

## Special Issue

# Prospects and Challenges of Rice Breeding under Climate Change

### Message from the Guest Editors

Under the background of climate change, rice breeding is facing great challenges. Firstly, increases in temperature are affecting rice cultivation with the northward expansion in Asia, and secondly, high-temperature stress is leading to a decrease in the rice heading date, and the high temperature at the heading stage may also lead to an increase in blighted grain and reduction in yield. Low-temperature stress at the transplanting stage of early rice and booting stage of late rice will also reduce rice yield. The frequent occurrence of disastrous weather requires us to cultivate new rice varieties that are resistant to high temperature, low temperature, lodging, flooding, pre-harvest sprouting, salinity, drought, disease, and insects.

This Special Issue focuses on the exploration of new rice germplasms, new genes, and new breeding techniques to resist adverse climatic conditions. This issue on the “Prospects and Challenges of Rice Breeding under Climate Change” will cover interdisciplinary research in agronomy, crop genetics and breeding, and molecular biology. All types of articles, such as original research, opinions, and reviews, are welcome.

---

### Guest Editors

Dr. Weixun Wu

Dr. Yingxin Zhang

Dr. Qunen Liu

---

### Deadline for manuscript submissions

closed (25 September 2023)



## Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/112636](https://mdpi.com/si/112636)

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

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





# Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



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



## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

---

### Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, 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, RePEc, and other databases.

#### Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)