

**POTENTIAL USE OF *MELASTOMA MALABATHRICUM* AS RAW MATERIAL
FOR PARTICLEBOARD**

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CANDIDATE'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulation of University Teknologi MARA. It is original and is the results of my work, unless otherwise indicate or acknowledged as reference work. This thesis has not been submitted to any academic institution on non-academic institution for any other degree or qualification. In the event that if my thesis is found violates the condition mentioned above, I voluntarily waive the right of conferment of my degree and agreed to be subjected to the disciplinary rules and regulation of University Teknologi MARA.

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ABSTRACT

Potential Use of *Melastoma malabathricum* as Raw Material for Particleboard

Melastoma malabathricum is a lesser known species that has the potential to make raw materials for producing particleboard. This species is easy to find in logged-over-forest forest and is easy to replant. The main objective of this study is to identify the mechanical and physical characteristics of the particleboard produced by *Melastoma malabathricum* species and to determine the effect of glue content on the size of the particles used. Modulus of Rupture (MOR), Modulus of Elasticity (MOE), Internal Bond (IB), Thickness Swelling (TS) and Water Absorption (WA) have shown that *Melastoma malabathricum* species have the potential to be used as raw materials in the wood industry

TABLE OF CONTENTS

		pages
APPROVAL SHEET		ii
DEDICATION		iii
CANDIDATE'S DECLARATION		iv
ACKNOWLEDGMENT		v
TABLE OF CONTENTS		vi
LIST OF TABLES		viii
LIST OF FIGURES		ix
LIST OF PLATES		x
LIST OF ABBREVIATIONS		xi
ABSTRACT		xii
ABSTRAK		xiii
CHAPTER		
1	INTRODUCTION	
	1.1 General Background	1
	1.2 Problem Statement	4
	1.3 Scope and Limitation	4
	1.4 Objectives	5
2	LITERATURE REVIEW	
	2.1 Particleboard	6
	2.2 Lesser Known Species	7
	2.3 Melastomataceae Family	11
	2.4 <i>Melastoma malabathricum</i>	12
3	MATERIALS AND METHODS	
	3.1 Raw Materials	14
	3.2 Materials Preparation and Particleboard Manufacturing	14
	3.2.1 Raw Material	14
	3.2.2 Chipping Process	15
	3.2.3 Flaking Process	15
	3.2.4 Screening Process	15
	3.2.5 Drying	17
	3.2.6 Glue Mixing	17
	3.2.7 Mat Forming	17
	3.2.8 Cold Press	18
	3.2.9 Hot Press	18
	3.2.10 Trimming and sizing	18

3.3	Sample Cutting for Testing	26
3.3.1	Method of Testing	26
3.3.2	Board Evaluation	26
3.3.3	Determination of Bending Strength	28
3.3.4	Determination of Internal Bonding	29
3.3.5	Determination of Thickness swelling	29
3.4	Design of Experimentals	30
4	RESULTS AND DISCUSSIONS	
4.1	Mechanical Properties	32
4.2	Physical Properties	33
4.3	Effects of Particles Size	35
4.4	Effects of Resin Content	36
4.5	Comparison between properties <i>Melastoma malabathricum</i> and Kelempayan (<i>Neolamarckia cadamba</i>)	43
5	CONCLUSIONS AND RECOMMENDATION	
5.1	Conclusions	46
5.2	Recommendations	46
	REFERENCES	47
	EVALUATION OF FINAL YEAR PROJECT	
	PERMISSION FOR REFERENCES AND PHOTOCOPYING	
	PUBLICATION OF THE PROJECT REPORT UNDERTAKING	
	CURRICULUM VITAE	