

DISEASE DETECTION IN CROPS USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

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The detection and management of diseases in crops are critical for ensuring agricultural productivity and food security. Advances in Artificial Intelligence (AI) and Machine Learning (ML) have demonstrated significant potential in transforming agricultural disease detection methods in recent times. This review offers a thorough examination of the current state of research on disease detection in crops using AI and ML. One of the most difficult problems in agriculture is the early detection of plant diseases. Increasing agricultural production requires early disease identification. This problem has been fixed by using an automated approach for diagnosing plant illnesses, which makes use of machine learning and deep learning techniques. On big agricultural farms that is advantageous since it cuts down on monitoring time. The dataset "Plant Village" contains 17 common ailments, including four bacterial illnesses, two viral illnesses, two mould illnesses, and one mite-related sickness. Disease. Images of undamaged leaves from a total of 12 crop species are also displayed.