Special Issue

Plant Stress Signaling and Adaptation to Fast Changes in Environmental Conditions

Message from the Guest Editors

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 influence on physiological processes, analysis of 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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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

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