

Contents

Cultivation and Uses of Cucurbits.....	1
James D. McCreight	
Phylogeny and Evolution of the Cucurbitaceae.....	13
Susanne S. Renner and Hanno Schaefer	
Melon Genetic Resources: Phenotypic Diversity and Horticultural Taxonomy	25
Michel Pitrat	
Genetic Resources of Cucumber	61
Rachel P. Naegele and Todd C. Wehner	
Genetic Resources of Watermelon.....	87
Amnon Levi, Robert Jarret, Shaker Kousik, W. Patrick Wechter, Padma Nimmakayala, and Umesh K. Reddy	
Genetic Resources of Pumpkins and Squash, <i>Cucurbita</i> spp.....	111
Harry S. Paris	
Gourds: Bitter, Bottle, Wax, Snake, Sponge and Ridge.....	155
Narinder P.S. Dhillon, Supannika Sanguansil, Sheo Pujan Singh, Mohammed Abu Taher Masud, Prashant Kumar, Latchumi Kanthan Bharathi, Halit Yetişir, Rukui Huang, Doan Xuan Canh, and James D. McCreight	
The Melon Genome.....	173
Josep Casacuberta, Pere Puigdomènech, and Jordi Garcia-Mas	
The Cucumber Genome	183
Yiqun Weng	
The Watermelon Genome.....	199
Xu Yong and Shaogui Guo	
Genetics and Genomics of <i>Cucurbita</i> spp.....	211
J. Montero-Pau, C. Esteras, J. Blanca, P. Ziarsolo, J. Cañizares, and B. Picó	

Comparative Genomics of the Cucurbitaceae	229
Padma Nimmakayala, Thangasamy Saminathan, Venkata Lakshmi Abburi, Lav Kumar Yadav, Yan Tomason, Amnon Levi, Yiqun Weng, and Umesh K. Reddy	
Organellar Genomes of the Cucurbits	241
Michael J. Havey	
Databases and Bioinformatics for Cucurbit Species	253
Yang Bai, Zhonghua Zhang, and Zhangjun Fei	
Genetic Mapping of Complex Traits in Cucurbits.....	269
María José Gonzalo and Antonio J. Monforte	
Phloem Biology of the Cucurbitaceae.....	291
Robert Turgeon	
Sex Determination in Cucumis	307
Natalia Yaneth Rodriguez-Granados, Aefef Lemhemdi, Fadi Abou Choucha, David Latrasse, Moussa Benhamed, Adnane Boualem, and Abdelhafid Bendahmane	
Genomic Analysis of Cucurbit Fruit Growth.....	321
Rebecca Grumet and Marivi Colle	
Fruit Ripening in Melon.....	345
Ryoichi Yano and Hiroshi Ezura	
Genomic Aspects of Melon Fruit Quality	377
Amit Gur, Itay Gonda, Vitaly Portnoy, Galil Tzuri, Noam Chayut, Shahar Cohen, Yelena Yeselson, Ayala Meir, Einat Bar, Rachel Davidovitz-Rikanati, Uzi Saar, Harry S. Paris, Joseph Burger, Yaakov Tadmor, Efraim Lewinsohn, Arthur A. Schaffer, and Nurit Katzir	
Cucurbit Genetics and Genomics: A Look to the Future	409
Rebecca Grumet, Jordi Garcia-Mas, and Nurit Katzir	
Index.....	417