

Special Issue

Molecular Mechanism of Plant Mineral Nutrient

Message from the Guest Editors

Plant mineral nutrition plays an important role in the health of plants and humans. Over the past few decades, the study of plant mineral nutrition has transformed from a predominantly applied field to a fundamental dissection of molecular mechanisms. This Special Issue will delve into the cutting-edge research and revelations that unveil the intricate molecular mechanisms of nutrient sensing, uptake, transport, and homeostasis in plants. It unravels the complex system of ion transporters and the regulatory networks orchestrating nutrient-responsive gene expression, spanning local and systemic signaling levels. Our collection of articles offers a comprehensive overview of this crucial aspect of plant biology. These insights have significant implications for sustainable agriculture, global food security, and our comprehension of how plants adapt to diverse environments. The knowledge generated can pave the way for strategies to develop crops with improved mineral use efficiency, thus mitigating fertilizer pollution of underground water systems through runoff. Join us in exploring the frontier of plant mineral nutrition for a greener, more nourished world.

Guest Editors

Dr. Cankui Zhang

Dr. Jing Huang

Dr. Chao Xia

Deadline for manuscript submissions

closed (20 January 2025)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/190954

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)





Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)



About the Journal

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, 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.

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB
R3T 2N2, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)