



## The Impact of Mulching on Crop Production and Farmland Environment

Guest Editors:

**Dr. Jixiao Cui**

Institute of Agricultural  
Environment and Sustainable  
Development, Chinese Academy  
of Agricultural Sciences, Beijing  
100081, China

**Prof. Dr. Wen-Qing He**

Institute of Agricultural  
Environment and Sustainable  
Development, Chinese Academy  
of Agricultural Sciences, Beijing  
100081, China

**Dr. Yingxing Zhao**

Crop Research Institute,  
Shandong Academy of  
Agricultural Sciences, Jinan  
250100, China

Deadline for manuscript  
submissions:

**30 June 2024**

### Message from the Guest Editors

Mulching is an important agricultural production measure that is beneficial for promoting crop yield, reducing water use efficiency, controlling weeds and pests, and preventing soil erosion. Various mulching materials and mulching modes have different impacts on crop production and the soil environment.

However, the inappropriate use of mulching, especially plastic film mulching, can lead to negative environmental impacts. Residual plastic film in the soil can damage its granular structure, reduce its permeability, and worsen its physical and chemical properties, directly affecting crop growth.

Therefore, this Special Issue seeks to publish related research on (1) the impacts of various mulching materials and modes on crop production, including but not limited to crop yield, water use efficiency, and nutrient recycling; and (2) the active and negative impacts of mulching on the farmland environment, including but not limited to greenhouse gas emissions, active nitrate leaching, ecosystem services, and microplastic pollution.





an Open Access Journal by MDPI

## **Editor-in-Chief**

### **Prof. Dr. Peter Langridge**

School of Agriculture, Food and  
Wine, University of Adelaide,  
Urrbrae, SA 5064, 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 (*Agronomy*) / CiteScore - Q1 (*Agronomy and Crop Science*)

## **Contact Us**

---

*Agronomy* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/agronomy](http://mdpi.com/journal/agronomy)  
[agronomy@mdpi.com](mailto:agronomy@mdpi.com)  
[X@Agronomy\\_Mdpi](https://twitter.com/Agronomy_Mdpi)