Special Issue

Molecular Mechanisms Associated with Plant Plasticity upon Environmental Stresses

Message from the Guest Editors

Plants are sessile organisms that have developed highly sophisticated and intricate defense mechanisms which allow them to overcome a diversity of environmental constraints, mainly related to extreme environmental conditions. Temperature, water availability, salinity, light intensity and heavy metals have been highlighted as limiting growth factors with negative consequences on crop yield and productivity. Complex networks of signal perception, signal canalization through a complex signaling cascade and the further induction of resistance genes are responsible for plant growth adjustments and adaption upon those stresses. Understanding the molecular mechanisms underlying stress signaling pathways and plant tolerance mechanisms upon those environmental constraints is important for plant breeders, allowing for the development of resilient varieties with increased plasticity. This Special Issue intends to report recent progress in the identification of gene families regulating the physiological process of plant response to abiotic stresses and their regulatory mechanisms, which can lead to increased tolerance/adaptation towards environmental stresses.

Guest Editors

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

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