

Special Issue

Genetic, Epigenetic and Microbiota Molecular Insights for Crop Resilience to Abiotic Stress

Message from the Guest Editor

Developing ways to safeguard crop and food systems relies greatly on illuminating the cellular processes and molecular mechanisms underlying stress perception, stress response and acquisition of resilience in crop species. The response to adverse environmental conditions involves the intricate relations of gene networks and gene expression programs induced by various abiotic stressors. Furthermore, epigenetic factors, such as DNA methylation, histone modifications, action of small RNAs, play crucial roles in regulating the molecular mechanisms associated with abiotic stress response and establishment of tolerance. Moreover, the microbiome (soil, rhizosphere, phyllosphere, carposphere) has an ever-increasing impact on plant development and environmental stress resilience. This Special Issue will focus on recent advances in the genetic, epigenetic and microbiota aspects of crop response to abiotic stress as well as their interactions. We welcome contributions in this multidisciplinary field.

Guest Editor

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