Summary of paper: AI-Based crop Disease Detection Agriculture

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August 19, 2025

Paper Details

- **Title:** AI-Based crop Disease Detection Agriculture
- **Author(s):** Jafar et al.
- **Link:** `https://www.frontiersin.org/journals/plant-science/articles/10.3389/fpls.2024.1356260/full`

1 Summary

The provided text discusses the significant impact of plant infections on crop quality and quantity, particularly in India, a major producer of crops like tomatoes, potatoes, and pepper. It highlights that traditional methods, where farmers visually inspect crops for disease, are often inaccurate and inefficient. This can lead to undetected infections, causing widespread crop decline and reduced yield. To address these challenges, the text proposes the use of computer-aided automated studies, specifically Machine Learning (ML) and Deep Learning (DL). These modern technologies can provide rapid, accurate, and early identification of plant diseases through computerized detection and image processing. The implementation of these AI techniques in agriculture is presented as a way to reduce labor costs, increase time efficiency, and ultimately enhance overall crop quality and yield.