

## **ABSTRACT**

Now we are living in an era where the problem regarding agriculture is a major issue nowadays. The major problem in crop growth is we have to take care of the health of the plants and crops. Agriculture is one field which has a high impact on life and economic status of human beings. Improper management leads to loss in agricultural products. This project is to detect the plant leaf disease detection using the Densenet121 neural network. This can easily detect the disease of plant leaf. First select the plant village dataset and apply into pre-processing method. It is very useful to identify the disease, then it will process into model selection and classification. In classification it will train the dataset and the disease can analyze and show the status of plant leaf that is healthy or unhealthy. The disease can be detected by the image of plant leaf. This work utilizes an open dataset of unhealthy and solid plants, where Densenet121 is used to characterize crop species and to detect the sickness status of different distinct classes. The predicted result was based on accuracy.