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Plant Stress Signaling and Adaptation to Fast Changes in Environmental Conditions

Guest Editors:

Dr. Lyubov Yudina

Lobachevsky State University of Nizhni Novgorod, Nizhny Novgorod, Russia

Dr. Vladimir Sukhov

Department of Biophysics, N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod 603022, Russia

Dr. Ekaterina Sukhova

Department of Biophysics, N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod 603022, Russia

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Message from the Guest Editors

Dear Colleagues,

Adverse changes in environmental factors (e.g., light intensity, temperature, water content, or mechanical actions) ranging in widely time intervals are the essential characteristic of a plant life. Activation of mechanisms of a plant stress signaling is a necessary stage connecting actions of environmental factors and adaptive responses of plants. There are different spatial levels of the stress signaling in plants (from a cell level to a level of whole organism); these signals can be based on Ca2+, H+, and K+ fluxes, ROS production, hydraulic waves, electrical responses, synthesis of phytohormones, and other processes. Detailed investigations of phenomenology of these signals, revealing mechanisms of their forming and physiological processes, influence on analysis interactions between these signals in induction of adaptation responses of plants, and development of new methods of plant monitoring based on this stress signaling are topical problems of plant physiology. This Special Issue of Plants will highlight the all aspects of the stress signaling in plants under fast changes in environmental factors.













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Prof. Dr. Dilantha FernandoDepartment of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

Message from the Editor-in-Chief

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