

## Special Issue

# Combining Machine Learning Algorithms with Earth Observations for Crop Monitoring and Management

### Message from the Guest Editors

We invite contributions that explore the following themes: Geospatial Analysis for Precision Irrigation: Utilizing GeoAI to optimize irrigation strategies by integrating geospatial data, weather patterns, and machine learning to enhance water efficiency and crop yield. Spatial Data Fusion for Agricultural Insights: Methodologies for integrating diverse datasets (e.g., geospatial, weather, soil, and crop information) using advanced data fusion techniques for informed decision-making. Smart Crop Monitoring: Investigating how remotely sensed data, coupled with ML, can revolutionize crop health, growth, and yield prediction. Pest and Disease Detection: Applying GeoAI technologies such as computer vision and machine learning to detect and diagnose crop diseases and pest infestations for early intervention and sustainable pest management. Data-Driven Climate Risk Assessment: Developing predictive models to assess climate risks in precision agriculture, helping farmers mitigate climate-related challenges.

### Guest Editors

Prof. Dr. Gniewko Niedbała  
Dr. Magdalena Piekutowska  
Dr. Sebastian Kujawa  
Dr. Tomasz Wojciechowski

### Deadline for manuscript submissions

closed (25 December 2024)



## Agriculture

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## 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.

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### Editor-in-Chief

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