

## Special Issue

# Application of Machine Learning and Artificial Intelligence in Precision Beekeeping

### Message from the Guest Editors

The integration of machine learning (ML) and artificial intelligence (AI) into precision beekeeping represents a significant advancement in apiculture, addressing the challenges posed by declining bee populations and increasing environmental stressors. Historically, beekeeping has relied on traditional methods, but the emergence of digital technologies has paved the way for more efficient and effective hive management practices. Precision beekeeping utilizes IoT devices and data analytics to monitor individual colonies, enhancing decision-making processes for beekeepers.

This Special Issue aims to explore cutting-edge research that highlights the application of ML and AI in precision beekeeping. We invite contributions that examine innovative technologies for monitoring bee health, optimizing hive conditions, and improving overall productivity. Topics may include real-time data collection through sensors, predictive modeling for disease detection, and automated systems for hive management.

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### Guest Editors

Dr. Tomyslav Sledevič

Prof. Dr. Darius Plonis

Prof. Dr. Artūras Serackis

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### Deadline for manuscript submissions

25 September 2025



## Agriculture

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### 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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