



Heat and Frost Stress Tolerance Mechanisms in Crops: From Gene to Canopy

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Deadline for manuscript
submissions:

closed (1 February 2019)

Message from the Guest Editor

Dear Colleagues,

The intensity and frequency of extreme events, such as heat and frost, largely increases under climate change conditions, which can substantially influence crop growth and development. An outsized effort has been invested in recognition of crop tolerance mechanisms to extreme events from the gene to plant level. However, little is known about associations between tolerance mechanisms and crop yield from gene to canopy level. Employing process base crop growth models would provide comprehensive overviews on linkages between stress tolerance mechanisms at gene level and a complex trait such as yield at canopy level.

The current Special Issue will highlight “Heat and Frost Tolerance Mechanisms”. We welcome original research, reviews and opinions covering related subjects, inclusive of the introduction of new tolerance mechanisms, the development of new modelling routines, comparing the performance of tolerance mechanisms under extreme conditions, similarities and differences between tolerance mechanisms to heat and frost stress, and the development of stress tolerance ideotypes.

Dr. Ehsan Eyshi Rezaei
Guest Editor



mdpi.com/si/14769

Special Issue



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