Special Issue

Mechanism of Phytohormones Regulating Crop Root Development and Stress Tolerance

Message from the Guest Editors

Global climate change is increasing the frequency and severity of stress, thus threatening food production. Plants have evolved to cope with these stresses by triggering growth and development changes, and phytohormones act as all-encompassing regulators in this process. Roots are fundamentally important for growth and development as they anchor the plant to its growth substrate, facilitate water and nutrient uptake from the soil, and sense and respond to environmental signals such as biotic and abiotic stresses. Upon exposure to stress, roots change their architecture to help plants survive under stressful conditions. Thus, root plasticity is a good model for studying plant response to stressful environments, and more and more scientists believe that modulating root growth and development provides a useful approach to improve plant stress tolerance without yield penalties. Research on phytohormones in plant root development and stress tolerance has been intensively carried out. This Special Issue of Plants aims to bring together inspiration from multiple research studies and highlight the function of phytohormones in crop root development and stress tolerance.

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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.

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