

TEAM ID: PNT2022TMID22643

Fertilizers Recommendation System for Disease Prediction

LITERATURE SURVEY

Here are some of the previous solutions that attempts to solve issues in fertilizer recommendation and disease prediction.

S. No	Author & Year	Title	Methodology	Dataset used	Inferences
[1]	Dr.P. Pandi Selvi, P. Poornima (Mar-Apr 2021)	Soil Based Fertilizer Recommendation System for Crop Disease Prediction System	1. Registration phase 2. The user will upload the soil test report. 3. The corresponding crops infection status will be analyzed and recorded. 4. The fertilizers are recommended	Real time data recording	The proposed system was able to analyze the soil nutrient type efficiently, kind of leaf disease present in the crop and predict the fertilizer in a proficient manner. The approach was flexible, and can be extended to the needs of the users in a better manner. The proposed method was carried out with five different crops.
[2]	Narayani patil; Shubham Kelkar; Mitali Ranawat; M.Vijayalakshmi (May 2021)	Plant disease identification and Crop recommendation using Artificial Intelligence	Deep Convolutional Neural Network (CNN) models i.e., Sequential and VGG-16. And trained a Content-based filtering technique on the dataset.	1. "Plant village"- Git repository 2. "Agricultural Production in India" - Kaggle,	According to the experimental results, model achieved the accuracy, which was 97.69%. The train loss value was 0.0107,

				3. "Rainfall in India" - Kaggle	
[3].	SK Mahmudul Hassan; Arnab Kumar Maji (January 2022)	Plant Disease Identification Using a Novel Convolutional Neural Network	1.Convolutional Neural Network 2.Residual Network 3. Depth wise Separable Convolution 4. Proposed Novel CNN Approach for Identification of Plant Diseases	Rice plant dataset, cassava plant dataset, and Plant village dataset	It can effectively classify the diseases in plants. Training the network requires much less time as compared to the standard CNN. The experimental result shows that the proposed model achieves good accuracy.
[4]	Apurva Save, Aksham Gupta, Sarthak Pruthi, Divyanjana Nikam, Prof. Dr. Shilpa Paygude (February 2022)	Plant Disease Detection and Fertilizer Suggestion	1.Image uploading 2.Preprocessing and Feature extraction 3. Once the disease is classified, it is mapped with the correct remedy or the fertilizer.	Plant Village - Kaggle	This model detects and distinguishes between a healthy plant and different diseases and provides suitable remedies so as to cure the disease.
[5]	Ms. Deepa, Ms. Rashmi N, Ms. Chinmai Shetty (January 2021)	A Machine Learning Technique for Identification of Plant Diseases in Leaves	A. Input image B. Pre processing C. Feature extraction D. Dataset E. Training F. Clustering	Open- source datasets	Machine learning techniques are used to predict the plant diseases. Experimental results show that the plant diseases can be accurately classified.

URL Reference:

[1] [Soil Based Fertilizer Recommendation System for Crop Disease Prediction System \(ijetajournal.org\)](https://www.ijetajournal.org/)

- [2] [Krush Sahyog: Plant disease identification and Crop recommendation using Artificial Intelligence | IEEE Conference Publication | IEEE Xplore](#)
- [3] [Plant Disease Identification Using a Novel Convolutional Neural Network | IEEE Journals & Magazine | IEEE Xplore](#)
- [4] [Plant Disease Detection and Fertilizer Suggestion \(ijraset.com\)](#)
- [5] [A Machine Learning Technique for Identification of Plant Diseases in Leaves | IEEE Conference Publication | IEEE Xplore](#)