

CONTENTS

Preface		vii
Foreword		1
Chapter 1	Fermented Foods in Human Welfare <i>J.B. Prajapati</i>	3
Chapter 2	Microbes as a Tool in Insect Pest Management of Horticultural Crops in India: Progress and Prospects <i>P.N. Ganga Visalakshy</i>	9
Chapter 3	Genetic Engineering for Viral Resistance in Vegetable Crops <i>P. Sharma, Richa Raizada, T. Ogawa and M. Ikegami</i>	25
Chapter 4	Microarrays: Concept and Applications <i>Smita Singh, Pawas Goswami, Kanti P. Sharma and R. K. Gaur</i>	43
Chapter 5	Biological Characterization, Genome Organization and Management Strategies of Begomoviruses Causing Severe Economic Losses to Chilli Cultivation in India <i>M. S. Khan, S. K. Snehi and S. K. Raj</i>	55
Chapter 6	Virus (Es) Infecting Stone Fruits: Detection Methods and Biotechnological Approaches Towards Management Strategies <i>Vanita Chandel, Tanuja Rana, Vipin Hallan and Aijaz A. Zaidi</i>	65
Chapter 7	Transgenic Crops- Another Leapfrog Technology <i>P. Balasubramanian</i>	81
Chapter 8	Phytoplasma Diseases of Weeds: Detection, Taxonomy and Diversity <i>Smriti Mall, Govind P. Rao and Carmine Marcone</i>	87
Chapter 9	An Overview of Gene Silencing and its Applications <i>Richa Raizada, Pradeep Sharma, Rajneesh Prajapati, Abhinav Tyagi, M.S. Rathore, K.P.Sharma and R.K.Gaur</i>	109

Chapter 10	Amplified Fragment Length Polymorphism (AFLP) as Molecular Marker- A PCR Based Technique and its Applications in Plant Sciences	117
	<i>Mangal Singh Rathore, Saroj Sharma, D. Purohit and R.K. Gaur</i>	
Chapter 11	Mycorrhiza and its Significance in Crop Improvement	131
	<i>Harish Dhingra and Sakshi Issar</i>	
Chapter 12	Biotechnology of Post-Harvest Diseases of Fruits and Vegetables	139
	<i>Sudhir Chandra, Raghvendra P. Narayan and H. K. Kehri</i>	
Chapter 13	Neuroaids in Indian Scenario	155
	<i>Ashish Swarup Verma, Anchal Singh, Udai Pratap Singh and Premendra Dhar Dwivedi</i>	
Chapter 14	<i>In vitro</i> Morphogenesis (Rhizogenesis) in Kalihari (<i>Gloriosa Superba</i> L.) - An Alternative Source of Colchicine Production	169
	<i>M.S. Rathore, Mangal S. Rathore, D. Panwar and N.S. Shekhawat</i>	
Chapter 15	Genetically Modified Organisms and Their Applications in Modern Era	181
	<i>Sakshi Issar and Harish Dhingra</i>	
Chapter 16	Patenting of Life Forms: Indian Scenario	189
	<i>Anvita Parashar</i>	
Chapter 17	IPR And Agri-Biotech Management in India – The Big Picture	199
	<i>Ashish Kumar Sharma, Sushil Kumar Rai and Anjali Sharma</i>	
About Authors		209
Index		213