Special Issue

Regulation of Nanomaterials in Crop Growth and Physiology Under Abiotic Stress

Message from the Guest Editors

The application of nanomaterials in agriculture has emerged as a revolutionary approach to enhance crop growth and resilience, particularly under abiotic stress conditions such as heavy metals, drought, salinity, and extreme temperatures. This Special Issue's primary aim is to explore nanomaterials' regulatory mechanisms in crop growth and physiology under various abiotic stress conditions. We seek to provide a comprehensive platform for researchers to present their latest findings and innovative approaches in this rapidly evolving field. This Special Issue will cover the synthesis and characterization of nanomaterials, their interaction with plant systems, and the underlying molecular and physiological mechanisms that confer stress tolerance. We solicit original research articles, reviews, and case studies that address topics such as the development of novel nanomaterials, their application in crop management under stress conditions, and the elucidation of their regulatory pathways in plants. This Special Issue aims to gather high-quality papers that push the boundaries of current knowledge and foster advancements in the sustainable use of nanotechnology in agriculture.

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