VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010

PROJECT REPORT ON

"DIAGNOSING THE DISEASES IN PEPPER PLANT USING IMAGE PROCESSING TECHNIQUE"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

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ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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2019-2020

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "DIAGNOSING THE DISEASES IN PEPPER PLANT USING IMAGE PROCESSING TECHNIQUE" is a bona fide work carried out by

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in partial fulfillment for the award of BACHELOR OF ENGINEERING in ELECTRONICS & COMMUNICATION ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2019–2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Agriculture plays a vital role in means to feed to ever going population. Agriculture is the art and science of cultivating the soil growing crops and raising live stokes. Among the spices Black Pepper, the king of spices is the most important dollar earning crop which has a decisive role in our nation and state economies. Detection of pests in the crops is the major challenge in the field of agriculture, hence effective measure should be developed to fight the infestation while minimizing the use of pesticides.

The techniques of image analyses extensively applied to agricultural science and it provides maximum protection to crops which can ultimately lead to better crop management and production. Images convey relevant data and information in biological sciences. Digital image processing technique is used for fast and accurate disease detection of plant. Using different methodologies such as image acquisition, image pre-processing, and disease spot segment, extraction of features and classification of disease. Feature extraction technique helps to extract the infected leaf and also to classify the plant diseases with very less computational efforts the optimum results were obtained, also shows the efficiency of the proposed algorithm in recognition and classification of the leaf diseases. Another advantage of using this method is that the plant diseases can be identified at an early stage or the initial stage.