

Special Issue

Advances in Crop Irrigation System and Management

Message from the Guest Editors

The growing global demand for food, coupled with increasing water scarcity and the impacts of climate change, places unprecedented pressure on irrigated agriculture. Traditional irrigation methods are often insufficient to meet these challenges, necessitating a paradigm shift towards more intelligent, efficient, and sustainable water management systems. True advancement lies not only in developing new technologies but also in their integration with deep ecological and physiological understanding. This Special Issue, "Advances in Crop Irrigation System and Management", aims to showcase research at the forefront of this transformation. We invite contributions that connect cutting-edge engineering and data science with fundamental plant biology and soil science. We are particularly interested in studies that explore precision irrigation through AI and IoT, innovative strategies like controlled deficit irrigation, the safe use of non-conventional water resources, and the physiological and molecular responses of plants to different irrigation regimes

Guest Editors

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Deadline for manuscript submissions

20 March 2026



Plants

an Open Access Journal
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Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/251904

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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.

Editor-in-Chief

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