

**PECTINASE PRODUCING MICROORGANISM
ISOLATED FROM FRESH AND DECAY
HONEYDEW PEEL**

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**Final Year Project Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science (Hons.) Biology
In the Faculty of Applied Sciences
Universiti Teknologi MARA**

JULY 2017

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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER 1: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Significance of the Study	3
1.4 Objectives of the Study	3
CHAPTER 2: LITERATURE REVIEW	
2.1 Enzyme	4
2.2 Pectinase	5
2.3 Pectinase producing microorganism	6
2.4 Fruit peel	7
2.4.1 Decay fruit peel	8
2.5 Honeydew melon	8
2.6 Pectinase screening agar medium (PSAM)	10
CHAPTER 3: METHODOLOGY	
3.1 Materials	11
3.1.1 Raw materials	11
3.1.2 Chemicals	11
3.1.3 Apparatus	12
3.2 Methods	12
3.2.1 Sample collection	12
3.2.2 Preparation of nutrient agar (NA)	13
3.2.3 Preparation of potato dextrose agar (PDA)	13

3.2.4	Preparation of pectinase screening agar medium (PSAM)	14
3.2.5	Isolation of pectinase producing microorganism	14
3.2.6	Characterization of pectinase producing bacteria	15
3.2.6.1	Gram staining	15
3.2.6.2	Endospore staining	16
3.2.6.3	Oxidase test	16
3.2.6.4	Catalase test	17
3.2.6.5	Citrate utilization test	17
3.2.6.6	Starch hydrolysis test	18
3.2.6.7	Hydrogen sulphide test	18
3.2.6.8	Carbohydrate fermentation test	19
3.2.7	Macroscopic examination of fungi	19
3.2.8	Microscopic examination of fungi	20
 CHAPTER 4: RESULTS AND DISCUSSION		
4.1	Bacteria producing pectinase from fresh honeydew peel	22
4.2	Fungi producing pectinase from decay honeydew peel	29
 CHAPTER 5: CONCLUSION AND RECOMMENDATIONS		35
 CITED REFERENCES		36
APPENDICES		42
CURRICULUM VITAE		45

ABSTRACT

PECTINASE PRODUCING MICROORGANISM ISOLATED FROM FRESH AND DECAY HONEYDEW PEEL

Pectinase is an enzyme which economically important to the enzyme industry as it helps degrade pectin, which present at the cell wall of fruit and vegetables. Microbial pectinase have been proved to provide wide uses and honeydew peel disposal is elevating in the environment. The aim of this study was to isolate and characterize pectinase producing microorganism from honeydew peel which includes bacteria and fungi. Morphology observation was performed to identify shape and Gram reaction while biochemical test was utilized to determine the enzymatic activities of the bacteria. For fungal isolates, macroscopic and microscopic examination were performed. Macroscopic observation includes color texture and surface appearance while microscopic examination includes structure of hyphae and types of spore. Pectinase screening agar medium was used for the screening of pectinase yield by the microorganism. The bacterial isolates might be from genus *Bacillus sp.* and *Pseudomonas sp.* whereas fungal isolates might be from genus *Aspergillus sp.*