

Special Issue

Cereal Breeding for Abiotic Stress Tolerance

Message from the Guest Editors

Cereal crops are the most important food resource for human beings. With the rapid growth of the world population, the demand for food is increasing. However, global climate change and adverse soil conditions pose severe constraints on crop growth, quality and yield.

Cereal plants have evolved stress resistance abilities to deal with adverse environments at physiological, cellular and molecular levels. Unraveling the underlying mechanism, and identifying elite germplasms and resistance genes, will definitely facilitate cereal breeding for abiotic stress resistance. This Special Issue will cover, but is not limited to, the following topics:

- (1) Exploration of elite germplasms for abiotic stress resistance.
- (2) Identification of genes responsible for abiotic stress resistance using QTL or genome-wide association studies (GWAS).
- (3) Physiological and molecular mechanisms of abiotic stress tolerance/resistance in cereal plants.
- (4) Omics studies on abiotic stress response in cereal plants.
- (5) Functional characterization of genes responsible for abiotic stress resistance in cereal plants.
- (6) The development or application of methodologies of cereal breeding for abiotic stress resistance.

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