

**HOMOGENOUS PARTICLEBOARD PROPERTIES OF PETAI
BELALANG (*Leucaena Leucocephala*) WOOD IN RELATION TO RESIN
CONTENT AND PARTICLE SIZE**

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TABLE OF CONTENTS

	Page
APPROVAL SHEET	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF PLATES	vii
LIST OF ABBREVIATIONS	viii
ABSTRACT	ix
ABSTRAK	x
CHAPTER 1 INTRODUCTION	
1.1 Background	1
1.2 Problems statement	2
1.3 Justification	3
1.4 Objectives	3
CHAPTER 2 LITERATURE REVIEW	
2.1 Particleboard	4
2.1.1 Properties of particleboard	5
2.1.2 Uses of particleboard	5
2.2 Factor affecting board properties	6
2.2.1 Effect of resin content	6
2.2.2 Effect of particle size	6
2.3 Raw Material	7
2.4 Fast-growing species	8
2.5 <i>Leucaena leucocephala</i>	9
2.5.1 Botanic Description	9
2.5.2 Ecology Description	10
2.5.3 Uses of <i>Leucaena leucocephala</i>	11
CHAPTER 3 METHODOLOGY	
3.1 Field procedure and material preparations	12
	13

3.2	Particleboard manufacturing	
3.2.1	Raw material	13
3.2.2	Debarking	14
3.2.3	Sawn into billet	15
3.2.4	Chipping	16
3.2.5	Flaking	16
3.2.6	Air Drying	17
3.2.7	Screening	18
3.2.8	Oven dried	19
3.2.9	Glue mixing and blending	19
3.2.10	Mat forming	20
3.2.11	Cold pressing	21
3.2.12	Hot pressing	21
3.2.13	Trimming and cutting	22
3.3	Particleboard evaluation	24
3.4	Mechanical testing	25
3.4.1	Bending testing	25
3.4.2	Internal bonding testing	26
3.5	Physical testing	27
3.5.1	Thickness swelling testing	27
3.5.2	Water absorption testing	27
3.6	Experimental design	24
3.5.2	Water absorption testing	24
3.6	Experimental design	28
CHAPTER 4 RESULTS AND DISCUSSIONS		29
4.1	Mechanical and physical properties of particleboard	29
4.2	Statistical significance	30
4.3	Effect of resin content on particleboard	32
4.3.1	Mechanical properties	32
4.3.2	Physical properties	33
4.4	Effect of particle size on particleboard	34
4.4.1	Mechanical properties	34
4.4.2	Physical properties	36
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS		38
5.1	Conclusions	38
5.2	Recommendations	38
CITED REFERENCES		39
APPENDICES		42
CURRICULUM VITAE		69

ABSTRACT

HOMOGENOUS PARTICLEBOARD PROPERTIES OF PETAI BELALANG (*LEUCAENA LEUCOCEPHALA*) WOOD IN RELATION TO RESIN CONTENT AND PARTICLE SIZE

*In this study, the influences of resin content and particle size on the properties of particleboard from petaibelalang (*Leucaenaleucocephala*) wood were determined. Variable factors were as resin content of UF (8%, 10%, and 12%) and particle size (1.0mm and 2.0mm) on particleboard was determined. The properties of this particleboard were tested for their mechanical strength including modulus of rupture (MOR), modulus of elasticity (MOE), internal bonding (IB), and also physical properties including thickness swelling (TS) and water absorption (WA). The mechanical and physical properties of this particleboard evaluated based on the European Standard (EN). According to mechanical properties values, the all of values are able to meet the minimum requirement of the standard. Whereas, for physical properties values all of them had failed to meets the standard on particle size.*