

## C O N T E N T S

	PAGE NO.
ACKNOWLEDGEMENTS	
INTRODUCTION	1-8
GEOGRAPHICAL SET-UP	9-23
MATERIALS & METHODS	24-36
OBSERVATIONS	37-147
Plant Morphology	37-69
Leaf number plant <sup>-1</sup> -- 38; Total leaf area per plant -- 39;	
Leaf biomass -- 40; shoot length -- 41; Root length	
-- 42; Root length: Shoot length ratio -- 43; Stem	
biomass -- 44; Root biomass -- 44; Root-Shoot dry	
weight ratio -- 45; Plant height -- 46; Number of	
flowers and fruits per plant and their ratio -- 47;	
Tables(6-29) -- 48-69; Photo Plate -- 1&2.	
Pigment and Mineral Concentration	70-92
Concentration of chlorophyll-a -- 70; concentration of	
chlorophyll-b -- 70; concentration of carotenoids -- 71;	
copper(Cu) -- 72; Iron(Fe) -- 73; Lead(Pb) -- 74;	
Sulphur(S) -- 74; Zinc(Zn) -- 75; Figures(9-24) -- 77-92.	
Epidermal responses	93-115
Length of stomata -- 93; width of stomata -- 94;	
variation in dimension of stomatal pore -- 96; stomatal	
index -- 99; size and frequency of trichomes -- 101;	
tables(30-39) -- 103-112; figures(25-27) -- 113-115.	

**Anatomical responses**

116-147

STEM ANATOMY:

Fibre length -- 116; vessel element dimension -- 117;  
vessel frequency -- 119; relative proportion of cortex,  
vascular tissue and pith -- 120.

ROOT ANATOMY:

Fibre length -- 122; size of vessel elements -- 123;  
vessel frequency -- 125; relative proportion of cortex,  
vascular tissue and pith -- 126; tables(40-51) -- 128-  
139; figures(28-35) -- 140-147.

**DISCUSSION**

148-202

**REFERENCES**

I-XXXI