

# Crop Disease Alert System: Literature Review

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**Abstract.** Crop disease steals the energy of crops, and it is responsible for huge damage to the crop field. Crops can be affected by the existing disease as well as a new disease. It is somehow okay when it is affected by an existing disease then farmers can ASAP prevent it by following the existing methods, but if a new disease affects the crops what can they do? Sometimes they fail to get any action until it damages all over the field. Think farmers may expect the products for the year but at the last few weeks some disease affected and shatter all the crops, then their all plans vanished and face to a huge loss. There are cases that farmers have suicide because of such incidents. We supposed a system that gives early alert for newly arise diseases on crops and suggestions to prevent them. This paper gives a related work review and technology behind them to implement that proposed system. Machine Learning plays a major role in this system. For classification and data processing we have to use one or more ML algorithms. By studying related works, we suggest ensemble model that consist different kinds of ML algorithms for our proposed system because it gives more accurate result than using single classifier. Support Vector Machine, Random Forest, Logistic Regression, Artificial Neural Network and K-Nearest Neighbours are the most suitable ML algorithms that can use for this ensemble model. We Can expect around 90% accuracy from that proposed system.

**Keywords:** *disease, ML, SVM, LR, DT, RF, ANN, CNN, KNN*