

## Special Issue

# Current Research on Hyperspectral and Multispectral Imaging and Their Applications in Precision Agriculture

### Message from the Guest Editors

Agriculture systems are facing a variety of stresses, such as diseases and insect pests, drought, heat, cold, frost, flooding, excessive fertilization, and environmental pollution, due to ever-increasing human interference and ongoing climate change. It is incredibly necessary to accurately and rapidly identify and quantify these stresses to support decision making. The rapid development of hyperspectral and multispectral imaging (HSI and MSI) techniques has greatly facilitated classification, monitoring, identification, diagnosis, and assessment in agriculture. Nevertheless, there are still many urgent and critical issues that need to be addressed, such as small-sample classification, spectral dimensionality reduction, sensitive spectral band selection, multiple stress identification, growth condition monitoring, early disaster warning, etc. This Special Issue focuses on exchanging knowledge and promoting development related to precision agriculture based on HSI and MSI techniques, thus facilitating their applications and demonstrations.

### Guest Editors

Dr. Jinling Zhao

National Engineering Research Center for Agro-Ecological Big Data Analysis & Application, Anhui University, Hefei 230601, China

Dr. Yingying Dong

Aerospace Information Research Institute, Chinese Academy of Sciences, Beijing 100094, China

### Deadline for manuscript submissions

closed (1 September 2022)



## Agronomy

an Open Access Journal  
by MDPI

Impact Factor 3.3  
CiteScore 6.2



[mdpi.com/si/95548](https://mdpi.com/si/95548)

*Agronomy*  
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 3.3  
CiteScore 6.2



[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), PubAg, AGRIS, and other databases.

#### Journal Rank:

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