



*plants*



an Open Access Journal by MDPI

## Strategies for Nutrient Use Efficiency Improvement in Plants

Guest Editor:

**Dr. Hongmei Cai**

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

Deadline for manuscript  
submissions:

**30 June 2024**

### Message from the Guest Editor

Dear Colleagues,

Nutrient elements are essential for plant growth and development. They are also the limiting factors for grain yield and quality in crops. Today, intensive high-yield agriculture is highly dependent on the addition of fertilizers, such as nitrogen, phosphorus, potassium, as well as other microelements. However, further increases in fertilizer application are unlikely to be as effective at increasing yields, as efficiency declines at higher levels of addition. 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.



[mdpi.com/si/164383](https://mdpi.com/si/164383)

# Special Issue



# plants



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Dilantha Fernando**

Department of Plant Science,  
University of Manitoba, Winnipeg,  
MB R3T 2N2, Canada

## 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.

## 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 (*Plant Science*)

## Contact Us

---

*Plants* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/plants](http://mdpi.com/journal/plants)  
[plants@mdpi.com](mailto:plants@mdpi.com)  
[X@Plants\\_MDPI](https://twitter.com/Plants_MDPI)