IJRETS: International Journal Of Research In Engineering, Technology And Science,
Volume XIII, Issue VIII, November.2020, ISSN 2454-1915, www.ijrets.com,
1st online international conference on informatics, robotics, construction & communication, 2020

LEAF DISEASES DETECTION AND MEDICATION

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ABSTRACT

India is fast developing country and agriculture is the back bone for the countries development in the early stages. Now a day's technology plays vital role in all the fields but till today we are using some old methodologies in agriculture. Identifying plant disease wrongly leads to huge loss of yield, time, money and quality of product. Identification of plant disease is very difficult in agriculture field. Leaf disease detection requires huge amount of work, knowledge in the plant diseases, and also require the more processing time. The objective of this research is to make use of significant features and prediction is done using computer vision technique. This method mainly download the image from the server then it converts the image into a gray-scale by calculating its pixels and it shows out only the defected parts of the leaf. This approach can significantly support an accurate detection of leaf disease. We can extend this approach by using image processing technique. It displays the output in graphical view that is X and Y coordinates. The user can also view the output in mobile application by retrieving the result from the server.

Keywords—Natural Language Processing, Gray scale image, *Maximum Likelihood Estimation, Machine Learning.*

I. INTRODUCTION

Developing countries like India the economy is mainly depends on agriculture. Due to plant diseases the quality and quantity of agriculture product is reduced. Some of the plant disease do not have visibility during early stage it only appears at that final stage. The purpose of agriculture is not only to feed ever growing population but it is an important source of energy and a solution to solve the problem of global warming. Plant disease diagnose is very important in earlier stage in order to cure and control the disease. In this method experts are involved who have the ability to detect the changes in leaf. Many times different experts identify the same disease as the different disease. This method requires continuous monitoring of experts. Depending on the applications, many systems have been proposed to solve or at least to reduce the problems, by making use of image processing we are also some of the automatic classification tool. Using this technique, we can easily segment the plant disease and also the affected part of the leaf can be found.

II.PROPOSED METHODOLOGY

In the proposed system, this is done using the segmentation process which detects and classifies the image. Image processing is used for measuring affected area of diseases and to determine the difference in the colour of the affected area. It covers the survey based on the classification mechanism whether the affected leaf is from which type of plant it specifies the pixel values and represent them in