

## Special Issue

# Advances in Tillage Methods to Improve the Yield and Quality of Crops

### Message from the Guest Editors

Tillage practices play a prominent role in regulating soil structures, increasing soil fertility and water availability, and improving the yield and quality of crops. We are therefore planning a Special Issue of *Agronomy* on “Advances in Tillage Methods to Improve the Yield and Quality of Crops”, which will focus on research and advancements in tillage methods and agriculture management that promote sustainable agriculture and improvements to soil health. This Special Issue invites original research, model simulations, and applications and reviews of tillage methods including, but not limited to, the following topics:

- No-till subsoiling practices, ridge tillage, conservation tillage, etc.;
- Straw mulching and plastic film mulching practices;
- Effects of tillage methods on soil micro-environments and soil fertility;
- Tillage effects on plant growth, yields, and water use efficiency;
- Model simulations and applications to determine the effects of various tillage methods on WUE and crop production.

---

### Guest Editors

Dr. Jiatun Xu

College of Water Resources and Architectural Engineering, Northwest A&F University, Yangling 712100, China

Prof. Dr. Xiaobo Gu

Key Laboratory of Agricultural Soil and Water Engineering in Arid and Semiarid Areas, Ministry of Education, Northwest A&F University, Yangling 712100, China

---

### Deadline for manuscript submissions

closed (31 July 2025)



## Agronomy

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 6.7



[mdpi.com/si/210313](https://mdpi.com/si/210313)

*Agronomy*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[agronomy@mdpi.com](mailto:agronomy@mdpi.com)

[mdpi.com/journal/  
agronomy](https://mdpi.com/journal/agronomy)





# Agronomy

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 6.7



[mdpi.com/journal/  
agronomy](https://mdpi.com/journal/agronomy)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Leslie A. Weston

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

---

### 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), GEOBASE, PubAg, AGRIS, and other databases.

#### Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)