Special Issue

Biodiversity Conservation and Stress Biology of Plants in Arid Regions

Message from the Guest Editors

Deserts cover one-fifth of the Earth's land surface. Due to the harsh climate in deserts, only some of the most unusual plants can survive in such regions. Many of the plants are an essential food reserve, especially during droughts. Desert plants are contentiously exposed to an extensive array of environmental stresses, such as water-deficit conditions (drought), low temperature (cold), salt, high temperature (heat), etc. Tolerance and susceptibility for plants under stress conditions are complex events in which stresses may affect the multiple stages of plant development. Under the influence of abiotic stress, plants change their molecular and physiological fine tuning and try to cope to maintain a healthy state in the face of the molecular and physiological disturbance imposed by the stressful environment. In this disturbance, the maintenance involves gene expression under stress, in the form of either structural or regulatory genes. Scientific research on plants is necessary to obtain a deeper insight into the desert plant's structure and physiology adaption strategies.

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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.

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