

Plant Disease Detection Using CNN: A Review

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Abstract: *Agricultural productivity is a key component of Indian economy. Therefore the contribution of food crops and cash crops is highly important for both the environment and human beings. Every year crops succumb to several diseases. Due to inadequate diagnosis of such diseases and not knowing symptoms of the disease and its treatment many plants die. This study provides insights into an overview of the plant disease detection using different algorithms. A CNN based method for plant disease detection has been proposed here. Simulation study and analysis is done on sample images in terms of time complexity and the area of the infected region. It is done by image processing technique. A total of 15 cases have been fed to the model, out of which 12 cases are of diseased plant leaves namely, Bell Paper Bacterial Spot, Potato Early Blight, Potato Late Blight, Tomato Target Spot, Tomato Mosaic Virus, Tomato Yellow Leaf Curl Virus, Tomato Bacterial Spot, Tomato Early Blight, Tomato Late Blight, Tomato Leaf Mold, Tomato Septoria Leaf Spot and Tomato Spider Mites and 3 cases of healthy leaves namely, Bell Paper Healthy, Potato Healthy and Tomato Healthy. Test accuracy is obtained as 94.80%. Different performance matrices are derived for the same.*

Keywords: Powdery Mildew, Downy Mildew, Blight etc.

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