Effects of Density and Press Temperature on Dried Leaves Particleboard

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iii

TABLE OF CONTENT

APPROVAL SHEET	i
CANDIDATE'S DECLARATION	ii
ACKNOWLEDGEMENT	111
TABLE OF CONTENT	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF PLATES	ix
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
ABSTRAK	xii
CHAPTER 1	
INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Justification	3
1.4 Scope and Limitation	3
1.5 Objective of The Study	4
CHAPTER 2	
LITERATURE REVIEW	
2.1 Introduction	5
2.2 Particleboard Industry in Malaysia	5
2.2.1 Material Used in Particleboard Manufacturing	5
2.2.2 Particleboard Manufacturing Process	6
2.3 Adhesive in Particleboard Manufacturing	7
2.3.1 Phenol Formaldehyde	8
2.3.2 Urea Formaldehyde	9
2.4 Dried Leaves Preparation for Particleboard	10
2.4.1.Properties of Dried Leaves	10
2.4.2 Usage of Dried Leaves Particleboard	11
2.5 Properties of Dried Leaves Particleboard	12
2.5.1 Effect of Density on Physical Properties in Particleboard	12

2.5.2 Effect of Density on Mechanical Properties in Particleboard	12
2.5.3 Effect of Press Temperature on Physical Properties in Particleboard	13
2.5.4 Effect of Press Temperature on Mechanical Properties in Particleboard	13
2.6 Particleboard Testing	14
2.6.1 Bending Test	14
2.6.2 Internal Bonding	15
2.6.3 Water Absorption	15
2.6.4 Thickness Swelling	16

CHAPTER 3

MATERIALS AND METHODOLOGY

3.1 Field Procedure	17
3.2 Material Preparation	17
3.3 Board Making	18
3.3.1 Blending	18
3.3.2 Mat Forming	19
3.3.3 Cold Press	20
3.3.4 Hot Press	20
3.3.5 Conditioning	21
3.3.6 Trimming and cutting	21
3.4 Particleboard Testing	22
3.4.1 Bending strength	22
3.4.2 Internal bonding	23
3.4.3 Water Absorption and Thickness Swelling	24
3.5 Experimental Design	25

CHAPTER 4

RESULT AND DISCUSSION	
4.1 The Mechanical and Physical Properties of Composite	26
4.2 Statistical Analysis	27
4.3 Effects of Density of The Board	28
4.3.1 Mechanical Properties	28
4.3.2 Physical Properties	30
4.4 Effects of Press Temperature	32
4.4.1 Mechanical Properties	33
4.4.2 Physical properties	35

ABSTRACT

EFFECT OF DENSITY AND PRESS TEMPERATURE ON DRIED LEAVES PARTICLEBOARD

Shortage of timber and material supply for furniture is one of the reason to use dried leaves as alternative material to produce particleboard. This research was aimed to determine the mechanical and physical properties of dried leaves particleboard. Besides, this study is done to evaluate the effect of density and press temperature on dried leaves particleboard. The materials were collected in UiTM area and not specify on specific species. Two variables as the density of board (500 kg/m³, 550 kg/m³, 600 kg/m³) and press temperature (160°C, 170°C and 180°C) was performed. Mechanical and physical properties were determined based on Bending, Internal Bonding, Thickness Swelling and Water Absorption testing. Based on the results, the board density of 600 kg/m³ and 180°C had the best mechanical and physical value.