Special Issue

Plants Response to Temperature Extremes

Message from the Guest Editors

Plants encounter various stresses, including temperature extremes, during their life cycles. Temperature anomalies, both high and low, severely restrict plant development and negatively impact productivity. Similarly, low temperature shortens the field season, causes early frost, and results in significant yield loss. The occurrence and severity of extreme temperature events are becoming more frequent and intense due to climate change, threatening food and nutritional security. Plants' response to temperature is oligogenic and mediated by complex biochemical pathways. While considerable research has been carried out in physiological, biochemical, and molecular mechanisms of plant response and adaptation to temperature extremes, the translation of results from lab to field is limited. A multidisciplinary approach is required to better understand the complexity of plant tolerance to temperature response to develop crops resilient to temperature extremes. In this Special Issue, we welcome colleagues to contribute research and review papers covering all aspects of plant response to temperature extremes.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

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.

Editor-in-Chief

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