

Special Issue

Omics in Plant Development and Stress Responses

Message from the Guest Editors

Plant growth, development, and productivity are closely regulated by intricate molecular networks that enable plants to respond and adapt to constantly changing environmental conditions. In the context of global climate change, it is increasingly important to understand how plants respond to both biotic and abiotic stresses in order to ensure crop resilience and sustainable agricultural production. Recent advancements in high-throughput omics technologies have created unprecedented opportunities to explore these processes at various regulatory levels. This Special Issue of *Plants*, titled “Omics in Plant Development and Stress Responses,” aims to showcase cutting-edge research that utilizes omics-based approaches—including genomics, transcriptomics, proteomics, metabolomics, epigenomics, and integrative multi-omics—to reveal the molecular mechanisms underlying plant development and stress adaptation. Contributions that address plant responses to abiotic stresses such as drought, salinity, temperature extremes, flooding, and nutrient imbalances, as well as biotic stresses caused by pathogens and pests, are particularly encouraged.

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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, and 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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