



Impacts of Fertilization and Irrigation on Soil Nitrogen Cycling and Crop Nitrogen Utilization

Guest Editors:

Prof. Dr. Xuebin Qi

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

Dr. Ping Li

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

Dr. Wei Guo

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

Deadline for manuscript
submissions:

30 December 2024

Message from the Guest Editors

Dear Colleagues,

Water and nitrogen are two essential substances that play an indispensable role in promoting normal crop growth. In recent years, scientists across the globe have conducted extensive research on the mechanism and application technology of crop water and fertilizer regulation.

However, due to the numerous impacts of environmental changes, global water shortage have only further intensified, and the ecological and environmental problems caused by unreasonable fertilization have become increasingly severe. These issues pose a serious threat to food security and sustainable development of agriculture. Thus, it is of dire necessity to address the challenges associated with agricultural water and soil resource bottlenecks, and further improve crop water and nitrogen utilization efficiency to ensure food security.

Given this context, this Special Issue aims to collate research addressing the impacts of fertilization and irrigation on soil nitrogen cycling and crop nitrogen utilization, as well as highlighting the novel developments in the fields of irrigation and fertilization.





an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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, RePEc, and other databases.

Journal Rank: JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

Contact Us

Agriculture Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
X@AgricultureMdpi