ABSTRACT

Most of the Indian economy is dependent on agriculture. Since there is growing Indian population, which is increasingly dependent on the agricultural yield, production of the crops must be enhanced. In order to grow more, the diseases must be analyzed in prior. Agricultural crops are infected by Bacteria, Fungi, Viruses and Pests. Diseases are analyzed using different image processing techniques. One such technique is proposed here extracted texture features was proposed and performed. The texture features have been extracted with using the Gray-Level Co-occurrence Matrix (GLCM) and the Principal Component Analysis (PCA) algorithms, using leaf detection, feature extraction and classification. For studying the proposed method, the composed dataset is used. The dataset contains diseased images. Images were preprocessed and cropped to a fixed standard size. Then, features are extracted from all the leaf images in the dataset using K-mean algorithm. For each image leaf more frequent K-mean key points are extracted to identify a unique feature. It permits finding related features for different image. Ultimately, the extracted K-mean and GLCM features are rendered to an ANN classifier for purpose of classifier to obtain efficient results.