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| Paper Name | Datasets used | Availability Links | Accuracy |
| A multi-source domain feature  adaptation network for potato  disease recognition in  field environment | The dataset comprises field images of potato diseases, categorized into five distinct disease types. It includes images captured under varying lighting conditions to simulate real-world scenarios | Not available for Public access | Recorded an average accuracy of 92.11% when using two source domains and 93.02% with three source domains |
| Plant diseases and pests detection based on deep learning: a review | PlantVillage Dataset  (Kaggle)  Imagenet Dataset (Available)  COCO Datset(Available) | 1. <https://www.kaggle.com/datasets/abdallahalidev/plantvillage-dataset> 2. <https://image-net.org/> 3. <https://cocodataset.org/> | Mask R-CNN model achieved an average accuracy of **96%** when detecting and segmenting maize northern leaf blight lesions. |
| Rhizosphere bacterial community is mainly determined by soil environmental factors, but the active bacterial diversity is mainly shaped by plant selection | **Climate Datasets,**  **Sequence Data** | 1. https://www.ncdc.noaa.gov/cdo-web/datasets/ | NA |
| Plant Disease Detection and Classification: A Systematic Literature Review | PlantVillage (Kaggle),Plant Doc Dataset(Kaggle) | 1. <https://www.kaggle.com/datasets/abdallahalidev/plantvillage-dataset>  2. https://www.kaggle.com/datasets/abdulhasibuddin/plant-doc-dataset | A significant finding from the review is that **73%** of the evaluated studies achieved plant disease diagnosis accuracy of more than 90%. |
| A Survey on Different Plant Diseases Detection Using Machine Learning Techniques | PlantVillage(Kaggle),Image Database of Plant Disease Symptoms (PDDB) | 1. <https://www.kaggle.com/datasets/abdallahalidev/plantvillage-dataset>  2. https://plant-diseases.uada.edu/ | For instance, an EfficientNet architecture achieved an accuracy of **99.91%** with EfficientNetB5 and **99.97%** with EfficientNetB4 on the original dataset |
| Towards Sustainable Agricultural Systems: A Lightweight Deep Learning Model for Plant Disease Detection | PlantVillage (PV), Data Repository of Leaf Images (DRLI),  Plant Composite (PC) | 1. <https://github.com/peijinwang/Sewage-Treatment-Plant-Dataset> 2. <https://www.kaggle.com/datasets/abdallahalidev/plantvillage-dataset> 3. https://www.kaggle.com/datasets/sharmisthabp/synthetic-plant-dataset-for-computer-vision | **PV Dataset**: Achieved an accuracy of 100% |
| Plant Disease Detection and Classification using CNN Model with Optimized Activation Function | Not mentioned specifically, Publicly available | 1. NA | model achieved an accuracy of 95% when compared to existing activation functions **[2]**. Additionally, the model demonstrated an accuracy of 92% in detecting a specific disease, "ANTHARASIS BACTERIAL BLIGHT" **[3]**. |
| ViT-SmartAgri: Vision Transformer and Smartphone-Based Plant Disease Detection for Smart Agriculture | Plant Village dataset, Sources of Tomatoes Leaves,Visual Representation | 1. <https://github.com/peijinwang/Sewage-Treatment-Plant-Dataset> | The ViT model achieved a validation accuracy of **95.76%**, which indicates its effectiveness in correctly identifying healthy and diseased plants from a separate dataset that was not used during training |
| Automatic plant disease detection using computationally efficient convolutional neural networ | Plant Village Dataset | <https://github.com/peijinwang/Sewage-Treatment-Plant-Dataset> | The proposed convolutional neural network (CNN) model achieved an impressive average accuracy of 96.86%, surpassing existing state-of-the-art models. |
| A Survey on Different Plant Diseases Detection Using Machine Learning Techniques | PlantVillage dataset, mage Database of Plant Disease Symptoms (PDDB) | 1. <https://github.com/peijinwang/Sewage-Treatment-Plant-Dataset> 2. https://www.apsnet.org/edcenter/resources/ImageDatabase/Pages/default.aspx | The paper reports impressive accuracy rates achieved by various models. For instance, Atila et al. achieved a high accuracy rate of 99.91% using the EfficientNetB5 model on the original dataset, and 99.97% with EfficientNetB4 |
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