

Contents

Contributors	xi
Introduction.....	xiii
1. An Overview of Association Mapping.....	1
<i>Nnadozie C. Oraguzie and Phillip L. Wilcox</i>	
2. Linkage Disequilibrium.....	11
<i>Nnadozie C. Oraguzie, Phillip L. Wilcox, Erik H.A. Rikkerink, and H. Nihal de Silva</i>	
3. What Are SNPs?.....	41
<i>David Edwards, John W. Forster, David Chagné, and Jacqueline Batley</i>	
4. Single Nucleotide Polymorphism Discovery.....	53
<i>David Edwards, John W. Forster, Noel O.I. Cogan, Jacqueline Batley, and David Chagné</i>	
5. Single Nucleotide Polymorphism Genotyping in Plants.....	77
<i>David Chagné, Jacqueline Batley, David Edwards, and John W. Forster</i>	
6. SNP Applications in Plants	95
<i>Jacqueline Batley and David Edwards</i>	
7. Linkage Disequilibrium Mapping Concepts	103
<i>H. Nihal de Silva and Roderick D. Ball</i>	

8. Statistical Analysis and Experimental Design.....	133
<i>Roderick D. Ball</i>	
9. Linkage Disequilibrium-Based Association Mapping in Forage Species	197
<i>Mark P. Dobrowolski and John W. Forster</i>	
10. Gene-Assisted Selection	
Applications of Association Genetics for Forest Tree Breeding.....	211
<i>Phillip L. Wilcox, Craig E. Echt, and Rowland D. Burdon</i>	
11. Prospects of Association Mapping in Perennial Horticultural Crops	249
<i>Erik H.A. Rikkerink, Nnadozie C. Oraguzie, and Susan E. Gardiner</i>	
Index.....	271