



Abiotic Stress Signaling and Responses in Plants

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Message from the Guest Editors

Plant responses to environmental factors are extraordinarily complex. They can be observed at various levels of plant organization, ranging from changes in the intensity of basic biochemical processes such as DNA replication, respiration, and photosynthesis to morphological and anatomical changes in organs. However, mentioned biochemical changes are preceded by the activation of an efficient signaling system which endures environmental fluctuations. Metabolic regulations enable the maintenance of the plant's homeostasis, as they are crucial for maintaining the balance between simultaneously occurring processes of growth and development and stress defense. It is considered that sugars and respiratory metabolites, such as malic and oxaloacetic acids, as well as amino acids, and enzymes involved in photosynthesis, respiration, and photorespiration, participate in the mechanisms of generation, processing, and perception of metabolic signals. Original and review papers dealing with all of the above aspects of signaling under stresses (also operating simultaneously or sequentially) are welcomed contributions for this Special Issue of





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Message from the Editor-in-Chief

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