

Special Issue

Strategies for Nutrient Use Efficiency Improvement in Plants—2nd Edition

Message from the Guest Editor

Nutrient elements are essential for plant growth and development. However, they are also the limiting factors for grain yield and quality in crops. Therefore, understanding how plants respond to environmental nutrient levels to identify appropriate approaches and strategies to promote root uptake, root-to-shoot translocation, and the distribution of nutrients in plants—ultimately, to improve nutrient use efficiency—is quite meaningful for crop yield and quality. In this Special Issue, we welcome articles including original research papers, perspectives, opinions, and reviews that focus on approaches and strategies for nutrient use efficiency improvement in plants. These approaches and strategies may include fertilizer management, the selection and breeding of high nutrient-use-efficient species and varieties, crop system change, as well as analyses of the physiological and molecular responses of plants to low and high nutrient conditions, the gene functions involved in nutrient uptake, translocation, and distribution in plants, and so on.

Guest Editor

Dr. Hongmei Cai

College of Resources and Environment, Huazhong Agricultural University, Wuhan 430070, China

Deadline for manuscript submissions

31 May 2026



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/245044

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, 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.

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)