Special Issue

Chloroplast and Stress Signaling

Message from the Guest Editors

Photosynthesis is inarguably the most important biological processes on earth, and chloroplast is the plant organelle that conducts photosynthesis. However, recent studies have indicated that chloroplasts suffered from stress conditions (e.g. high light, drought, low/high temperature, nutrient limitation, pathogen infection) produce specific signals and regulate the expression of nucleus genes. Meanwhile, stressed chloroplast also elicits posttranslational modifications including autophagy, budding or even degradation. Thus, chloroplasts are not only centers of plant metabolism, but also sensors of environmental stresses. This special issue focuses on the role of chloroplast in sensing and transmitting stress signals as well as its responses to environmental stresses.

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