**ABSTRACT**

Agricultural productivity is something on which economy highly depends. This is the one of the reasons that disease detection in plants plays an important role in agriculture field, as having disease in plants are quite natural. If proper care is not taken in this area then it causes serious effects on plants and due to which respective product quality, quantity or productivity is affected. For instance a disease named little leaf disease is a hazardous disease found in pine trees in United States. Detection of plant disease through some automatic technique is beneficial as it reduces a large work of monitoring in big farms of crops, and at very early stage itself it detects the symptoms of diseases i.e. when they appear on plant leaves. The proposed scheme is based on the image processing technique using Matlab. Earlier linear support vector machine was used to identify single diseases. Our proposed algorithm uses multi support vector machine that identifies many diseases and there by increasing the efficiency and productivity of the plants.