
C O N T E N T S

CONTENTS

Chapter.	Title	Page
Part I		
	Introduction	1
	A brief account of <u>Crotalaria</u> .	6
	Review of Literature.	17
Part II		
I	Effect of Diethyl Sulfate (DES) a chemical mutagen on <u>Crotalaria juncea</u> Linn	30
A.	Introduction.	31
B.	Material and Methods.	32
	1. Morphological parameters.	32
	a) Germination and Survival.	32
	b) Morphological peculiarities.	34
	c) Growth parameters.	34
	d) Leaf area.	34
	e) Stomatal frequency.	35
	f) Pollen fertility.	35
	2. Physiological parameters.	35
	a) Moisture percentage.	355
	b) Total chlorophylls.	36
	c) Nitrogen.	36
C.	Results.	38
	1. Morphological parameters.	38
	a) Germination and survival.	388
	b) Morphological peculiarities.	38

Chapter	Title	Page
	c) Growth parameter.	45
	d) Leaf area.	49
	e) Stomatal frequency.	49
	f) Pollen fertility.	50
	2. Physiological parameters.	53
	a) Moisture percentage.	53
	b) Total chlorophylls.	55
	c) Nitrogen.	55
D.	Discussion.	57
II	Effect of $\sqrt{\text{V}}$ -irradiation, a physical mutagen on <u>Crotalaria juncea</u> Linn.	72
A.	Introduction.	73
B.	Material and Methods.	74
C.	Results.	75
	1. Morphological parameters.	75
	a) Germination and survival.	75
	b) Morphological peculiarities.	77
	c) Growth parameter.	81
	d) Leaf area.	81
	e) Stomatal frequency.	85
	f) Pollen fertility.	86
	2. Physiological parameters.	86
	a) Moisture percentage.	86
	b) Total chlorophylls.	88
	c) Nitrogen.	88
D.	Discussion.	89
III	Summary and conclusion.	102
	Bibliography.	106
	Statement I	
	Statement II	