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ROS and Abiotic Stress in Plants

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Message from the Guest Editors

Dear Colleagues,

Abiotic stresses cause plant growth inhibition, damage, and in the most severe cases cell death, resulting in major crop yield losses worldwide. Many abiotic stresses can lead to oxidative stress. Recent genetic and genomics studies have revealed highly complex and integrated gene networks related to abiotic stress and reactive oxygen species, which are responsible for stress adaptation. Thus, a systems biology approach is needed in order to understand the molecular mechanisms of stress tolerance and to find solutions for stress mitigation and secure crop production for the growing human population in an era of global climate change.

Our Special Issue aims to report original research that delves into the intricate pathways promoting plant tolerance to single or combined abiotic stresses as well as oxidative stress and provides novel insights into the control mechanisms regulating plant growth or defense programs under adverse conditions. Multidisciplinary approaches, studying the experimental systems from genetic, molecular biology, physiological, biochemical, and systems biology perspectives are encouraged.

Assoc. Prof. Dr. Tsanko Gechev Dr. Veselin Petrov



Specialsue









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Message from the Editor-in-Chief

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