Special Issue

Nitric Oxide and Reactive Species in Plant Physiology and Pathology

Message from the Guest Editor

Nitric oxide (NO) and reactive oxygen species (ROS) are now recognized as fundamental signaling molecules in plant biology, governing a wide spectrum of physiological and metabolic processes. Their tightly regulated interplay determines redox homeostasis, modulates cellular signaling cascades, and influences transcriptional and post-translational control in both physiological and stress conditions. Emerging evidence highlights that NO and ROS act synergistically or antagonistically to modulate hormonal signaling, ion balance, and antioxidant defense, thereby shaping plant adaptation to salinity, drought, heat, and pathogen attack. This Special Issue, "Nitric Oxide and Reactive Species in Plant Physiology and Pathology," welcomes original research and comprehensive reviews that elucidate the biochemical, molecular, and physiological roles of NO, ROS, and RSS. Studies exploring their crosstalk with phytohormones, signaling pathways, and plant defense systems are particularly encouraged.

Guest Editor

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

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