Topics

Physiological and Molecular Characterization of Crop Tolerance to Abiotic Stresses

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Deadline for abstract submissions:
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Deadline for manuscript submissions:
1 May 2022

Message from the Topic Board

Dear Colleagues,

Crop growth and yield are limited by several factors of which abiotic stresses are among the most damaging. Solutions to increase crop tolerance and minimize the effects of abiotic stresses on crop yield have been actively sought. Many of the crop traits resulting in increased abiotic stress tolerance are an interplay of several genes, which make them difficult to investigate and modify. Furthermore, different stress factors may cause osmotic or oxidative stress and protein denaturation, leading to cellular adaptive responses. Exposure to a stress factor can also lead to tolerance against a wide range of future abiotic stress events, such as priming, acclimation, conditioning, hardening, or cross-stress tolerance. Significant steps have been taken in understanding the physiology and molecular biology of crop abiotic stress tolerance, and updates on the most recent accomplishments will be provided in this special topic.

Participating Journals:

Agronomy, Agriculture, Plants, horticulturae