

LIST OF FIGURES

Chapter	Fig.No.	Title	After Page
3			
	2.1	Effect of NaCl salinity on germination % in <u>C. tinctorius</u> var. <u>Bhima</u> .	71
	2.1	Effect of NaCl salinity on height of shoot & length of root of <u>C. tinctorius</u> var. <u>Bhima</u> , seedlings.	75
	2.3(a)	Effect of NaCl salinity on moisture % in seedling <u>C. tinctorius</u> var. <u>Bhima</u> .	77
	2.3(b)	Effect of NaCl salinity on TAN value of <u>C. tinctorius</u> var. <u>Bhima</u> .	80
	2.3(c)	Effect of NaCl salinity on reducing sugar, total sugar, starch & total carbohydrates in seedlings of <u>C. tinctorius</u> var. <u>Bhima</u> .	83
	2.3(d)	Effect of NaCl salinity on total nitrogen & crude proteins in the seedlings of <u>C. tinctorius</u> , var. <u>Bhima</u> .	85
	2.3(e)	Effect of NaCl salinity on total lipids in seedlings of <u>C. tinctorius</u> var. <u>Bhima</u> .	87
	2.3(f)	Effect of NaCl salinity on polyphenol contents in seedlings of <u>C. tinctorius</u> var. <u>Bhima</u> .	89
	2.3(g)	Effect of NaCl salinity on proline contents in seedlings of <u>Carthamus tinctorius</u> var. <u>Bhima</u> .	89
	2.4(a)	Effect of NaCl salinity on Sodium & Calcium K ⁺ content in seedlings of <u>C. tinctorius</u> var. <u>Bhima</u> .	94
	2.4(b)	Effect of NaCl salinity on magnesium & iron content in seedlings of <u>C. tinctorius</u> var. <u>Bhima</u> .	98
	2.4(d)	Effect of NaCl salinity on chloride contents in seedlings of <u>C. tinctorius</u> var. <u>Bhima</u> .	100

Chapter	Fig.No.	Title	After Page
4			
	3.1(a)	Effect of NaCl treatment on av. no. of leaves per plant & av. leaf area of <u>C. tinctorius</u> var. <u>Bhima</u> .	119
	3.1(b)	Effect of NaCl treatment on leaf thickness of <u>C. tinctorius</u> var. <u>Bhima</u> .	121
	3.1(c)	Effect of NaCl treatment on height of shoot & root length of <u>C. tinctorius</u> var. <u>Bhima</u> .	120
	3.2(a)	Effect of NaCl treatment on moisture % of <u>C. tinctorius</u> var. <u>Bhima</u> .	124
	3.2(b)	Effect of NaCl treatment on total chlorophyll contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	128
	3.2(c)	Effect of NaCl treatment on TAN of <u>C. tinctorius</u> var. <u>Bhima</u> .	130
	3.3(a)	Effect of NaCl treatment on reducing sugar contents of <u>C. tinctorius</u> , var. <u>Bhima</u> .	135
	3.3(b)	Effect of NaCl treatment on total sugar contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	135
	3.3(c)	Effect of NaCl treatment on starch & total carbohydrates of <u>C. tinctorius</u> var. <u>Bhima</u> .	135
	3.4(a)	Effect of NaCl treatment on total nitrogen & crude proteins of <u>C. tinctorius</u> var. <u>Bhima</u> .	139
	3.4(b)	Effect of NaCl treatment on polyphenol contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	143
	3.4(c)	Effect of NaCl treatment on proline contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	145
	3.5(a)	Effect of NaCl treatment on sodium & calcium content of <u>C. tinctorius</u> var. <u>Bhima</u>	148
	3.5(b)	Effect of NaCl treatment on potassium contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	150
	3.5(c)	Effect of NaCl salinity on Mg ²⁺ & Cl ⁻ contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	156

Chapter	Fig.No.	Title	After Page
	3.5(d)	Effect of NaCl salinity on Fe ³⁺ & P ⁵⁺ content of <u>C. tinctorius</u> var. <u>Bhima</u> .	158
	3.6	Effect of NaCl salinity on reproductive growth.	165
5	4.1(a)	Effect of water stress on ave. no. of leaves/plant, leaf area, leaf thickness of <u>C. tinctorius</u> var. <u>Bhima</u> .	175
	4.1(b)	Effect of water stress on height of shoot & length of root of <u>C. tinctorius</u> var. <u>Bhima</u> .	175
	4.2(a)	Effect of water stress on moisture %	175
	4.2(b)	Effect of water stress on total chlorophyll contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	182
	4.2(c)	Effect of water stress on TAN values.	182
	4.3(a)	Effect of water stress on reducing sugar & total sugar content of <u>C. tinctorius</u> var. <u>Bhima</u> .	187
	4.3(b)	Effect of water stress on starch & total carbohydrates of <u>C. tinctorius</u> var. <u>Bhima</u> .	187
	4.4(a)	Effect of water stress on total nitrogen & crude protein contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	192
	4.4(b)	Effect of water stress on polyphenols & contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	195
	4.5(a)	Effect of water stress on Na ⁺ & Cl ⁻ contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	199
	4.5(b)	Effect of water stress on K ⁺ & Ca ²⁺ contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	202
	4.5(c)	Effect of water stress on Fe ³⁺ , Mg ²⁺ & P ⁵⁺	187
	(d)	Contents of <u>C. tinctorius</u> var. <u>Bhima</u> .	& 207

PLATE - I :-

Carthamus tinctorius L.

Cultivation.

PLATE - II :-

A photograph showing effect of NaCl salinity on growth & development in the seedlings of C. tinctorius var. Bhima.

PLATE - III :-

A photograph showing effect of NaCl salinity on growth & development of Carthamus tinctorius var. Bhima.

PLATE - IV :-

A photograph showing effect of water stress on growth & development of Carthamus tinctorius var. Bhima.