

Special Issue

Genetic Improvement of Abiotic Stress Tolerance in Crops

Message from the Guest Editor

Crop production is frequently threatened by environmental stress, which is exacerbated by the trends of climate warming on a global scale. Improving the adaptability of crops is a key strategy to mitigate the effects of climate change on productivity. Thus, it is imperative to breed broad-spectrum tolerant crops in order to meet the increasing demand for food productivity globally. However, the tolerance of abiotic stress, such as drought, heat, and salinity is a complex quantitative trait controlled by many genes involved in the stress signal perception, signal transduction and amplification, and plant stress adjustments. One leverage point to accelerate the improvement in crops is to better understand the genetic and molecular bases of abiotic stress resistance, which require comprehensive studies of various aspects of crops, including their physiology, agronomy, phenome, omics, genetics, molecular mechanism, breeding, yield production, and utilization. In addition, the trade-off between crop yields and stress resistance is also highly important in this Special Issue.

Guest Editor

Prof. Dr. Hude Mao

State Key Laboratory of Crop Stress Biology for Arid Areas, College of Plant Protection, Northwest A&F University, Yangling 712100, China

Deadline for manuscript submissions

closed (1 December 2023)



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/155041

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

[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)





Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)



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)