

CONTENTS

Preface		vii
Chapter 1	Photosynthesis: Molecular Regulation through Biotic and Abiotic Factors <i>Saumya Srivastava and Yogesh Kumar Sharma</i>	1
Chapter 2	Elevated Root-Zone CO ₂ on Photosynthesis of Vegetable Crops at Different Air and Root-Zone Temperatures <i>Jie He</i>	23
Chapter 3	Chlorophyll A Fluorescence, Photosynthesis Activity and Chlorophyll Content in Senescing Leaves <i>Marina Cavaiuolo, Roberta Bulgari, Giacomo Cocetta and Antonio Ferrante</i>	55
Chapter 4	Carbon Isotope Heterogeneity in Photosynthesizing Biomass and Perspectives of Its Application in Biological Studies <i>Alexander A. Ivlev</i>	71
Chapter 5	Photosynthesis and Photoinhibition in Aquatic Plants with Different Carbon Uptake Physiology <i>Søren Laurentius Nielsen</i>	103
Chapter 6	Stomatal and Photosynthetic Responses to Flooding <i>Mohammad Mobin, Mohammad Nasir Khan and Zahid bin Khorshid Abdukhalik Nourabbas</i>	119
Chapter 7	Photosynthesis in Changing Environment: Analyzing the Role of Phytohormones in Modulation <i>M. Iqbal R. Khan, Nafees A. Khan, Mohd. Asgher, Mehar Fatma, Shabina Syeed, Asim Masood, Tasir S. Per and Wasim Kaiser</i>	129
Chapter 8	Photosynthetic Inhibition under Salinity Challenged Environment: An Insight into Regulation of Rubisco <i>Noushina Iqbal, Nafees A. Khan and Shahid Umar</i>	167

Chapter 9	Oxidative Stress Management Through Sugar Signaling and Antioxidant Network in Plants	185
	<i>Resham Sharma, Renu Bhardwaj, Dhriti Kapoor, Sonia, Amandeep Rattan, Vinod Kumar, Anket Sharma, A. K. Thukral, Satwinderjeet Kaur and Nitika Arora</i>	
Chapter 10	The Effect of Silicon on Plant Photosynthesis during Pathogens Infection	211
	<i>Fab��rio de �vila Rodrigues, Wilka Messner da Silva Bispo and Carlos Eduardo Aucique-P��rez</i>	
Chapter 11	Natural Products and Their Synthetic Analogues As New Active Principles Targeting the Photosynthetic Machinery	231
	<i>R��bson Ricardo Teixeira, Ang��lica Faleiros da Silva Maia, Wagner Luiz Pereira, �ngela Maria Almeida Lima and Giuseppe Forlani</i>	
Chapter 12	Photosynthesis in Humans	257
	<i>Arturo Sol��s Herrera, Mar��a del Carmen Arias Esparza and Martha Patricia Sol��s Arias</i>	
About the Editor		281
Index		283