# Special Issue

# Revolutionizing Crop Management: Integrating UAV Technology for Precision Agriculture

# Message from the Guest Editors

Precision agriculture is a modern farming strategy that places emphasis on site-specific crop management to respond to spatial and temporal field variability in crop growth, soils, and environmental conditions. It is made possible through integrating UAV technology for real-time or near-real-time observations and assessments of crop conditions throughout the growing season. UAVs equipped with various sensors allow imaging crops at a canopy level, enabling a fast and convenient field-level quantification and estimation of crop height, stresses, pest occurrence, and crop yield, which enhances the efficiency of decision making and operations compared to conventionally manned field surveys. Based on the above, we initiated a Special Issue in *Agronomy*, which will focus on, among other things, the following:

- The spatial and temporal analysis and zoning of field-level variability with UAVs;
- Combining UAV technology with other methods in precision agriculture;
- Crop sensing with UAV multispectral, hyperspectral, and other sensors;
- Applications of crop management enabled by UAV technology;
- Spray and seeding applications with UAVs.

#### **Guest Editors**

Dr. Biquan Zhao

Department of Biological Systems Engineering, University of Nebraska-Lincoln, Lincoln, NE 68583, USA

Dr. Cengiz Koparan

Department of Agricultural Education, Communications and Technology, Biological and Agricultural Engineering, University of Arkansas, Fayetteville, AR 72701, USA

# Deadline for manuscript submissions

31 March 2026



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/212398

Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

mdpi.com/journal/agronomy





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



# **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 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)

