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## Epigenetic Regulation of Plant Stress Responses

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submissions:

**closed (30 April 2024)**

### Message from the Guest Editors

Dear Colleagues,

Plants are sessile organisms subjected to constantly changing environments that can generate unfavorable or stressful situations for plant growth, development, and productivity. In recent years, enormous progress has been made in understanding epigenetic regulation in response to diverse environmental stimuli, including in response to biotic and abiotic stresses. Epigenetic regulation comprises the covalent modification of DNA and histone proteins that affect the accessibility of chromatin to the transcriptional machinery. The three main types of epigenetic marks or signatures include DNA methylation, histone modification, and non-coding RNA (ncRNA)-mediated RNA interference, including small RNAs and long non-coding RNAs. Furthermore, epigenetic mechanisms can generate stress memory, which can be transferred to the next generation of plants exposed to stress. In this way, knowledge of these stress memories could enhance our understanding of the processes implicated in the adaptation of plants to stress. This Special Issue of *Plants* aims to collect the latest data in the field of epigenetic regulation in response to various types of stress.



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# Special Issue



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## Message from the Editor-in-Chief

*Plants* is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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