

ANTIFUNGAL ACTIVITY OF BANANA PEEL (*Musa paradisiaca L.*) EXTRACT AGAINST PATHOGENIC FUNGUS

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This Final Year Project Report entitled “**Antifungal Activity of Banana Peel (*Musa paradisiaca L.*) Extract Against Pathogenic Fungus**” was submitted by Intan Nor Shahira Binti Yazid, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Science, and was approved by

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TABLE OF CONTENT

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
ABSTRACT	xi
ABSTRAK	xii
CHAPTER 1: INTRODUCTION	
1.1 Background Study	1
1.2 Problem Statement	2
1.3 Significance of Study	3
1.4 Objectives of Study	4
CHAPTER 2: LITERATURE REVIEW	
2.1 <i>Musa spp.</i>	5
2.1.1 Uses of <i>Musa spp.</i>	6
2.1.2 <i>Musa paradisiaca L.</i>	6
2.2 Antimicrobial activities from <i>Musa sp.</i> extracts	7
2.2.1 Extraction of <i>Musa sp.</i> for antimicrobial source	7
2.2.2 Potential antifungal activity from <i>Musa sp.</i> extracts	8
CHAPTER 3: METHODOLOGY	
3.1 Materials	
3.1.1 Raw materials	9
3.1.2 Chemicals	9
3.1.3 Apparatus	9
3.1.4 Equipment	10
3.2 Methods	
3.2.1 Preparation of <i>Musa paradisiaca L.</i> extract	12
3.2.1.1 Sample preparation	12
3.2.1.2 Preparation of dry samples	12
3.2.1.3 Extraction of banana peel (<i>Musa paradisiaca L.</i>)	12
3.2.1.4 Preparation of Potato Dextrose Agar (PDA)	13
3.2.2 Isolation of growth pathogenic fungi	13
3.2.3 Growth of pure fungal pathogen	14
3.2.4 Macroscopic and microscopic identification of pathogenic fungi	
3.2.4.1 Macroscopic identification	14
3.2.4.2 Microscopic identification	15
3.2.5 Determination of antifungal activity using disc diffusion	

method	15
CHAPTER 4: RESULTS AND DISCUSSION	
4.1 Isolation of growth of pathogenic fungus	17
4.1.1 Macroscopic identification of pathogenic fungi	21
4.1.2 Microscopic identification of pathogenic fungi	20
4.2 Detection of antifungal activity from banana peel (<i>Musa paradisiaca L.</i>) extract	28
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	33
CITED REFERENCES	35
APPENDICES	41
CURRICULUM VITAE	43

ABSTRACT

ANTIFUNGAL ACTIVITY OF BANANA PEEL (*Musa paradisiaca L.*) EXTRACT AGAINST PATHOGENIC FUNGUS

The emergence of antifungal resistant also has risen at alarming rate. Therefore, study on antifungal compound is urgently needed. In addition, banana peel has potential to be as antifungal candidate due to its therapeutic characteristics. Thus, attempts have been carried out to study the potential of banana peel extract against pathogenic fungi. Extraction of the banana peel was performed by using chloroform-methanol extraction. Determination of antifungal activity of the extract was done by using disk diffusion method. A total of 5 strains of pathogenic fungi, (i.e. AG1, AG2, AG3, AG4 and AG5), which isolated from palm oil diseases, scalp fungi and contaminated food were used as tested pathogenic fungi. Based on the results acquired, extract of banana peel against all the pathogenic fungi strain showed negative antifungal activities, except for strain AG4. Only strain (AG4) showed holozone production, 22.33 mm compared to positive control (itraconazole 100 mg/ml), 13 mm holozone was produced. It can be concluded that the extract of banana peel has shown to exhibit antifungal activity against certain fungus. In future, extract of component of banana peel can be considered as promising antifungal component. It is suggested to further study on its specific properties, antioxidants, toxicity and its extract compound.