Special Issue

Plant Responses to Internal Nitrogen Status

Message from the Guest Editor

Nitrogen fertilization rapidly changes the expression of many genes in roots, suggesting that nitrogen compounds act as signaling molecules. Many efforts have been made in elucidating how plant roots sense and respond to external nitrogen sources, i.e., nitrate, ammonium, and organic nitrogen compounds. They have succeeded in identifying the molecular components including transceptors, transcription factors, kinases, phytohormones, and peptide signals. These components elaborately regulate nitrogen uptake and assimilation and thereby facilitate the accumulation of nitrogen sources and their assimilated nitrogen compounds in different parts of the plant body. The resultant changes in internal nitrogen status trigger further , albeit little understood, responses by some mechanisms. This Special Issue will focus on recent progress which addresses the questions of what nitrogen compounds function as nitrogen status signals, where/how they are monitored, how nitrogen status signaling interacts/integrates with the signaling arising from external nitrogen, and how the nitrogen status alters molecular and physiological responses to the other nutrients or environmental stresses.

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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