Special Issue

Research on the Construction of Water-Saving Planting Systems and Supporting Technology

Message from the Guest Editor

The inefficient use of water resources has hindered the sustainable development of agriculture. Consequently. enhancing irrigation efficiency has become an imperative issue in contemporary agricultural development. Several urgent issues need to be solved: firstly, an improvement in irrigation technology, which involves the use of advanced moisture sensors and automated control systems to enable precise measurement and accurate water supply; and secondly, enhancing soil water retention capacity through measures like soil improvement and cover protection, reducing water evaporation and seepage. Additionally, research on the selection and cultivation of plant varieties is necessary to adapt to growth requirements in arid conditions. Finally, research on agricultural management techniques, including appropriate fertilization, pest and disease control, and soil conservation, should also be conducted.

In this Special Issue, we aim to present the current knowledge on reducing agricultural water usage while simultaneously ensuring crop yield and quality through the application of advanced technological approaches.

Guest Editor

Dr. Yunpeng Zhou

College of Water Resources and Civil Engineering, China Agricultural University, Beijing 100083, China

Deadline for manuscript submissions

closed (25 July 2024)



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/194818

Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

mdpi.com/journal/agronomy





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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), PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)

