



an Open Access Journal by MDPI

Coupling Effect of Water and Fertilizer on Crops in Salinized Soil

Guest Editors:

Prof. Dr. Haijun Liu

College of Water Sciences, Beijing Normal University, Beijing, China

Prof. Dr. Quanzhong Huang

Chinese-Israeli International Center for Research and Training in Agriculture, China Agricultural University, Beijing, China

Prof. Dr. Xiaobin Li

Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Scicences, Beijing, China

Deadline for manuscript submissions: closed (31 July 2023)

Message from the Guest Editors

Coupling water management and fertilizer application could improve the soil water and root zone nutrient environment, thus mitigating the salt's effect on the plant growth and improving crop yield and food quality. The optimization of the combination modes of water and fertilizer should be systematically analyzed regarding the crops' responses to irrigation water quality, soil chemical and physical properties, irrigation methods and irrigation scheduling, drainage practice, fertilizer type and fertilizer application strategy in salinized soil. Field investigations, mathematical models and laboratory simulations are most frequently used in the research.

In this Special Issue, we want to explore recent advances in theories and technologies on the coupled effect of water and fertilizer on crops in salinized soil, based on laboratory experiments, field investigations, and physical models. Moreover, we welcome the submission of papers regarding the responses of crops in salinized soil to agronomy practices and climate change, as well as studies on soil and water environmental quality in saline soil–crop systems.



mdpi.com/si/157037







an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST

ECOLAB, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, campus ENSAT, Auzeville Tolosane, France

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. Water invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision

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), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Water Resources*) / CiteScore - Q1 (*Water Science and Technology*)

Contact Us

Water Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/water water@mdpi.com X@Water_MDPI