

The Molecular Biology and Biotechnology of Flowering

2ND EDITION



EDITED BY BRIAN R. JORDAN

Contents

Contributors	vii
Preface	ix
Part I: External and Internal Regulation of Flowering	1
1. Photoperiodism and Flowering <i>B. Thomas, I. Carré and S. Jackson</i>	3
2. Vernalization <i>A.R. Gendall and G.G. Simpson</i>	26
3. Signal Transduction Regulating Floral Development <i>R.G. Anthony</i>	50
Part II: Floral Development	79
4. Floral Meristem Identity Genes <i>B. Davies</i>	81
5. Molecular Biology of Floral Organogenesis <i>B. Krizek</i>	100
6. Molecular Developmental Genetics and the Evolution of Flowers <i>G. Theissen and K. Kaufmann</i>	124
7. Flower Senescence <i>S. Verlinden</i>	150
8. Developmental Control and Biotechnology of Floral Pigmentation <i>K. Davies and K. Schwinn</i>	178

9. Biotechnology of Floral Development	237
<i>C. Winefield and B.R. Jordan</i>	
Part III: Fertilization and Gametophyte Development	267
10. Control of Fertilization by Self-incompatibility Mechanisms	269
<i>T. Gaude, I. Fobis-Loisy and C. Miège</i>	
11. Stamen Development: Primordium to Pollen	298
<i>R.J. Scott, M. Spielman and H.G. Dickinson</i>	
12. Genes Regulating Ovule Development	332
<i>J. Broadhvest and B.A. Hauser</i>	
13. The Molecular Biology of Apomixis	354
<i>R.A. Bicknell and A.S. Catanach</i>	
Index	391