

Special Issue

Water-Saving Irrigation Technology and Strategies for Crop Production

Message from the Guest Editors

With the global climate change and population growth, the contradiction between the shortage of water resources and the increase in food demand has intensified. Agricultural irrigation needs to focus on the application of advanced water-saving irrigation technology and management strategies to improve agricultural water use efficiency and grain production capacity. In this context, it is particularly urgent to quantitatively reveal the response of processes driving crop water-saving and yield increase to irrigation technology and management strategies, aiming to put forward ways to improve crop yield and water use efficiency. This Special Issue invites relevant results of field measurement, model simulation, and macro strategy research on the following topics:

- Water-saving irrigation scheduling and management strategy;
- Soil water, fertilizer, salt, gas, and heat coupling and field energy balance under water-saving irrigation technology;
- The physiological response processes of evapotranspiration and crop growth under water-saving irrigation technology;
- Technology and strategies to improve crop yield and water use efficiency in agricultural irrigation.

Guest Editors

Prof. Dr. Jiandong Wang

Institute of Environment and Sustainable Development in Agriculture,
Chinese Academy of Agricultural Sciences, Beijing 100081, China

Dr. Yanqun Zhang

Department of Irrigation and Drainage, China Institute of Water
Resources and Hydropower Research, Beijing 100048, China

Deadline for manuscript submissions

closed (25 June 2022)



Agriculture

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Impact Factor 3.6
CiteScore 6.3



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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

Editor-in-Chief

Prof. Dr. Les Copeland
Sydney Institute of Agriculture, School of Life and Environmental
Sciences, The University of Sydney, Sydney, NSW 2006, Australia

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