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An Automatic Approach for Leaf Disease Detection using Deep Learning Algorithms

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Abstract: *India is an agriculture country and above seventy percent of our population depends on the agriculture. One-third of our national income comes from agriculture. Agriculturalists are facing loss due to various crop diseases and it becomes tedious for cultivators to monitor the crop regularly when the cultivated area is huge. So the plant disease detection plays an important role in agriculture field. Timely and accurate disease detection is important for the loss caused due to crop diseases which affects adversely on crop quality and yield. Early diagnosis and intervention can reduce the loss of plant due to disease and reduce the unnecessary drug usage. Earlier, automatic detection of plant disease was performed by image processing. For disease detection and classification, the machine learning mechanism and image processing tools are proposed. Crop disease will be detected through various stages of image processing such as image acquisition, image pre-processing, image feature extraction, feature classification, disease prediction and fertilizer recommendation.*

Keywords: Classification, Feature Extraction, Image Global Features, Image Processing, Machine Learning

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