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Crop Antioxidant System and Its Responses to Stress

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Message from the Guest Editors

Climate change is a global problem with various negative effects on plants and animals as well as the production of food supplies, which causes changes in the nutritional and biological activity of cereals, fruits and vegetables. Plant responses to stress conditions involve numerous physiological, biochemical, molecular and cellular changes. An example of a response to stress is the increased accumulation of reactive oxygen species (ROS) that leads to oxidative stress. The antioxidant defense system of plant includes enzymatic (ascorbate peroxidase, catalase, glutathione reductase, peroxidase, superoxide dismutase) and non-enzymatic mediators (ascorbic acid, b-carotene, glutathione, polyphenols, proline. atocopherols). Changes in plant biochemical pathways, with an emphasis on antioxidants, can significantly change their biopotential for future human and animal use.

This Special Issue focuses on the plant antioxidant system and its response to stress. The goal is to gain an insight into changes in the nutritional value and biological activity of plants that are exposed to stress and are used in human and animal nutrition. Original research articles and reviews are welcome.



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Message from the Editor-in-Chief

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