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Precision Agriculture Meets IoT: Advanced Detection Systems for Crop Health

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Message from the Guest Editors

Using the Internet of Things (IoT) can help farmers implement sophisticated sensing systems to monitor crop health remotely and in real-time. Advances in IoT technology have provided new capabilities that can be incorporated into precision agriculture, such as disease detection, monitoring of soil and environmental conditions, and optimization of water and fertilizer use. These systems provide, through remote communication between nodes, enable the farmer to intervene in the field, either automatically or manually using decision-making systems.

These monitoring systems incorporate sensors to collect field data. The data are transmitted to the central nodes where they are analyzed and processed. In some cases, data analysis and processing, which may be carried out using artificial intelligence and machine learning, allow for the timely detection of problems and accurate assessment of crop conditions.

This Special Issue aims to bring together recent developments and applications of the Internet of Things (IoT) and precision agriculture for advanced detection systems in crop health and original research articles and reviews are welcome.