

Special Issue

Water-Saving in Agriculture: From Soil to Plant

Message from the Guest Editors

The shortage of water resources is a hot issue of interest in the world today. Previous research on water-saving agriculture has mainly focused on the increase and storage of soil water in the crop root layer and the reduction of evaporation and consumption in the tillage and cultivation of farmland, irrigation engineering, and agronomic water-saving technology. However, with the development of research on the soil–crop water relationship, more and more research has been concentrated on the exploitation of plant physiological water-saving potential, the improvement of water and nitrogen use efficiency under fertigation technology, and the change in soil greenhouse gas emissions after changes in soil water supply. This Special Issue focuses on how soil water regulation and leaves sprayed with exogenous substances affect transpiration, photosynthesis, plant growth, and water use efficiency and how irrigation schedules and methods, irrigation water quality, and drop fertigation technology affect farmland water and nitrogen use efficiency and soil greenhouse gas emissions.

Guest Editors

Prof. Dr. Jingsheng Sun

Chinese Academy of Agricultural Sciences, Beijing, China

Prof. Dr. Quanqi Li

College of Water Conservancy and Civil Engineering, Shandong Agricultural University, Tai'an, China

Dr. Guangshuai Wang

Institute of Farmland Irrigation, Chinese Academy of Agricultural Sciences, Xinxiang 453002, China

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

Prof. Dr. Leslie A. Weston

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

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