

**PROPERTIES OF PARTICLEBOARD FROM SUGARCANE
BAGASSE IN RELATION TO BOARD DENSITY AND RESIN
CONTENT**

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TABLE OF CONTENTS

	Page
CANDIDATE'S DECLARATION	i
ACKNOWLEDGEMENTS	ii
TABLES OF CONTENTS	iii
LIST OF TABLES	V
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
ABSTRACT	viii
ABSTRAK	ix
CHAPTER 1 INTRODUCTION	
1.1 Background	1
1.2 Problem Statement	2
1.3 Objectives of Study	3
CHAPTER 2 LITERATURE REVIEW	
2.1 Particleboard	4
2.1.1 Particleboard Process	6
2.1.2 Properties of Particleboard	7
2.1.3 Particleboard Dimension	7
2.1.4 Particle Size	7
2.1.5 Uses of Particleboard	8
2.2 Raw Material	8
2.2.1 Sugarcane Bagasse	9
2.2.2 Properties of Sugarcane Bagasse	10
2.3 Resin	11
CHAPTER 3 MATERIALS AND METHODS	
3.1 Preparation of Raw Material	13
3.1.1 Chipping and Flaking	13
3.1.2 Screening and Oven Drying	13
3.1.3 Blending	14
3.1.4 Mat Forming	15
3.1.5 Cold Press	15
3.1.6 Hot Press	15
3.1.7 Conditioning and Trimming	15
3.2 Panel Testing	16
3.3 Board Testing and Evaluation	17
3.3.1 Cutting Planning	17
3.3.2 Physical Testing	18
3.3.2.1 Thickness Swelling and Water Absorption Test	18
3.3.3 Mechanical Testing	19
3.3.3.1 Bending Strength Testing	19

3.3.3.2 Internal Bonding Testing	19
3.34 Density Test	20
3.4 Experimental Design of Main Study	21
CHAPTER 4 RESULTS AND DISCUSSION	
4.1 ANOVA Analysis	22
4.2 Effects of Board Density	24
4.2.1 Internal Bonding	24
4.2.2 Bending	25
4.2.3 Thickness Swelling	26
4.3 Effects of Resin Content	27
4.3.1 Internal Bonding	27
4.3.2 Bending	28
4.3.3 Thickness Swelling	30
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	
5.1 Conclusions	31
5.2 Recommendations	32
REFERENCES	33
APPENDIXES	35
<i>CURRICULUM VITAE</i>	44

ABSTRACT

PROPERTIES OF PARTICLEBOARD FROM SUGARCANE BAGASSE IN RELATION TO BOARD DENSITY AND RESIN CONTENT

This study used Sugarcane Bagasse as a raw material in the manufacture of Particleboard (PB). Currently rubberwood supply is decreasing and limited in resources thus another fast growing species were promoted as very promising raw material for wood composite product. The objectives of this study are to determine the properties and to evaluate the effects of board density and resin content on PB properties. Target board density was 700 kg/m³ and 800kg/m³ with applied 7%, 9% and 11% of Urea Formaldehyde (UF) as a binder. The quality of the boards were evaluated by determine of bending properties including modulus of rupture (MOR), modulus of elasticity (MOE), internal bond (IB) strength and thickness swelling (TS) based on JIS standard. All of the results testing show the mechanical and physical properties of PB have meet the standard requirement based on JIS A5908:2003.