Special Issue

Advanced Studies in Abiotic Stress Response Mechanism of Horticultural Plants

Message from the Guest Editors

Plants have developed several strategies to overcome abiotic stress, adopting a mechanism that allows them to survive adverse conditions. Therefore, many plants, especially tolerant species, distinguish abiotic stress and elicit an appropriate response. These response mechanisms range from morphological and anatomical adaptations in organs to changes in physiological and biochemical processes. These adversely affect the plant growth and productivity and cause interference in stress tolerance and adaptation. Reactive oxygen species (ROS) are created in plant cells as a result of all of these stresses, which also cause oxidative damage. Plant defense against oxidative damage include the activation of antioxidant enzymes and the buildup of complementary solutes that efficiently scavenge ROS. However, harmful degenerative processes do happen if the amount of activated oxygen produced surpasses the plant's ability to detoxify it; typical symptoms include loss of osmotic responsiveness, wilting, and necrosis. Plants must be able to sense, analyze, and translate various stimuli into adaptive responses when faced with stressful situations.

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Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

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