

## Special Issue

# AI-Powered UAVs and Imaging Systems for Precision Wheat and Rice Management

### Message from the Guest Editors

The rapid advancement of agricultural digitization and intelligent technologies has opened new avenues for the application of artificial intelligence (AI) in UAV-based imaging systems for crop analysis. This special issue seeks to highlight pioneering research on the innovative use of AI algorithms, remote sensing imaging, and drone technologies in wheat and rice production. Key topics include advanced methods for estimating agronomic parameters such as precision fertilization, pest and disease surveillance, water management, and yield forecasting. Particular emphasis is placed on novel approaches that process drone imagery through AI algorithms and integrate these datasets with crop physiological models to develop intelligent decision-support systems. Furthermore, we encourage studies fostering interdisciplinary collaboration, such as the convergence of computer science with crop management practices. This special issue aspires to provide a platform for academic exchange among global researchers and practitioners, fostering collective efforts toward the sustainable development of food production systems.

### Guest Editors

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### Deadline for manuscript submissions

closed (5 July 2025)



## Agriculture

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## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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### Editor-in-Chief

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