Special Issue

Genetic Research and Breeding to Improve Stress Resistance in Rice

Message from the Guest Editor

Rice is one of the most essential staple crops globally; however, it faces increasing challenges due to climate change and various environmental stresses such as drought, salinity, and cold. Improving rice stress resistance is therefore of paramount importance. Recent advances in genetic research and molecular breeding have made significant strides in improving rice resilience under these adverse conditions. This Special Issue seeks to compile cutting-edge research on the genetic and molecular mechanisms underlying rice stress resistance, including the identification and functional analysis of stress-responsive genes, molecular regulation, QTL mapping, and their practical applications in breeding. We invite original research articles and reviews covering areas such as gene discovery and functional validation, multi-omics, genome-wide association studies (GWASs), marker-assisted selection, and innovative breeding techniques, with the goal of advancing the development of rice varieties with enhanced stress tolerance.

Guest Editor

Dr. Luomiao Yang

College of Agriculture, Northeast Agricultural University, Harbin 150030, China

Deadline for manuscript submissions

closed (25 April 2025)

Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 6.3

mdpi.com/si/220256

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

mdpi.com/journal/agriculture

MDPI

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)