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Abiotic Stress in Plants: Molecular Genetics and Genomics—2nd Edition

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

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, molecular genetics and genomics technologies are increasingly 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 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.













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Message from the Editor-in-Chief

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