

## Special Issue

# Advances in Robotic Systems for Precision Orchard Operations

### Message from the Guest Editor

Driven by advancements in artificial intelligence, sensing technologies, and intelligent machinery, precision orchard robotics has evolved from simple automation to complex systems capable of making autonomous decisions. This Special Issue aims to compile cutting-edge research on the development and integration of robotic systems for precision orchard management. We seek to explore innovative solutions that enhance the efficiency, accuracy, and sustainability of fruit production. The scope of this Special Issue encompasses a wide range of technologies, including precision spraying, intelligent weeding, automated pruning, flower and fruit thinning, growth monitoring, pest and disease identification, yield estimation, field survey, remote sensing, and selective harvesting. We encourage submissions that present original research on cutting-edge technologies, such as novel sensor fusion, advanced machine learning algorithms for perception and decision-making, robust robotic manipulation under uncertainty, and seamless multi-robot coordination. Studies on field validation, scalability, and the economic and environmental impacts of these systems are also highly relevant.

---

### Guest Editor

Prof. Dr. Hongjun Wang

College of Engineering, South China Agricultural University, Guangzhou 510642, China

---

### Deadline for manuscript submissions

10 August 2026



## Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/254519](https://mdpi.com/si/254519)

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

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





# Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



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



## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

---

### Editor-in-Chief

Prof. Dr. Les Copeland  
Sydney Institute of Agriculture, School of Life and Environmental  
Sciences, The University of Sydney, Sydney, NSW 2006, 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, RePEc, and other databases.

#### Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)