

## Special Issue

# Precision Agriculture in Intensive Grain Production Systems

### Message from the Guest Editors

Confronting the dual challenges of escalating global food demand and mounting resource and environmental constraints, precision agriculture has emerged as a core pathway for achieving sustainability in grain production systems. This Special Issue aims to present cutting-edge research and innovative applications of precision agriculture in intensive cereal systems, such as wheat, maize, and rice. It will explore the entire agricultural value chain, spanning from field-level sensing and variable-rate technology to farm-scale logistics and comprehensive sustainability assessment. We welcome submissions of original research and review articles on topics including, but not limited to, the following areas:

- Artificial intelligence and machine learning for yield prediction, disease detection, and decision support.
- High-resolution remote and proximal sensing technologies for crop phenotyping and stress monitoring.
- Integration of Internet of Things (IoT) and real-time data streams for autonomous field management.
- Robotics, automation, and smart machinery applied across the full crop cycle.

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### Guest Editors

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### Deadline for manuscript submissions

30 July 2026



## Agronomy

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### Editor-in-Chief

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