

Special Issue

Plant Epigenetic Memory Under Abiotic Stress

Message from the Guest Editor

Plant adaptation to abiotic stress is critical under climate change. Epigenetic memory—heritable gene expression changes without DNA sequence alterations—enables plants to endure stresses like drought, heat, and salinity. Mechanisms such as DNA methylation and histone modification regulate stress genes, driving plasticity and transgenerational tolerance. This Special Issue explores the molecular basis of plant epigenetic memory. We seek submissions on:

- Mechanisms of stress-induced epigenetic modifications and pathways.
- Functional genomics and transcriptomics of epigenetic regulation.
- Transgenerational inheritance of stress memory.
- Integration of epigenetic data with physiological outcomes.

Papers must offer molecular-level insights using NGS, ChIP, or advanced genetics. Surveys are excluded. This issue aims to clarify how epigenetic mechanisms underpin resilience, ultimately informing crop improvement for stress tolerance.

Guest Editor

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