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 (Al) 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 Al 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.

Guest Editors

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Deadline for manuscript submissions

25 February 2026



Agriculture

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Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/218395

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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.

Editor-in-Chief

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