

# A Review on ML and DL Techniques in Detecting Plant Diseases

Ms. R. K. Ramya<sup>1</sup> and Dr. C. Meenakshi<sup>2</sup>

Research Scholar, Department of Computer Application<sup>1</sup>

Associate Professor, Department of Computer Application<sup>2</sup>

Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamil Nadu, India

**Abstract:** *In Our country, Agriculture is the main occupation of the people. Plant diseases are a major problem today as they affect the quality and production of agricultural production. Most plant-borne diseases are caused by viruses and fungi. Identifying the diseases in early stage by manual power is not possible in large sector of Area. Subsequent maintenance of plants conditions are major challenging task. To overcome this problem in Agriculture, we use Image Processing Technique to identify the disease in beginning stage . To Apply Image Processing Technique, we have to undergo certain Image concepts that deals with image acquisition, image pre-processing, image segmentation, feature extraction and classification of disease. This Methodology reduces the destruction of plants and make the crop production high. The digital Image Processing Technique is the main solution to solve the problems in Plant diseases by identifying the plant diseases in early stage. It is very much useful to the Farmers who are facing plant diseases problem in their Agriculture Area. Many techniques are used to identify the diseases in plants using classifiers such as , K-Nearest Neighbors ,Support Vector Machine methods etc. This paper gives the overview of available methods for plant disease detection*

**Keywords:** Image Processing, Plant Diseases, Segmentation, classification