

## Special Issue

# Advances in Environmental Stress Biology: From Omics Approaches

### Message from the Guest Editors

The growth and development of plants are limited by abiotic and biotic stresses. Solutions to improve plant tolerance and minimize the effects of abiotic stresses have been actively sought. This Special Issue aims to address the mechanisms of plant. We highlight that an approach based on different integrated systems can improve plant adaptation and productivity in a sustainable way using omics approaches. We welcome the submission of original research articles and review related to, but not limited to, the following topics: Studies on plant–environment interactions through omics technologies; Application of natural small molecules of plant origin with biological activity in plant tolerance improvement; Using cultivation measures, fertilizers, and other methods to improve environmental stress resistance and agronomic traits; Revealing molecular mechanisms and regulatory network under various environmental stresses in plants and improving stress tolerance through genetic engineering; Identifying key regulatory genes of important agronomic traits and improving molecular breeding methods.

### Guest Editors

Prof. Dr. Longxing Hu

Department of Pratacultural Sciences, College of Agronomy, Hunan Agricultural University, Changsha 410128, China

Prof. Dr. Liang Chen

Key Laboratory of Plant Germplasm Enhancement and Specialty Agriculture, Wuhan Botanical Garden, Chinese Academy of Sciences, Wuhan 430074, China

### Deadline for manuscript submissions

closed (30 January 2025)



## Agronomy

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 6.7



[mdpi.com/si/161288](https://mdpi.com/si/161288)

*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 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)