UNIVERSITI TEKNOLOGI MARA

HARUMANIS MANGO LEAF DISEASE DETECTION SYSTEM USING IMAGE PROCESSING TECHNIQUE

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DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Current Harumanis mango farming technique in Malaysia still mostly depends on the farmers' own expertise to monitor the crops from the attack of pests and insects. This approach is susceptible to human errors and those who do not possess this skill may not be able to detect the disease at the right time. As leaf diseases seriously affect the growth of the crop and the quality of the yield, this project aims to develop a Harumanis Mango Leaf Disease Detection System (HLDDS) that detects the presence of disease in the mango leaf using image processing technique. First, the image is acquired through a smart phone camera, once it has been pre-processed, the image is then segmented in which the RGB image is converted to HSI image, then the features are extracted. Lastly, classification of disease is done to determine the type of leaf disease. The proposed system effectively detects and classify the disease with an accuracy of 68.89%. The findings of this project will contribute to the benefit of farmers and society and researchers can use the approach to address similar issues in future works.

TABLE OF CONTENTS

SUPERVISOR'S APPROVAL ..... **ii**

DECLARATION ..... **iii**

ACKNOWLEDGEMENT ..... **iv**

ABSTRACT ..... **v**

TABLE OF CONTENTS ..... **vi**

LIST OF FIGURES ..... **ix**

LIST OF TABLES ..... **xi**

LIST OF ABBREVIATIONS ..... **xii**

CHAPTER 1 INTRODUCTION **13**

1.1 Background of Study 13

1.2 Problem Statement 14

1.3 Objectives 15

1.4 Project Scope 15

1.5 Project Significance 15

1.6 Summary 16

CHAPTER 2 LITERATURE REVIEW **17**

2.1 Smart Farming 17

2.2 Tropical Fruits 18

2.2.1 Mango 19

2.2.2 Harumanis Mango 20

2.2.3 Harumanis Mango Leaf Diseases 20

2.3 Related Works 23

2.4 Development Technique 30

4.3.2 Microsoft Office Visio 44
4.4 Prototype Design 45
4.4.1 System Flowchart 45
4.5 Prototype Development 46
4.5.1 Image Acquisition 46
4.5.2 Image Pre-processing 50
4.5.3 Image Segmentation 51
4.5.4 Feature Extraction 52
4.5.5 Classification 53
4.6 Summary 54
CHAPTER 5 RESULTS AND FINDINGS 55
5.1 Performance Evaluation 55
5.1.1 Testing Description 55
5.1.2 Results and Findings of Performance Evaluation 57
5.2 Summary 60
CHAPTER 6 CONCLUSION 61
6.1 Conclusion 61
6.2 Contributions of Study 62
6.2.1 Contributions for Farmers 62
6.2.2 Contributions for Practitioners 62
6.3 Problems and Limitations 62
6.4 Recommendations 63
REFERENCES 64
APPENDICES 64