Special Issue

Crop Improvement under a Changing Climate

Message from the Guest Editor

The natural and cultivated habitats of the world's major agricultural crops are continually being challenged by climate change, which is hastening the onset of negative impacts on biological processes through abiotic stressors and disease pressure. Drought (lack of water), salt, flood, cold, heat, toxic metals, metalloids, oxidizing agents, irradiation, and other abiotic stressors are significant influencing factors, while fungal agents, bacteria, and viruses are prevalent biotic stressors that induce disease and infection in plants. Such unfavorable conditions have an impact on crop development, physio-biochemical processes, production, and nutritional quality. This Special Issue welcomes research aiming to improve crops by combining agronomic practices (by using genetics, breeding, and phenotyping tools) and biotechnological applications, such as molecular markers, QTL and haplotype mapping, genetic engineering, tissue culture, various omics applications, and gene editing tools. Furthermore, articles detailing basic and practical knowledge on crop growth, stress responses, and tolerance mechanisms are of interest.

Guest Editor

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Deadline for manuscript submissions

closed (31 January 2025)



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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.

Editor-in-Chief

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