Special Issue

Physiological and Molecular Mechanisms of Abiotic Stress Tolerance in Grass Species

Message from the Guest Editors

Abiotic stresses such as drought, high temperature, salinity stress, and heavy metal stress have become problems all over the world due to global warming. Grass species, the third most abundant flowering plants, have been widely used as forage, bioenergy plants, turfgrass, ornamental grass, and ground-cover plants for landscaping and ecological rehabilitation. Grass species have developed multiple adaptive strategies to counter complex environmental stresses during the long process of evolution. An in-depth understanding of adaptive strategies for dealing with various abiotic stresses in grass species will be beneficial to better utilize these grasses in different ecoregions and in the breeding of new cultivars with stronger stress tolerance. This Special Issue aims to reveal the physiological and molecular mechanisms of abiotic stress tolerance in grass species responding to complex environmental stresses based on changes in phenotype, physiology, metabolic pathway, and molecular level.

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