Special Issue

Physiological and Biochemical Adjustments in Response to Abiotic Stressors Associated with Climate Change

Message from the Guest Editors

Since the conquest of land, plants have developed an integrated and modular defense network to acclimate/adapt to multiple environmental pressures, including an excess of solar irradiance (both PAR and UV wavelengths), scarcity of water and nutrients in the soil and extreme temperatures. As these constraints usually occur concomitantly on both a seasonal and daily basis, plants respond in a multi-integrated way, combining morphological, physiological and biochemical responses to maintain biomass allocation and improve plant fitness. The frequency of severe stress events will increase due to climate change, detrimentally affecting not only profitable growth but also plant survival. Therefore, elucidating the mechanisms at underlying plant stress responses not only represents a compelling research topic but could also have a significant impact on future ecosystem management and agricultural programs. How plants respond to the multiple environmental pressures associated with climate change is the timely topic explored in this Special Issue.

Guest Editors

Dr. Massimiliano Tattini

Dr. Antonella Gori

Dr. Luana Beatriz dos Santos Nascimento

Deadline for manuscript submissions

closed (20 March 2023)

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/110893

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

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

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)