

Special Issue

Genetic Research on Crop Stress Resistance and Quality Traits

Message from the Guest Editors

With global climate change and population growth posing significant threats to food security, improving crop resilience and quality traits has become a critical focus in agricultural research. Balancing stress resistance (e.g., drought, salinity, disease) with desirable quality traits (e.g., nutritional value, yield, processing properties) remains a major challenge in modern breeding programs. Recent breakthroughs in genomics, molecular biology, and gene editing have provided powerful tools to unravel the genetic and molecular mechanisms underlying these traits. This Special Issue will gather cutting-edge research on the genetic basis of crop resilience and quality traits, exploring both trade-offs and synergistic solutions to advance sustainable agriculture. Contributions will cover topics such as genetic and epigenetic regulation, multi-omics approaches, molecular breeding strategies, and the development of stress-resilient, high-quality crop varieties.

Guest Editors

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Deadline for manuscript submissions

25 August 2025

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CiteScore 5.5
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About the Journal

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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