# WOOD DESTROYING FUNGI

# By NUR FAEIZAH BT ABD GHANI

Final Project Paper Submitted in Partial Fulfillment for the Diploma in

Wood Industries, Faculty of Applied Sciences,

Universiti Teknologi MARA

April 2008

#### **ACKNOWLEDGEMENT**

First and foremost, I would like to give my special thanks to ALLAH s.w.t for blessing me and giving me the strength and chance to complete this final project entitle "Wood Destroying Fungi". Without this blessing I'm sure that my work cannot complete on time.

Besides that, I want to say thank you very much to my advisor Prof Madya Abdul Jalil bin Hj. Ahmad for spending his time to give me knowledge, instructions and full support with sincerely to complete my task in this project. Every the knowledge that you give, I will keep and won't forget it for the rest of my life. I think you are the best advisor.

Thanks to Prof. Madya. Dr. Jamaludin bin Kasim because of all the comments and suggestions. In addition I would like to appreciate the support that my beloved family gives to me. Without my family I cannot live in this world also not to be UiTM's student. Lastly, thanks to all my friends because of the cooperation during my presentation.

# TABLES OF CONTENTS

APPROVAL SI	HEETii
ACKNOWLED	GEMENTiii
DEDICATION	iv
LIST OF TABI	LEvii
LIST OF FIGU	RESviii
LIST OF PLAT	TEix
ABSTRACT	х
ABSTRAK	xii
CHAPTER 1	INTRODUCTION 1
	1.1 Objectives 3
CHAPTER 2	CLASSIFICATION OF FUNGI
	2.1 General
	2.2 Types of wood decaying fungi
	2.2.1 soft rot fungi
	2.2.2 brown-rot fungi10
	2.2.3 white-rot fungi13

2.3	Types of wood staining fungi
2	2.3.1 Molds fungi
2	2.3.2 Chemicals stains
2	2.3.3 Sapstaining fungi
2.4	Characteristics of Wood Destroying Fungi20
	2.4.1 Macroscopic Appearance of Fungi
	2.4.2 Macroscopic Appearance of Fungi23
2.5	The cause of decay24
	Fungi Requirements25
	Spread of Decay27
2.8	Mechanism of Fungal Attack29
CII A DOTTI	
	R 3 PREVENTIONS & TREATMENT
3.1	General
3.2	Chemical Used and Control Method
	3.2.1 Water borne chemical
	3.2.2 Oil-borne chemical
СНАРТЕІ	R 4 EFFECT OF FUNGAL DECAY ON WOOD
	eneral
	ffect of decay on physical properties of wood
	ffect of decay on appearance of wood42
4.3 E	tect of decay on appearance of wood42
СНАРТЕІ	R 5 CONCLUSION AND RECOMMENDATIONS44
REFERE	NCES46
VITA	48

### WOOD DESTROYING FUNGI

#### BY

## NUR FAEIZAH BT ABD GHANI

### **APRIL 2008**

#### **ABSTRACT**

Fungi are the wood destroying agent that destroys the wood and decrease its quality. Several methods were done by scientists in this world to search the best method to destroy the fungal attack. Fungi classified to two types: wood decaying fungi and wood staining fungi. Wood decaying fungi can change the physical and chemical properties of wood. While, the wood staining fungi just change the physical properties of wood and cannot destroy the entire of wood. Wood decaying fungi has three types: brown rot, white rot and soft rot. These fungi can destroy the entire parts of wood and also decrease the quality of wood thus reducing the strength.