Special Issue

Innovations and Advances in Rice Molecular Breeding

Message from the Guest Editors

With the rapid development of DNA markers, gene mapping and cloning in the last three decades, research on rice has made great progress in terms of improving grain yield, nutrition quality and environmental performance, achieving substantial progress for global food security. However, the balance of yield, cooking and taste quality and disease resistance is a daunting challenge in crop breeding due to the antagonistic relationship between these aspects. The biggest bottleneck is to develop and utilize genomic technologies, based on germplasm resource mining and functional genomics dissection, which would greatly facilitate more efficient and precise breeding. This Special Issue focuses on the most recent innovations and advances in rice molecular breeding, aiming to achieve high and stable yield, superior quality, multiresistance, wide adaptability and simplified cultivation. This issue will cover a broad range of molecular breeding approaches, including, but not limited to, functional marker-assisted selecting, gene pyramiding, rational design, GWAS, artificial intelligence and genome editing.

Guest Editors

Dr. Ye-Yang Fan

State Key Laboratory of Rice Biology and Breeding, China National Rice Research Institute, Hangzhou 310006, China

Dr. Yu-Jun 7hu

China National Rice Research Institute, Hangzhou, China

Dr. Yong-Feng Shi

Chinese National Center for Rice Improvement, China National Rice Research Institute, Hangzhou 310006, China

Deadline for manuscript submissions

closed (15 March 2024)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/168103

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

mdpi.com/journal/agriculture





Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

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)

