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Plant Disease Detection Using Image Processing and Machine Learning

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Abstract: One of the critical and tedious assignments in agricultural practices is the detection of diseases on vegetation. Agricultural production is very important in today's economy because plant diseases are common, and early detection of plant diseases is important in agriculture. Automatic detection of such early diseases is useful because it reduces control efforts in large productive farms. Using digital image processing and machine learning algorithms, this paper presents a method for plant disease detection. Detection of the disease occurs on different leaves of the plant. The proposed system for plant disease detection is simple and computationally efficient, requiring less time than learning-based approaches. The accuracy of various plant and foliar diseases is calculated and presented in this paper.

Keywords: plant diseases, machine learning, image processing, deep learning

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