

Special Issue

Crops and Environmental Stresses: Phenomes to Genomes

Message from the Guest Editors

Abiotic stresses are major yield-limiting factors in crop plants. Over 90% of the arable land is exposed to more than one stress during the growing season. Combined stresses during critical growth and developmental stages (vegetative, reproductive, and grain filling) can affect the genetic potential of crops by alerting a series of morpho-physiological, yield, and quality traits. Quantifying traits responses and connecting phenome to the genome are cornerstones for crop improvement. Therefore, accumulation of knowledge on stress physiology, trait responses, and identifying breeder-friendly markers would facilitate the development of climate-smart crops. The special issue entitled "*Crops and Environmental Stresses: Phenomes to Genomes*" welcomes research articles addressing knowledge gaps related to stress physiology, trait discovery, remote sensing, crop modeling, phenomics, genomics, and generating breeder-friendly phenotypic/biomarker information under individual (CO₂, drought, heat, salinity, nutrient, disease) and combined stress in monocots and dicots.

Guest Editors

Dr. Raju Bheemanahalli

Department of Plant and Soil Sciences, Mississippi State University,
Mississippi State, MS 39762, USA

Dr. K. Raja Reddy

Department of Plant and Soil Sciences, Mississippi State University,
Mississippi State, MS 39762, USA

Deadline for manuscript submissions

closed (31 August 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/117252

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, 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)