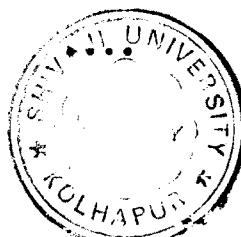




CONTENTS

C O N T E N T

CHAPTER	TITLE	PAGE No.
I	INTRODUCTION	1
II	REVIEW OF LITERATURE ...	6
	1. Forestry	6
	i) Distribution of forest flora in India. ...	10
	ii) Distribution of forest flora in Maharashtra ...	15
	iii) Common plants in Maharashtra	25
	2. Physiology of Germination ...	47
	A. Introduction -	
	i) General	47
	ii) Viability and life span of seed	49
	iii) Dormancy and development	54
	B. Biochemical changes during germination ...	62
	i) General ...	62
	ii) Hormonal regulation of seed germination ...	70
	C. Factors controlling germination	73
	i) General	73
	ii) Temperature ...	75
	iii) Light	76
	iv) Gases	79
	v) Water	80
	vi) Soil conditions ...	82
	vii) Inhibitors ...	83
	3. Scope of Present Investigation	84



CHAPTER	TITLE	PAGE NO.
III	MATERIAL AND METHODS	87
	1. Material ...	87
	2. Methods - A. Field experiments	87
	B. Laboratory experiments	89
	i) Pre-treatment ...	89
	ii) Post-treatments ...	90
	C. Analysis - i) Germination	91
	ii) Growth ...	91
	iii) Water content	92
	iv) Carbohydrates	92
	v) Proline	94
	vi) Amino acids and sugars	95
IV	RESULTS AND DISCUSSION	97
	1. Field experiments ...	97
	2. Laboratory experiments ...	110
	A. Effect of pre-treatment on germination	110
	B. Effect of post-treatments	113
	i) Germination & Growth	113
	ii) Carbohydrates ...	126
	iii) Proline ...	129
	iv) Amino acids ...	133
	v) Sugars ...	138
V	SUMMARY AND CONCLUSIONS	144
	BIBLIOGRAPHY ...	152
	STATEMENT-I ...	167
	STATEMENT-II ...	168