

## Special Issue

# Genetics and Epigenetics in Plant Development

### Message from the Guest Editor

Plant development is a complex process regulated by intricate genetic and epigenetic mechanisms. Understanding the interplay between these mechanisms is crucial for advancing agricultural productivity, crop improvement, and sustainable food systems. This Special Issue, "Genetics and Epigenetics in Plant Development", aims to explore the molecular and epigenetic basis of plant growth and development, with a focus on how genetic networks, epigenetic modifications, and genome editing technologies influence key developmental processes such as germination, organogenesis, flowering, and stress responses. This Special Issue seeks to address the following themes: (1) genetic regulation of plant development, (2) epigenetic mechanisms and their role in development, (3) interactions between genetic and epigenetic factors, (4) the impact of environmental cues on developmental pathways, and (5) the application of genome editing technologies in studying and manipulating plant developmental processes. We welcome original research articles, reviews, and case studies that contribute to our understanding of these processes.

### Guest Editor

Dr. Chao Bian

Frontiers Science Center for Molecular Design Breeding, State Key Laboratory of Maize Bio-Breeding, National Maize Improvement Center, Department of Plant Genetics and Breeding, China Agricultural University, Beijing, China

### Deadline for manuscript submissions

25 September 2025

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## Genes

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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?

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### Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan  
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