Special Issue

Defense Strategies of Cereals Affected by Abiotic and Biotic Stresses

Message from the Guest Editors

In order to survive adverse conditions and continue growth and development, cereal plants, exposed to abiotic or biotic stressors, quickly and precisely recognize external stimuli. Moreover, from the agronomic point of view, it is important in which stage of cereal development the stress factor acts, which may undoubtedly affect the quantity and quality of cereal grain yield in the future. Cereal plants' responses to environmental factors are extremely complex. They can be observed at various levels of plant organization, from changes in the activity of basic biochemical processes such as respiration, and photosynthesis, to morphological and anatomical changes in plant organs. Biochemical changes are preceded by the activation of an efficient signaling system which includes hormones, and other molecules, such as reactive oxygen species (ROS), reactive nitrogen species (RNS), and hydrogen sulphide (H2S).

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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.

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