

# C O N T E N T S

CHAPTER	TITLE	PAGE NO.
I	INTRODUCTION	1
II	REVIEW OF LITERATURE	2
III	MATERIALS AND METHODS	
A.	Materials	14
B.	Methods	15
a.	Photosynthetic Pigments (Chlorophyll)	15
b.	Titrateable Acid Number (TAN)	16
c.	Carbohydrates	17
d.	Proline	20
e.	Polyphenols	21
f.	Nitrogen Metabolism	22
1.	Total nitrogen and crude protein	22
ii.	Nitrate reductase	23
iii.	Nitrite reductase	24
g.	Inorganic Constituents	24
1.	Preparation of acid digest	24
ii.	Estimation of chlorides	25
IV.	RESULTS AND DISCUSSION	
1.	Chlorophylls	27
2.	Titrateable Acid Number (TAN)	32
3.	Carbohydrates	35
4.	Proline	40
5.	Polyphenols	45
6.	Nitrogen Metabolism	52
a.	Total nitrogen and crude protein	52
b.	Nitrate reductase (NR)	57
c.	Nitrite reductase (NiR)	61



---

CHAPTER	TITLE	PAGE NO.
7.	Inorganic Constituents	64
a.	Na <sup>+</sup>	65
b.	K <sup>+</sup>	67
c.	Ca <sup>+2</sup>	68
d.	Mg <sup>+2</sup>	69
e.	Fe <sup>+3</sup>	70
f.	Mn <sup>+2</sup>	73
g.	Cu <sup>+2</sup>	75
h.	Zn <sup>+2</sup>	76
i.	Cl <sup>-</sup> (Chlorides)	79
V.	SUMMARY AND CONCLUSION	84
	BIBLIOGRAPHY.	93

---