Special Issue

Physiological and Molecular Mechanisms of Abiotic Stress Tolerance in Grass Species

Message from the Guest Editors

Abiotic stresses such as drought, high temperature, salinity stress, and heavy metal stress have become problems all over the world due to global warming. Grass species, the third most abundant flowering plants, have been widely used as forage, bioenergy plants, turfgrass, ornamental grass, and ground-cover plants for landscaping and ecological rehabilitation. Grass species have developed multiple adaptive strategies to counter complex environmental stresses during the long process of evolution. An in-depth understanding of adaptive strategies for dealing with various abiotic stresses in grass species will be beneficial to better utilize these grasses in different ecoregions and in the breeding of new cultivars with stronger stress tolerance. This Special Issue aims to reveal the physiological and molecular mechanisms of abiotic stress tolerance in grass species responding to complex environmental stresses based on changes in phenotype, physiology, metabolic pathway, and molecular level.

Guest Editors

Prof. Dr. Zhou Li
College of Grassland Science and Technology, Sichuan Agricultural University, Chengdu 611130, China

Prof. Dr. Gang Nie
College of Grassland Science and Technology, Sichuan Agricultural University, Chengdu 611130, China

Deadline for manuscript submissions

10 June 2026

Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.7

mdpi.com/si/210876

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

mdpi.com/journal/agronomy

MDPI

Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.7

mdpi.com/journal/agronomy

MDPI

About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. *Agronomy* is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston
Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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), PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)