


ORCHID BIOTECHNOLOGY



edited by

Wen-Huei Chen • Hong-Hwa Chen

 World Scientific

Contents

<i>Foreword</i>		v
<i>Preface</i>		ix
<i>List of Contributors</i>		xiii
Chapter 1	Breeding and Development of New Varieties in <i>Phalaenopsis</i> <i>Ching-Yan Tang and Wen-Huei Chen</i>	1
Chapter 2	Embryo Development of Orchids <i>Yung-I Lee, Edward C Yeung and Mei-Chu Chung</i>	23
Chapter 3	<i>In vitro</i> Morphogenesis and Micro-Propagation of Orchids <i>Wei-Chin Chang</i>	45
Chapter 4	Somaclonal Variation in Orchids <i>Fure-Chyi Chen and Wen-Huei Chen</i>	65
Chapter 5	The Screening of Orchid Mycorrhizal Fungi (OMF) and their Applications <i>Doris C. N. Chang</i>	77
Chapter 6	Analysis of the Orchid Genome Size Using Flow Cytometry <i>Tsai-Yun Lin and Hsiao-Ching Lee</i>	99

Chapter 7	The Cytogenetics of <i>Phalaenopsis</i> Orchids <i>Yen-Yu Kao, Chih-Chung Lin, Chien-Hao Huang and Yi-Hsueh Li</i>	115
Chapter 8	Analysis of the Chloroplast Genome of <i>Phalaenopsis aphrodite</i> <i>Ching-Chun Chang, Hsien-Chia Lin and Wun-Hong Zeng</i>	129
Chapter 9	Analysis of Expression of <i>Phalaenopsis</i> Floral ESTs <i>Wen-Chieh Tsai, Yu-Yun Hsiao, Zhao-Jun Pan and Hong-Hwa Chen</i>	145
Chapter 10	Orchid MADS-Box Genes Controlling Floral Morphogenesis <i>Wen-Chieh Tsai, Chin-Wei Lin, Chang-Sheng Kuoh and Hong-Hwa Chen</i>	163
Chapter 11	Pseudobulb-Specific Gene Expression of <i>Oncidium</i> Orchid at the Stage of Inflorescence Initiation <i>Jun Tan, Heng-Long Wang and Kai-Wun Yeh</i>	185
Chapter 12	Application of Virus-induced Gene Silencing Technology in Gene Functional Validation of Orchids <i>Hsiang-Chia Lu, Hong-Hwa Chen and Hsin-Hung Yeh</i>	211
Chapter 13	Genetic Transformation as a Tool for Improvement of Orchids <i>Sanjaya and Ming-Tsair Chan</i>	225
	<i>Index</i>	255