

Special Issue

Plant Abiotic Stress: Mechanisms, Tolerance and Sustainable Management

Message from the Guest Editors

Plants face increasingly frequent and severe abiotic stresses in their environments, most notably drought, salinity, extreme temperatures, nutrient deficiencies, and heavy metal toxicity. All of these stresses could have serious adverse effects on plant growth, development, and productivity, thus posing serious challenges to food security and the sustainability of agriculture. In this Special Issue, we explore recent advances and discoveries on the following topics:

- Mechanisms of plant response to abiotic stresses;
- Signal pathways and regulatory networks involved in stress perception and adaptation;
- Biotechnological approaches and breeding strategies for engineering and developing abiotic stress resilient cultivars;
- Agronomic and management practices for sustainable cultivation under abiotic stress conditions;
- Applications of omics technologies to unravel the complexities of plant stress biology;
- Field evaluation of abiotic stress management methods.

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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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