

PROPERTIES OF PARTICLEBOARD (650 KG/M³) FROM SESENDOK
(Endospermum malaccensis)

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TABLE OF CONTENT

TITLE	PAGE
PROJECT TITLEi
APPROVAL SHEETii
DEDICATIONiii
ACKNOWLEDGEMENT	.....iv
TABLE OF CONTENT	.....v
LIST OF TABLES	.....x
LIST OF FIGURES	.....xi
LIST OF PLATES	.....xiii
LIST OF ABBREVIATIONS	.....xiv
ABSTRACT	.....xv
ABSTRAK	.....xvi
CHAPTER 1	
1.0 INTRODUCTION	..... 1
1.1 Justification	..... 6
1.2 Objective	.....7
CHAPTER 2	
2.0 LITERATURE RIVIEW	
2.1 Particleboard	
2.1.1 Definition of Composite	.....8
2.1.2 History of Particleboard	.....9
2.1.3 Particleboard	.....10
2.1.4 Particle Types and Characteristics	.....15

2.1.5	Particle Size and Geometry	16
2.1.6	Particle Distribution Between face and Core	17
2.1.7	Board Density	18
2.1.7.a	Effect of Species and raw material type on Properties	19
2.1.7.b	Variable Affecting Board properties	23
2.1.7.c	Species and Particle Geometry	24
2.1.7.d	Board Density and Density profile	27
2.1.7.e	Resin Content and Distribution	30
2.1.8	Important Board Characteristics and Uses	31
2.1.9	Strength Properties	32
2.1.10	Dimensional Characteristics	34
2.2	Sesendok	
2.2.1	General description	35
2.2.2	Ecology	36
2.2.3	Botanical description	36
2.2.4	Properties	37
2.2.5	Macroscopic characters	37
2.2.6	Microscopic characters	38
2.2.7	Sawing and wood working	38
2.2.8	Mechanical properties	39
2.2.9	Durability	39
2.2.10	Uses of Sesendok	40

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ABSTRACT

Particleboard is a panel products produced by compressing small particles of wood while simultaneously bonding them with an adhesive. Particleboard also is one of the alternatives in wood composite made to replace plywood. It is said that particleboard has similar strength properties with plywood. In this study the research is done to particleboard from *Endospermum malaccensis* which is easy to find in secondary forest. In this study urea formaldehyde was used in three different level of resin that is 8%, 10% and 12% with density of board 650 kg/m³. This testing is done to determine the strength of board to be compared with Europe Standard (EN 312-3 1996) whether it is suitable or not to be commercializing in future. According to the physical and mechanical testing that has be done, there's only mechanical testing was achieved the standard, where the highest value for MOE is 3893.403 MPa with resin 12%. While for MOR the highest value is 29.891 MPa also with resin 12%. There must be more research must be done in the future to improve the quality of particleboard in different species of wood.