

Special Issue

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

Message from the Guest Editor

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.

Guest Editor

Dr. Ehsan Eyshi Rezaei

Department of Crop Sciences, Division Agronomy / Crop Science, Von-Siebold-Str. 8, D-37075 Göttingen, Germany

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Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

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Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,
Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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