

Special Issue

Advances in Nitrogen Nutrition in Plants

Message from the Guest Editor

Nitrogen is an essential major element for all living things because N is a constituent element in amino acids, proteins, nucleic acids, and other important biomolecules. Animals, including humans, cannot assimilate the inorganic N compounds, so they depend on the organic nitrogen compounds originally assimilated by plants. Most terrestrial plants absorb nitrate or ammonium in soils, but the availability of N often restricts plant growth and crop yield. Plants cannot fix atmospheric N₂ by themselves, but some plants can use N₂ fixed by nitrogen-fixing symbiotic bacteria. An understanding of the processes of N absorption, transport, and assimilation in plants is fundamental to improving plant characteristics and agricultural practices to increase crop yield and quality. Much remains to be discovered in the field of N nutrition in plants, such as the sensing of N, regulation of N uptake, transport, and assimilation, etc. We will highlight the recent advances in N nutrition in plants, including N absorption, assimilation, transport, and protein synthesis in sink organs.

Guest Editor

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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, and 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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