

Special Issue

Novel Approaches to Improve Abiotic Stress Tolerance in Crop Plants

Message from the Guest Editor

Abiotic stresses are major factors for losses in agricultural production worldwide. In this Special Issue, we shall focus on several abiotic stressors, such as drought, salinity, alkalinity, temperature extremes, flooding, nutrient deficiency, and toxicity. To ensure food security for a world population of 10 billion by 2050, the major challenge for plant scientists is to devise novel strategies to mitigate the abiotic stresses affecting various crops. One fruitful strategy to enhance adaptation and productivity of crop plants under abiotic stress environments is to design stress-tolerant varieties. However, realizing this goal will require advances in the following areas: identification and utilization of novel sources of abiotic stress tolerance, a thorough understanding of the physiological and molecular basis of stress response, identification of traits and the underlying genetic factors conferring abiotic stress tolerance, and development of molecular tools for successful transfer of stress tolerance genes. Contribution of both original research articles and reviews is welcome for this Special Issue.

Guest Editor

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