

Special Issue

Abiotic Stress in Plants: Molecular Genetics and Genomics

Message from the Guest Editor

Environmental stresses such as drought and low temperatures can have serious adverse effects on plant growth and development and crop yield. Global warming and climate change will further exacerbate the negative impact of adverse environments on plants, highlighting the necessity and importance of molecular mechanisms for plant abiotic stress response and tolerance. With the increasing maturity of high-throughput DNA sequencing technology and the development of various genetic modification methods, including CRISPR-Cas9, more and more molecular genetics and genomics technologies are being applied to the field of plant abiotic stress research, improving our understanding of the response mechanisms of various non-model plants to environmental stress. The purpose of this Special Issue is to deeply analyze the response and adaptation mechanisms of plants to environmental stress by applying multiple types of omics methods, including genomics, transcriptomics, proteomics, and metabolomics, individually or in combination. The combination of bioinformatics and experimental validation is encouraged to analyze the abiotic stress response of plants.

Guest Editor

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Deadline for manuscript submissions

closed (15 June 2024)

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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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