

## Special Issue

# Management and Efficient Utilization of Water and Fertilizer in Field Crops

### Message from the Guest Editors

Due to the global rise in population and climate change, food security and production have been major concerns for the world. The integrated management of water and fertilizer can affect soil water and nutrient distributions, thereby altering the water- and nutrient-use patterns, which can further affect the grain and forage yield and economic benefits of field crops. Due to the different cropping systems in the world, the distribution and movement of water and nutrients are complex.

However, there have been few studies on water and fertilizer movement mechanisms in different cropping systems and on water–fertilizer coupling effects on plant–soil relationships, crop growth monitoring and yield prediction. Therefore, a well-coordinated water and fertilizer supply promotes the growth, leaf photosynthetic capacity, grain and forage yield, quality, water and fertilizer use efficiency as well as production benefits. This Special Issue invites original research, technology reports, modelling approaches and methods, opinion articles, perspectives, invited reviews, and minireviews on water and fertilizer management in plant–soil systems.

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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

closed (20 June 2023)



## Plants

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*Plants*

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

[plants@mdpi.com](mailto:plants@mdpi.com)

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

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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, 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

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

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