

## Special Issue

# Plant Stress Tolerance: From Genetic Mechanism to Cultivation Methods

### Message from the Guest Editors

Plants are constantly exposed to diverse abiotic and biotic stresses that threaten global food security. Over the last several decades, advances in genetics, molecular biology, and agronomy have significantly deepened our understanding of stress tolerance mechanisms. Meanwhile, sustainable cultivation strategies are being increasingly emphasized to translate this knowledge into practical applications. This Special Issue aims to bridge fundamental insights into stress-responsive genes, regulatory networks, and signaling pathways with applied approaches for resilient crop production. We particularly welcome cutting-edge research that integrates genomics, gene editing, and omics technologies with physiology, soil-plant interactions, and innovative cultivation systems. We solicit original research articles, reviews, and short communications covering topics from genetic dissection of tolerance traits to novel management practices, with an emphasis on integrative and interdisciplinary studies. Through this collection, we seek to highlight both the mechanistic foundations and field-level applications that can accelerate the development of stress-resilient agriculture.

### Guest Editors

Dr. Chang Liu

College of Agronomy, Shenyang Agriculture University, Shenyang 110866, China

Dr. Changlin Liu

Institute of Crop Science, Chinese Academy of Agricultural Sciences, National Key Facility for Crop Gene Resources and Genetic Improvement, Beijing 100081, China

### Deadline for manuscript submissions

20 July 2026



## Agronomy

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 7.6



[mdpi.com/si/258342](https://mdpi.com/si/258342)

*Agronomy*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[agronomy@mdpi.com](mailto:agronomy@mdpi.com)

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





# Agronomy

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 7.6



[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), GEOBASE, PubAg, AGRIS, and other databases.

#### Journal Rank:

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