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 marker-assisted 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.

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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

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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.

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