

**ANTIFUNGAL ACTIVITY OF *Mimosa pudica* LEAVES
EXTRACT AGAINST *Penicillium sp.***

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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMEENTS	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 Study	1
1.2 Problem Statement	4
1.3 Significance of the Study	5
1.4 Objectives of the Study	5
CHAPTER 2: LITERATURE REVIEW	
2.1 <i>Mimosa pudica</i>	6
2.1.1 Taxonomy	6
2.1.2 Pharmacology importance	7
2.1.3 Antimicrobial activity	7
2.1.4 Analgesic and anti-inflammatory activity	8
2.2 <i>Penicillium sp.</i>	8
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 <i>Mimosa pudica</i> leaves collection	12
3.2.2 Extraction of <i>Mimosa pudica</i> leaves	12
3.2.3 Phytochemical screening of <i>Mimosa pudica</i> leaves extract	13
3.2.4 Agar preparation (Potato Dextrose Agar)	14
3.2.5 Antifungal assay	15

CHAPTER 4: RESULTS AND DISCUSSION	
4.1 Preliminary phytochemical screening of <i>Mimosa pudica</i>	17
4.2 Antifungal activity of the methanolic extract of <i>Mimosa pudica</i> leaves on <i>Penicillium sp.</i>	18
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS	22
CITED REFERENCES	24
CURRICULUM VITAE	27

ABSTRACT

ANTIFUNGAL ACTIVITY OF *Mimosa pudica* LEAVES EXTRACT

AGAINST *Penicillium sp.*

Currently, synthetic fungicide was used as a prevention to massive post-harvest lost during handling process. The endless use of synthetic fungicide could harm the health of people and environment due to the chemical component of it. Thus, the present research is conducted to look for natural antifungal that could be obtain from plant extract that contain secondary metabolites. The objective of this study are to analyses phytochemical compound of methanolic *Mimosa pudica* leaves extract by phytochemical screening and to determine the antifungal activity of *Mimosa pudica* leaves extract on *Penicillium sp.* The antifungal activity of *Mimosa pudica* against *Penicillium sp.* at different concentration was tested using agar well diffusion method and phytochemical screening was used to test the present of phytochemical compound of *Mimosa pudica* leaves. *Mimosa pudica* shows a series of positive result on qualitative phytochemical test alkaloids, flavonoids, saponins, tannis and reducing sugar. However, the antifungal activity of methanolic extract of *Mimosa pudica* leaves at four different concentrations which are 250, 500, 750 and 1000 mg/ml was unable to inhibit *Penicillium sp.* In conclusion, secondary metabolites concentration of *Mimosa pudica* leaves extract does not show antifungal activity toward *Penicillium sp.*