Special Issue

Recent Trends in Reproductive Enhancement of Crop Resilience to Extreme Climate

Message from the Guest Editors

As climate change intensifies, improving crop reproductive resilience to extreme environmental conditions becomes one of the most challenging issues and a key focus in agricultural research. There are several strategies to mitigate effects of climate change to plant reproductive systems, including: (i) genetic and molecular approaches employing genomic selection for heat and drought tolerance, polyploidy, and epigenetics and stress memory; (ii) physiological and biochemical approaches related to hormonal regulation of reproductive development, pollen viability, and role of antioxidant systems; (iii) breeding approaches focused on developing climate-smart crop varieties, use of wild relatives and hybrid breeding, and implementation of marker assisted selection; (iv) interdisciplinary approach related to abiotic and biotic stress interactions; (v) technological innovations related to the use of high-throughput genotyping and phenotyping; and (vi) sustainable agricultural practices for climate resilience. Thus, this Special Issue will cover a wide range of topics, aiming to contribute to the overall understanding of various strategies that can be employed.

Guest Editors

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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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