**Fertilizers Recommendation System For Disease Prediction**

**Literature Survey:**

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| **Title** | **How does it related to my study** | **Used methodologies** | **limitation** | **Recommendation from this paper** |
| Leaf Disease Detection and Fertilizer Suggestion | This system uses K-Medoi  clustering and Random Forest algorithm to produce more accuracy in the detection of disease in the leaf | Using the clustering method to find the affected area of the leaf | It can be made more robust. | Newer models can also be added and tried with time which may result in better accuracy and would make the model even faster. |
| Plant Disease Detection and Classification using CNN Model with Optimized Activation Function | Area affected by disease is calculated by using K – means clustering algorithm for optimization of fertilizer usage. | Convolutional Neural Networks (CNN), pooling layers, K – Means Clustering | Working structure is complex. | The K-means clustering algorithm was implemented in MATLAB to calculate the affected area percentage and the optimized amount of fertilizer is suggested to improve the crop yield.. |
| Crop leaf disease detection using machine learning algorithm | Distinguish the illness introduce in a plant by watching its morphology by picture handling and machine learning | Histogram of oriented gradients and random forest algorithm | It would classify upto 70% accuracy | To increase the rate of accuracy |

**Proposed paper:**

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| **Title** | **How does it related to my study** | **Used methodologies** | **Advantages** | **Recommendation from this paper** |
| Fertilizers recommendation system for disease prediction in tree leave | In this system Pre-processing using a median filter, segmentations done by Guided Active Contour method and finally, the leaf disease is identified by using Support Vector Machine. | Guided Active Contour method, Leaf segmentation, Leaf Feature Identification | The proposed SVM  technique gives a better result when compared to existing  CNN. | To increase the rate of accuracy |