1.Lee, Sue Han, CheeSeng Chan, Paul Wilkin, and Paolo Remagnino."Deep-plant: Plant identification with convolutional neural networks." In 2015 IEEE International Conference on Image Processing (ICIP), pp. 452-456.IEEE, 2015.

This paper studies convolutional neural networks (CNN) to learn unsupervised feature representations for 44 different plant species, collected at the Royal Botanic Gardens, Kew, England. To gain intuition on the chosen features from the CNN model (opposed to a 'black box' solution), a visualization technique based on the deconvolutional networks (DN) is utilized. It is found that venations of different order have been chosen to uniquely represent each of the plant species. Experimental results using these CNN features with different classifiers show consistency and superiority compared to the state-of-the art solutions which rely on hand-crafted features.

2.Hamrouni .L, Aiadi .O, Khaldi .B and Kherfi .M.L, "Plants Species Identification using Computer Vision Techniques", Revue des Bioresources 7, no. 1, 2018.

Agriculture is the main aspect of country development. Many people lead their life from agriculture field, which gives fully related to agricultural products. Plant disease, especially on leaves, is one of the major factors of reductions in both quality and quantity of the food crops. In agricultural aspects, if the plant is affected by leaf disease then it reduces the growth of the agricultural level. Finding the leaf disease is an important role of agriculture preservation. After pre-processing using a median filter, segmentation is done by Guided Active Contour method and finally, the leaf disease is identified by using Support Vector Machine. The disease-based similarity measure is used for fertilizer recommendation.

3.Naresh, Y. G., and H. S. Nagendraswamy, "Classification of medicinal plants: an approach using Modified LBP with symbolic Representation", Neurocomputing 173, pp: 1789-1797, 2016.

In this work, a symbolic approach for classification of plant leaves based on texture features is proposed. Modified Local binary patterns (MLBP) is proposed to extract texture features from plant leaves. Texture of plant leaves belonging to same plant species may vary due to maturity levels, acquisition and environmental conditions. Hence, the concept of clustering is used to choose multiple class representatives and the intra-cluster variations are captured using interval valued type symbolic features. The classification is facilitated using a simple nearest neighbor classifier. Extensive experiments have been carried out on newly created UoM Medicinal Plant Dataset as well as publically available Flavia, Foliage and Swedish plant leaf datasets. Results obtained by proposed methodology are compared with the contemporary methodologies. The Outex dataset is also considered for experiments and the results are promising even on this synthetic dataset.