

**THERMOPLASTIC COMPOSITE FROM
MAHANG KAPUR (*M. hoseii*)**

MOHD SAIFULDIN BIN JASIN

**DIPLOMA IN WOOD INDUSTRY
UNIVERSITI TEKNOLOGI MARA**

2001

ACKNOWLEDGEMENT

I would like to take this opportunity to express my special to Allah S.W.T. for his Blessing and Strength rendered to me to complete my final project entitle “Thermoplastic Composite from Mahang Kapur“ and also to my beloved friends for their continuous support.

I would also like to offer my special thanks to my supervisors, Assoc. Prof. Madya Dr. Jamaludin Kasim, for helping me at every phase of the study. Who are so generous in lending me helping hands and showing me the correct ways of performing my tasks. I would like to express my most sincere thanks to him.

I also to extend my appreciation to those who are involved either directly or indirectly in completing this project. I believed, without their helps, I would not be able to complete this final project.

TABLE OF CONTENT

TITLE	PAGE
PROJECT.....	i
APPROVAL SHEET.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
LIST OF PLATES.....	ix
LIST OF ABBREVIATIONS.....	x
ABSTRACT.....	xi
ABSTRAK.....	xii

CHAPTER

1.0	INTRODUCTION.....	1
2.0	LITERATURE REVIEW.....	3
	2.1 Physical properties of Mahang.....	3
	2.2 Anatomical properties of Mahang.....	3
	2.3 Uses.....	3
	2.4 Polypropylene.....	4
	2.5 Thermoplastic composite.....	5
	2.5.1 Thermoplastic.....	5
	2.5.2 Composite.....	6
	2.6 Potential and uses of Thermoplastic Composite.....	7
3.0	MATERIAL AND METHOD.....	9
	3.1 Material preparation.....	9
	3.2 Composite Manufacture.....	9
	3.3 Physical and Strength properties testing.....	12
	3.3.1 Tensile test.....	12
	3.3.2 Bending test.....	13
	3.3.3 Thickness swelling and Water absorption test.....	14
4.0	RESULT AND DISCUSSION.....	16
	4.1 Strength and Dimensional Properties of Thermoplastic.....	16
	4.2 Effect of Filler Content on Strength Properties.....	17
	4.3 Effect of Filler Content on Dimensional Properties.....	20

5.0 CONCLUSION.....	21
REFERENCES.....	22
APPENDICES.....	23
VITA.....	31

ERMOPLASTIC COMPOSITE FROM MAHANG KAPUR

By

MOHD SAIFULDIN JASIN

September 2001

ABSTRACT

The important of this research is to find the better ay to make Composite Thermoplastic. From this research, we can make the new uses of Mahang Kapur. The uses of Mahang Kapur can be expended to new way for Composite Thermoplastic with 15%, 25% and 35% of wood dust. It also depends on synthetic material that is used that is polypropylene and MAPP will be come coupling agent of on the thermoplastic. It of wood dust and the purpose for adding will be tied the plastic and of the strenghen for composite thermoplastic, if some of be MAPP.