







an Open Access Journal by MDPI

New Insights into Plants' Defense Mechanisms against Abiotic Stresses

Guest Editors:

Prof. Dr. Feibo Wu

Dr. Fei Chen

Dr. Imrul Mosaddek Ahmed

Deadline for manuscript submissions:

closed (31 December 2022)

Message from the Guest Editors

Plants are continuously exposed to abiotic stresses such as drought, salinity, heavy metals, heat, waterlogging and cold, which negatively affect crop performance and yield. This has raised a major challenge for plant scientists to secure global food supplies and created an urgent need to continuously increase the yield of crops. Stress responses and defense mechanisms are especially complex because of crosstalk, spatio-temporal regulations, intricate metabolic networks, variations in specialized metabolites among plant species, and multiple defense responses against a single threat. Better analytic tools to explore metabolomes and proteomes, genome sequencing, and improved genetic tools are now available for unraveling the defense mechanisms against abiotic stresses. Exploiting new knowledge of plants' defense mechanisms will lead to the development of new varieties, with enhanced protection against abiotic stresses, and will ameliorate sustainable agriculture practices. This Special Issue of Plants welcomes articles that enhance our understanding of plants' defense mechanisms against abiotic stresses.













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha FernandoDepartment of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

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 communitys on topics of interest to the plant research community.

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 (Plant Science)

Contact Us