

## Literature Survey

Team Id : **PNT2022TMID51948** Project Name: **Fertilizer Recommendation System for Disease Prediction**

Authors & year	Goals/Aim	Future perspectives
[1] Savita N. Ghaiwat et al., Detection and classification of plant leaf diseases using image processing techniques: a review (2014)	Review of ANN, SVM, PNN, SELF ORG MAPS and fuzzy logic	In neural network it's difficult to understand structure of algorithm and to determine optimal parameters when training data is not linearly separable
[2] Prof. Sanjay B. et al., Agricultural plant leaf disease detection using image processing (2013)	Vision-based detection algorithm with masking the green-pixels and color cooccurrence method	NN's can be used to increase the recognition rate of classification process
[3] Mrunalini R. et al., An application of K-means clustering and artificial intelligence in pattern recognition for crop diseases (2011)	K-means clustering algorithm with neural networks for automatic detection of leaves diseases	Artificial neural network and fuzzy logic with other soft computing technique can be used to classify the crop diseases
[4] S. Arivazhagan et al., Detection of unhealthy region of plant leaves and classification of plant leaf diseases using texture features (2013)	Color co-occurrence method with SVMclassifier	The training samples can be increased and shape feature and color feature along with the optimal features can be given as input condition of disease identification
[5] Anand H. Kulkarni et al., Applying image processing technique to detect plant diseases (2012)	Gabor filter for feature extraction and ANN classifier for classification	Recognition rate can be increased
[6] Sabah Bashir et al., Remote area plant disease detection using image processing (2012)	Texture segmentation by co-occurrence matrix method and K-means clustering technique	Bayes classifier, K-means clustering and principal component classifier can be used to classify various plant diseases
[7] Smita Naikwadi et al., Advances in image processing for detection of plant diseases (2013)	The color co-occurrence texture analysis method was developed through the use of spatial gray-level dependence matrices	Better result of detection can be obtained with the large database and advance feature of color extraction
[8] Piyush Chaudhary et al., Color transform based approach for disease spot detection on plant leaf (2012)	Median filter is used for image smoothing and threshold can be calculated by applying Otsu method	Disease spot area can be computed for assessment of loss in agriculture crop. Disease can be classified by calculating dimensions of disease spot
[9] Arti N. Rathod et al., Image processing techniques for detection of leaf disease (2013)	Survey of different techniques for leaf disease detection	Development of hybrid algorithms & neural networks in order to increase the recognition rate of final classification process