# BENDING PROPERTIES OF FINGER JOINTED MAHANG GAJAH (Macaranga gigantae)

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**CANDIDATE'S DECLARATION** 

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iii

#### **ABSTRACT**

#### BENDING PROPERTIES OF FINGER JOINTED MAHANG GAJAH

(Macaranga Gigantae)

Recently, there are depleting supplies of hardwood for furniture industry. Wood jointing system might be applied to solve this situation. The objectives of this study are to determine the bending properties of finger jointed Mahang Gajah (Macaranga gigantae) at different portions (top, middle, and bottom) and at different finger orientations (vertical and horizontal). In this study, Mahang Gajah was used as a raw material. It was harvested from Hutan Pembelajaran UiTM, Cawangan Pahang. From the study, it shows that for different portions, it is highly significant difference for Modulus of Elasticity (MOE) but no significant difference for Modulus of Rupture (MOR). For different finger orientations, both MOE and MOR are highly significant. Meanwhile for portion interaction with finger orientation, both MOE and MOR are not significant. It can be conclude that Mahang Gajah is a suitable material for finger jointing and can be a new potential source for furniture industry.

## **TABLE OF CONTENTS**

			Page		
APPROVA	PROVAL SHEET ii				
CANDIDATE'S DECLARATION					
ACKNOWLEDGEMENT					
TABLE OF CONTENTS					
LIST OF TABLES					
LIST OF FIGURES					
LIST OF PLATES					
LIST OF ABBREVIATIONS					
ABSTRACT					
ABSTRAK					
		1			
CHAPTER					
1.0	INTR				
			1 4 4 5		
	LITERATURE REVIEW				
	2.1	Mahang Gajah (Macaranga gigantae) 2.1.1 Properties of Mahang Gajah 2.1.2 Plantation of Mahang Gajah 2.1.3 Uses of Mahang Gajah	6 6 7 8		
	2.2 2.3 2.4	Finger Joint	8 10 12		

3.0	MATERIALS AND METHODS				
	3.1 3.2	Materials Methodology 3.2.1 Preparation of Sample 3.2.2 Sampling	15 15 15 17		
	3.3	3.2.3 Finger Jointing Method of Testing 3.3.1 Bending Test (4 point)	18 19 19		
	3.4		20		
	3.5	Method of Analyzing	21		
4.0	RESULTS AND DISCUSSION				
3	4.1	Results and Discussion	22		
	4.2	Mark Color C	23		
140	4.3	Effects of portion on bending properties of finger jointed Mahang Gajah	24		
**	4.4	Effects of finger orientation on bending			
	4.5	Properties of finger jointed Mahang Gajah Effects of portion interaction with finger orientation on bending properties of	27		
		finger jointed Mahang Gajah	29		
5.0	CONCLUSIONS AND RECOMMENDATIONS				
	5.1	Conclusions	32		
	5.2	Recommendations	34		
		,			
REFEREN			35 38		
APPENDICES					
CURRICU	LUM VI	TAE	55		
PUBLICAT	LION OI	F THE PROJECT REPORT			
UNDERTA	KING		56		
PERMISSI	ON FO	R THE REFERENCES AND			
PHOTOCO	PYING	*	57		