Special Issue

Mastering Hormone Regulation to Boost Crop Resilience Against Climate Change

Message from the Guest Editors

Plant hormones play a key role in plant acclimation to environmental stress. While efforts have been made to breed crops with improved stress tolerance through hormone regulation, these often result in yield reductions. However, under mild stress conditions, productivity has sometimes increased. Hormone regulatory networks that adjust gene expression in response to developmental and environmental signals are complex, varying between species and across spatial and temporal scales.

This Special Issue aims to uncover the mechanisms of hormonal regulation in crops under environmental stress and identify sustainable crop management techniques in a changing climate. We welcome submissions on new roles of plant hormones under stress; new interactions and feedback loops among hormones, including local and/or systematic plant hormone communication under stress conditions; breeding programs that enhance hormone regulation leading to improved stress tolerance and resilience; and the identification of new regulatory factors in hormone signaling. We also encourage studies on traditional or local crop cultivars.

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