

## Special Issue

# Molecular Genetics of Stress Response in Crops

### Message from the Guest Editor

Climate change has led to increasingly severe abiotic stresses such as drought, extreme temperatures, and aluminum, which have led to a considerable reduction in crop yields. The cultivation of crops with increased stress adaptation is extremely important for ensuring food security in the world. As a consequence, plants have evolved a set of perception and signaling mechanisms to respond or adapt to adverse environmental conditions via gene expression regulation and protein translation, modification, and degradation. Better understanding of the physiological, biochemical, cellular, and molecular mechanisms of crops in response to stresses is pivotal for enhancing stress resistance/tolerance.

This Special Issue aims to publish high-quality articles uncovering the molecular and biochemical mechanisms underlying crop responses to stresses, including studies exploring the underlying mechanisms contributing to crop stress resistance/tolerance and developing novel methods and biotechnological strategies for improving crop stress resistance/tolerance. Original research papers, reviews, and short communications can be submitted to the Special Issue.

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### Guest Editor

Dr. Jie Zhan

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### Deadline for manuscript submissions

15 December 2025

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## Genes

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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?

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### Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan  
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