased accumulation of reactive oxygen species (ROS), which cause oxidative damage. One process in plants that is strongly affected under stress is photosynthesis. The impact of stress factors on plants depends on their intensity, frequency and duration, as well as the plant species. Plants evolve different adaptation mechanisms to survive the harmful effects of the environment. Studies in past years have revealed that plants have different sensitivities to stress factors. Despite many studies working to elucidate the mechanisms of plant tolerance to abiotic stress factors, the exact mechanisms are not fully understood. Therefore, the study of the influence of abiotic stress factors on the growth, physiology, biochemistry and photosynthesis of different plant species is of great importance in order to clarify the mechanisms of tolerance in plants. This Special Issue aims to show the molecular mechanisms associated with plant tolerance upon various abiotic stresses, such as salinity, drought, temperature, ultraviolet radiation and heavy metals.

Guest Editor

Prof. Dr. Emilia Apostolova

Institute of Biophysics and Biomedical Engineering, Bulgarian Academy of Sciences, Acad. G. Bonchev Str., Bl. 21, 1113 Sofia, Bulgaria

Deadline for manuscript submissions

closed (15 July 2024)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/163719

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)