



## Nutrient Cycling and Environmental Effects on Farmland Ecosystems

Guest Editors:

**Prof. Dr. Wenxu Dong**

Key Laboratory of Agricultural  
Water Resources, Hebei Key  
Laboratory of Soil Ecology,  
Center for Agricultural Resources  
Research, Institute of Genetics  
and Developmental Biology,  
Chinese Academy of Sciences,  
286 Huaizhong Road,  
Shijiazhuang 050021, China

**Dr. Anna Walkiewicz**

Department of Natural  
Environment Biogeochemistry,  
Institute of Agrophysics, Polish  
Academy of Sciences,  
Doświadczalna 4, 20-290 Lublin,  
Poland

Deadline for manuscript  
submissions:

**31 October 2024**

### Message from the Guest Editors

Nutrient cycling in farmland is a vital safeguard for soil vitality and agricultural production, as well as a key factor in ecosystem balance. The excessive use of fertilizers, improper waste management, and reduced nutrient recycling have led to nutrient imbalances, water pollution, greenhouse gas emissions, and biodiversity loss. Understanding the intricate interplay between nutrient cycling and environmental effects is crucial for addressing these challenges and promoting environmentally friendly agricultural systems. Innovative research that explores the complex interactions between nutrient cycles, soil health, water quality, greenhouse gas emissions, and biodiversity conservation will form the core of this Special Issue.

This Special Issue aims to explore the mechanisms and processes of nutrient cycling in farmland ecosystems, and identify innovative approaches that promote sustainable nutrient management while minimizing negative environmental consequences. This Special Issue solicits original research articles, reviews, case studies, theoretical discussions, and policy papers addressing sustainable nutrient management in agriculture.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Leslie A. Weston

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

## 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.

## 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 (Plant Sciences) / CiteScore - Q1 (Agronomy and Crop Science)

## Contact Us

---

*Agronomy* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

mdpi.com/journal/agronomy  
agronomy@mdpi.com  
X@Agronomy\_Mdpi