

Contents

<i>Preface to the Series</i>	v
<i>Preface to the Volume</i>	xi
<i>List of Contributors</i>	xv
<i>Abbreviations</i>	xxiii
1. The Conifers (Pinophyta)	1
<i>David S. Gernandt, Ann Willyard, John V. Syring and Aaron Liston</i>	
2. Economic Importance, Breeding Objectives and Achievements	40
<i>T.J. Mullin, B. Andersson, J.-C. Bastien, J. Beaulieu, R.D. Burdon, W.S. Dvorak, J.N. King, T. Kondo, J. Krakowski, S.J. Lee, S.E. McKeand, L. Pâques, A. Raffin, J.H. Russell, T. Skrøppa, M. Stoehr and A. Yanchuk</i>	
3. Cytogenetics	128
<i>M. Nurul Islam-Faridi and C. Dana Nelson</i>	
4. Neutral Patterns of Genetic Variation and Applications to Conservation in Conifer Species	141
<i>Francesca Bagnoli, Bruno Fady, Silvia Fineschi, Sylvie Oddou-Muratorio, Andrea Piotti, Federico Sebastiani and Giovanni G. Vendramin</i>	
5. Genetic Mapping in Conifers	196
<i>Kermit Ritland, Konstantin V. Krutovsky, Yoshihiko Tsumura, Betty Pelgas, Nathalie Isabel and Jean Bousquet</i>	
6. Patterns of Nucleotide Diversity and Association Mapping	239
<i>González-Martínez SC, Dillon S, Garnier-Géré PH, Krutovsky KV, Alía R, Burgarella C, Eckert AJ, García-Gil MR, Grivet D, Heuertz M, Jaramillo-Correa JP, Lascoux M, Neale DB, Savolainen O, Tsumura Y and Vendramin GG</i>	
7. Integration of Molecular Markers in Breeding	276
<i>Rowland D. Burdon and Phillip L. Wilcox</i>	

8. Transcriptomics	323
<i>John J. Mackay and Jeffrey F. D. Dean</i>	
9. Recent Advances in Proteomics and Metabolomics in Gymnosperms	358
<i>Rebecca Dauwe, Andrew Robinson and Sharon D. Mansfield</i>	
10. Toward the Conifer Genome Sequence	389
<i>Michele Morgante and Emanuele De Paoli</i>	
11. Future Prospects	404
<i>Jeffrey F.D. Dean</i>	
<i>Index</i>	439
<i>Color Plate Section</i>	449