Special Issue

Genetic Improvement in Rice: Enhancing Environmental Sustainability and Global Health

Message from the Guest Editor

Rice (*Oryza sativa*) serves as a staple food for over half of the world's population, yet its production faces unprecedented challenges from population growth, climate change, and environmental degradation. However, rice functional genomic research over the past two decades has identified and characterized thousands of genes for various traits, which has enabled precise modifications for rice traits through molecular breeding, genomic breeding, and genome editing (e.g., CRISPR-Cas9). This Special Issue will highlight cutting-edge research and technological breakthroughs in rice genetics, genomics, and biotechnology revolutionizing crop yield, resilience, and nutritional quality. We request submissions of original research articles and review articles that address challenges in rice genetic improvement to enhance environmental sustainability and human well-being. Topics of interest include but are not limited to the following:

- Yield and related traits;
- Resistance to biotic and abiotic stresses;
- Nutrient-use efficiency;
- Nutrional quality.

Guest Editor

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Deadline for manuscript submissions

closed (25 August 2025)

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Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

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