LIST OF FIGURES -1--1-Pig. No. Caption Page Chapter I 1 Chloroplast assembly and disassembly during leaf growth and senescence 8 2 Hormonal regulation of senescence 28 Groundnut (Arachis hypogaea L.) 3 37 Growth stages in a peanut plant 38 Chapter III 5 Changes in sodium, potassium, calcium and phosphorus contents in first leaf of groundnut (Arachis hypogaea L.) during different growth stages 60 Time course of the conductivity of the incubation medium (under natural light and continuous darkness) during leaf senescence in groundnut (Arachis hypogaea L.) 69 Changes in chlorophyll content in 7 first leaf of groundnut (Arachis hypogaea L.) during different growth 72 stages 8 Chemical structure of chlorophyll a and chlorophyll b 74 9 Changes in carotenoid content in first leaf of groundnut (Arachis hypogaea L.) 79 during different growth stages



Conti..

Fig. No.	<u>Caption</u>		Page
10	Changes in chlorophyll content during		
	leaf senescence under continuous darkness		
	and natural light	• • •	83
11	Changes in carotenes content during		
	leaf senescence under continuous		
	darkness in groundnut (Arachis		
	hypogaea L.)	• • •	88
12	Changes in carotenes content during		
	leaf senescence under natural light		
	in groundnut (Arachis hypogaea L.)	•••	89
13	Changes in reducing sugars and starch		
	content in first leaf of groundnut		
	(Arachis hypogaea L.) during different		
	growth stages	• • •	92
14	Changes in reducing sugars and starch		
	contents during leaf senescence under		
	natural light in groundnut (Arachis		
	hypogaea L.)	• • •	99
15	Changes in reducing sugars and starch		
	contents during leaf senescence under		
	condition of continuous darkness in		
	groundnut (Arachis hypogaea L.)	• • •	100
16	Changes in acidity status in first		
	leaf of groundnut (Arachis hypogaea L.)		
	during different growth stages	•••	103
17	Changes in acidity status during leaf		
	senescence in groundnut (Arachis		4 - 4
	hypogaea L.)	• • •	106

Fig. No.	Caption		Page
18	Changes in polyphenol content in first		
	leaf of groundnut (Arachis hypogaea L.)	•••	103
19	Changes in total polyphenols during		
	leaf senescence under continuous dark-		
	ness and natural light	• • •	113
20	Changes in soluble protein in first		
•	leaf of groundnut (Arachis hypogaea L.)		
	during different growth stages	• • •	116
21	Changes in soluble proteins during		
	leaf senescence under continuous		
	darkness and natural light	• • •	122
22	Changes in catalase activity in		
	first leaf of groundnut (Arachis		
	hypogaea L.) during different growth		
	stages	• • •	126
23	Changes in peroxidase activity in		
	first leaf of groundnut (Arachis		
	hypogaca L.) during different		
	growth stages	• • •	131
24	Changes in catalase activity during		
	leaf senescence under continuous		
	darkness in groundnut (Arachis		
	hypogaca L.)	•••	136
25	Changes in peroxidase activity during		
	leaf senescence under continuous dark-		
	ness in groundnut (Arachis hypogaca L.)	_	138
	ness in Aroquance (wracurs mybonacs n.)	• • •	