

## Special Issue

# Advanced Image Collection, Processing, and Analysis in Crop and Livestock Management

### Message from the Guest Editors

The integration of imaging technology in agriculture has evolved significantly from basic field photography to sophisticated data collection systems. This Special Issue underscores the value of image-based data in agriculture, providing insights into crop health and livestock management. The focus extends to innovative image analysis techniques that enhance crop and soil monitoring, disease detection, and yield predictions through data from sensors and images. In livestock management, AI-driven image analysis contributes to sophisticated health monitoring and behavioral analytics, enabling strategies such as early illness detection and optimized feeding. The issue further examines the inclusion of RGB, depth, multispectral, and hyperspectral imaging to augment the data quality and utility. Additionally, the value of quick, mobile imaging processes tailored for modern agriculture's fast-paced needs is highlighted, alongside the role of edge-computing in managing the significant 'digitization footprint' that these advanced imaging technologies bring to agricultural management.

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### Deadline for manuscript submissions

closed (30 September 2025)



## Agriculture

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