

# AgroGuide Plants Diseases Detection Using Image Processing

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**Abstract:** *When plants and crops are suffering from pests and diseases it affects the agricultural production and overall development of the country. Often, farmers or specialists monitor plants for healthiness and diagnose diseases. Diagnosis of plant diseases is key to preventing crop losses and agricultural product value. Plant Disease studies refer to studies of the visible patterns observed in a plant. It requires tremendous amount of work, expertise in the plant diseases, and this method is often time processing, expensive and inaccurate. Automatic identification of diseases using image processing algorithms provide fast and accurate results. This paper tells how the techniques and methods used earlier by various researchers in this field. Accuracy of their models and comparative summary is shown below. Also this paper tell how by using this technique farmer can detect plant diseases in his early phase that causes he can control it and grow their production. In that paper we describe various feature that we implement in our application.*

**Keywords:** Artificial Intelligence, Machine Learning, Deep Learning, Convolutional Neural Networks, Image Processing, Image Classification, Pest Detection, Plant Diseases, Farmers, Image Datasets, InceptionV3.

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