

## Special Issue

# Management and Efficient Utilization of Water and Fertilizer in Field Crops—3rd Edition

### Message from the Guest Editors

Due to the global rise in population and climate change, food security and production have become major concerns. Water and fertilizer are two of the main limited resources and are vital elements for agricultural production, especially in arid and semi-arid regions. However, there have been few studies on water–fertilizer coupling’s effects on plant–soil relationships, crop growth monitoring, and yield prediction. Access to a well-coordinated water and fertilizer supply promotes growth, leaf photosynthetic capacity, grain and forage yield, quality, and water and fertilizer use efficiency, as well as having production benefits. This Special Issue invites original research, technology reports, modeling approaches and methods, opinion articles, perspectives, reviews, and mini reviews on water and fertilizer management in plant–soil systems. This is the Third Edition of our Special Issue series “Management and Efficient Utilization of Water and Fertilizer in Field Crops”.

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### Guest Editors

Dr. Shicheng Yan

Prof. Dr. Junliang Fan

Dr. Zhou Zhang

Dr. Chao Zhang

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### Deadline for manuscript submissions

31 August 2025



## Plants

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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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### Editor-in-Chief

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