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Abiotic Stress in Plants: Present and Future

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Deadline for manuscript submissions: closed (25 April 2023)

Message from the Guest Editors

Today's agriculture is facing great challenges. Adverse climatic factors, such as extreme temperature, drought, salinity, heavy metals, and oxidative stresses are the main causes of low crop productivity and sustainability. Abiotic stress generated reactive oxygen species (ROS) playing the dual role of signaling and regulating basic cellular metabolism. Much progress has been made in the identification and characterization of genes/proteins/metabolites that allow plants to tolerate abiotic stresses. The Special Issue of the Journal entitled "Abiotic Stress in Plants: Present and Future" mainly focus on how plants adapt to abiotic stress and various biotechnological and molecular approaches for improving the stress tolerance in crop plants to mitigating the effect of global climate change. This issue presents a holistic view of the general principles of stress tolerance, signal transduction and regulation of gene expression, heavy metal toxicity, hormones, metabolites, and nutrient and halophytes in defense mechanisms. This Special Issue serves as a complete package on the basics, applications and management for abiotic stress tolerance in plants.



mdpi.com/si/138854







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Message from the Editor-in-Chief

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