



an Open Access Journal by MDPI

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

Guest Editor:

#### Dr. Ehsan Eyshi Rezaei

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

Deadline for manuscript submissions: closed (1 February 2019)



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









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Leslie A. Weston

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

## Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, and

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, and other databases.

Journal Rank: JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Agronomy and Crop Science)

### **Contact Us**

*Agronomy* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/agronomy agronomy@mdpi.com X@Agronomy\_Mdpi