

**PROPERTIES OF ORIENTED STRAND BOARD FROM MIX OF
ACACIA AND MAHANG WITH DENSITY OF 600KG/M³**

By

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TABLE OF CONTENT

	PAGE
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
LIST OF PLATES.....	viii
LIST OF FIGURE.....	ix
LIST OF ABBREVIATIONS.....	x
ABSTRACT.....	xi
ABSTRAK.....	xii
CHAPTER 1 INTRODUCTION.....	1
1.1 Justification.....	2
1.2 Objectives.....	3
CHAPTER 2 LITERATURE REVIEW.....	4
2.1 <i>Acacia mangium</i>	4
2.1.1 Distribution of <i>Acacia mangium</i>	4
2.1.2 Description of <i>Acacia mangium</i>	4
2.1.3 Utilization of <i>Acacia mangium</i>	5
2.2 Mahang Kapur (<i>Macaranga hypoleuca</i>).....	6
2.3 Oriented Strand Boards (OSB).....	8

2.3.1	History of OSB.....	9
2.3.2	Composition of OSB.....	10
2.3.3	Manufacturing of OSB.....	13
2.3.4	Benefit of OSB.....	17
CHAPTER 3 MATERIALS AND METHODS.....		18
3.1	Treatment	18
3.1.2	Harvesting of <i>acacia mangium</i> and <i>macaranga hypoleuca</i>	19
3.1.3	Glue/resin preparation in board making.....	19
3.2	Oriented Strand Boards preparations.....	20
3.2.1	Flow process.....	20
3.2.2	Manufacturing process.....	21
3.3	Testing.....	30
3.3.1	Board cutting.....	31
3.3.2	Bending strength testing.....	33
3.3.3	Thickness swelling testing.....	35
3.3.4	Water absorption testing.....	36
3.3.5	Internal bonding.....	38

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ABSTRACT

Oriented Strand Board is a construction panel made with layers of precision-manufactured wood "strands" that are aligned, formed into panels and pressed with an exterior grade adhesive resin. *Acacia mangium* and *Macaranga Hypoleuca* are selected for manufacturing of OSB for improvement of strength properties. This study used 5% of phenol formaldehyde as resin whereby solid content of resin is 41.8%. Strength properties determined are mechanical properties such as Modulus of Rupture (MOR), Modulus of Elasticity (MOE) and internal bond, while physical properties are water absorption and thickness swelling. All of study results are compared with Europe Standard (EN 310).