DISTRIBUTION OF BIRD NEST AND STAG HORN FERN IN UITM FOREST RESERVE, JENGKA, PAHANG

By

Mohd Zamri Bin Ibrahim

Final Project Submitted in Partial Fulfillment For The Diploma In Wood Industries, Faculty Applied Science, Universiti Teknologi MARA

September 2001

ACKNOWLEDGEMENT

First of all, I would like to take this opportunity to express my special thanks to Allah S.W.T for His Blessing and Strength rendered to me to complete my final project entitle "Distribution of Bird's Nest and Stag's Horn Fern in UiTM Forest Reserve, Jengka, Pahang." I would like to offer my special thanks to my beloved family who pray for me always.

I would like to offer my special thanks to my project advisor, Mr. Sheikh Abdul Karim Yamani Bin Zakaria, because of his guidance and also helping me at every phase of the study. He is so generous in lending me helping hands and showing me the correct ways of forming my tasks. I would like to express my most sincere thanks to him.

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

TABLE OF CONTENTS

Page

APPROVAL SHEET	i
DEDICATION	ü
ACKNOWLEDGEMENT	iii
LIST OF TABLES	viii
LIST OF PLATES	ix
ABSTRACT	xī
ABSTRAK	xii

Page

CHAPTER ONE

1.0	Introduction	1			
1.1	Objectives	3			
CHAPTER TWO					
2.0	What is the fern	4			
2.1	Fern structure	4			
	2.1.1 stem	5			
	2.1.2 roots	6			
	2.1.3 fronds	6			
2.2	The anatomy of fern	6			
2.3	Germination	7			
2.4	Types of fern	8			
	2.4.1 Bird's nest fern	8			
	2.4.2 Stag's horn fern	10			

2.5	General species	12
	2.5.1 Stag's horn fern	12
	2.5.1.1 Platycerium coronarium	12
	2.5.1.2 Platycerium holttumii	15
	2.5.1.3 Platycerium wallichii	17
	2.5.2 Bird's nest fern	19
	2.5.2.1 Asplenium nidus	19
	2.5.2.2 Asplenium phytilidis	22
	2.5.2.3 Asplenium batuensa	24
2.6	The life cycle of fern	29
2.7	Pest and disease	30
	2.7.1 Pest	30
	2.7.1.1 Aphids	30
	2.7.1.2 Brown fern scale	30
	2.7.1.3 Caterpillars and cutworms	30
	2.7.1.4 Coconut scale	30
	2.7.1.5 Fungus gnat	31
	2.7.1.6 Root coccids	31
	2.7.1.7 Passionvine hoppers	32
	2.7.2 Disease	32
	2.7.2.1 A healthy environment	32
	2.7.2.2 Acid rot	32
	2.7.2.3 Algae	33

DISTRIBUTION OF STAG'S HORN AND BIRD'S NEST FERN IN

UITM FOREST FESERVE, JENGKA, PAHANG

By

MOHD ZAMRI IBRAHIM

September 2001

ABSTRACT

This project comprehend all the observation and recognition the distribution of bird's nest and stag's horn fern in UiTM Forest Reserve of Pahang. The main objective of the study is to know the distribution of bird's nest and stag's horn fern that can be found in UiTM Forest Reserve. Beside that the characteristic of can be recognized. From this, one best result can be make. Beside that, it can be known for the commercial plant especially for landscaping plant.