**Detection of Plant Leaf Disease Using Image Processing Approach**

**ABSTRACT**

 The identification of disease on the plant is a very important key to prevent a heavy loss of yield and the quantity of agricultural product. The symptoms can be observed on the parts of the plants such as leaf, stems, lesions and fruits. The leaf shows the symptoms by changing colour, showing the spots on it. This identification of the disease is done by manual observation and pathogen detection which can consume more time and may prove costly. The aim of the project is to identify and classify the disease accurately from the leaf images. The steps required in the process are Preprocessing, Training and Identification. The disease considered are Powdery Mildew, Downey Mildew which can cause heavy loss to Grape fruit. For identification of disease features of leaf such as major axis, minor axis etc. are extracted from leaf and given to classifier for classification.

***Keywords —*** disease, features, pathogen, spots.