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Biodiversity Conservation and Stress Biology of Plants in Arid Regions

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Message from the Guest Editors

Dear Colleagues,

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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Message from the Editor-in-Chief

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