**Fertilizers Recommendation System For Disease Prediction**

**LITERATURE SURVEY**

**TEAM ID:**PNT2022TMID53458

**1)** **PAPER :** An Overview of the Research on Plant Leaves Disease detection

using Image Processing Techniques

**AUTHOR :**  Kiran R. Gavhale, Ujwalla Gawande

**YEAR :** 2014

**DESCRIPTION :** This paper gives an introductory part that includes importance of leaf disease detection, plant leaves analysis, various types of leaf diseases and its symptoms and presents a detailed discussion on recent work carried out in this area. It also includes basic methodology for leaves disease detection which represents a brief review on various image processing techniques.

**FUTURE WORK AND ANALYSIS :** The early stage diagnosis of plant disease is an important task in the field of agriculture therefore looking for fast , less expensive and accurate method to automatically detect the diseases from the symptoms that appear on the plant leaf is of great realistic significance.

**2) PAPER :** A Survey on Plant Disease Prediction using Machine Learning and Deep Learning Techniques

**AUTHOR :** Gokulnath BV, Usha Devi G

**YEAR :** 2017

**DESCRIPTION :** A survey of different existing machine learning techniques used for plant disease prediction was presented in this paper. Machine learning techniques like Random Forest, Bayesian Network, Decision Tree, Support Vector Machine etc. help in automatic detection of plant disease from visual symptoms in the plant

**FUTURE WORK AND ANALYSIS :** Automatic detection of disease in plant helps in early diagnosis and prevention of disease which leads to an increase in agriculture productivity**.**

**3)PAPER :** Machine Learning based Prediction and Recommendation System for Detection of Pests and Cultivation of Crops

**AUTHOR :** Abhishek Shah , Samreen Syeda

**YEAR :** 2020

**DESCRIPTION :** Introduce a Recommender System which can efficiently recommend and predict pest attacked on crops. The prediction model is authenticated by utilizing the traditional data of insect pests, and then the genetic algorithm is adopted to search for the unique features of community optimization.

**FUTURE WORK AND ANALYSIS :** Farmers can inspect manually but these can take time and accuracy concern, so there arises a need to modernize the traditional agriculture system and with the help of the prediction system, we can minimize these problems. With the facility of recommendation system, it will be best to plant crops suitable to the climate conditions, land specifications, and other environmental factors

**4)PAPER :** Agro-Farm Care – Crop, Fertilizer & Disease Prediction (Web App)

**AUTHOR :** Sanidhya Purohit, Deep Sanghani, Naman Senjaliya, Anuradha Kapoor

**YEAR :** 2022

**DESCRIPTION :** The project comes with a model to be precise and accurate in predicting crop, fertilizers, Crop disease and deliver the end-user with proper recommendations about the required fertilizer ratio based on several parameters which enhance to increase the crop yield and increase farmer revenue.

**FUTURE WORK AND ANALYSIS :** This system can provide a mechanic for crop prediction, Fertilizer prediction, plant disease prediction. This will help farmers get a sense of what crops should be grown based on soil details, what fertilizers to use in crops, and disease detection.