# DESIGN AND DEVELOPMENT OF A MODEL TO CLASSIFY CROP FOLIAR DISEASES

A
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# Summary


## Introduction

Agriculture field plays an important role in economy of any country. As India is one of the developing countries agriculture is one of the backbones of economy. Having diseases in plants is a natural process. In traditional practice farmer try to evaluate the diseases by his past experience. Or in other case the expert observe the plant organs like leaves and stems for any diseases. It is very time consuming and costly method. We require an early identification to protect crop from diseases. This study performs classification techniques to identify mung bean plant leaf diseases using machine learning and deep learning techniques.

## Chapter 1 - Introduction to Plant Disease Detection System

This chapter gives overview of the research work, its scope, objectives, need etc. in detail. Also chapter covers details of common mung bean plant diseases and diseases covered in this study. Application areas of agriculture image processing, Crop/Plant diseases selection, image processing techniques are also covered in this chapter. The summary of the overall thesis is also discussed.

## Chapter 2 - Literature Review

Study of the previously done work up to now in the area of plant disease recognition for numerous plants and its organs is discussed in this chapter. It includes journal articles, conference articles, electronic documents, web resources.

## Chapter 3 Plant Foliar Disease Identification Model

In this chapter design of the foliar/leaf disease detection model is discussed in detail. Numerous components and subcomponents of model are explained in detail in this chapter.

## Chapter 4 Development of Plant Foliar Disease Identification Model (PFDIM)

This chapter describes component development of the model presented in chapter 3 in detail. Input and output of the model “Plant Foliar Disease Identification Model” is discussed in this chapter.

## Chapter 5 Results and Conclusion

This chapter converses result of the projected PFDIM model applied on mung leaf dataset collected to quantity the success of projected research work. Moreover this chapter presents conclusion of projected research work along with path for future scope in the present research space.

## Conclusion

Results and conclusion are discussed in detail in chapter 5 based on various parameters. This chapter presented the results concerning to the numerous proposed models.