## Special Issue

# The Role of Molecular Breeding in Improving Agronomic Traits of Rice

#### Message from the Guest Editors

Rice is the staple food of more than half of the world's population and improving rice production is a major challenge due to the global population explosion and climate change. With the rapid development of molecular biology in recent decades, molecular breeding using molecular marker-assisted selection. genome-wide selection, and other techniques has shown great advantages in improving the agronomic traits of rice. Additionally, genome editing technology can accurately modify the DNA sequences of multiple genes simultaneously and in a short period of time. which represents great application prospects for improving multiple traits in a variety of species, including rice. This Special Issue focuses on recent advances in the role molecular breeding plays in improving the agronomic traits of rice. Submitted papers could cover the development of high-throughput molecular markerassisted selection modules for several key known genes that are important for agronomic traits, the mining of breeding-favorable alleles of known genes or unknown genes, and the validation of their functions. All original research, opinions, and reviews are welcome.

#### **Guest Editors**

Dr. Yuexing Wang

China National Rice Research Institute, Chinese Academy of Agricultural Sciences, Hangzhou 310006, China

Dr. Deyong Ren

China National Rice Research Institute, Chinese Academy of Agricultural Sciences, Hangzhou 310006, China

#### Deadline for manuscript submissions

closed (15 July 2025)



## Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/199362

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)

