

Contents

List of contributors	page vii
Preface	ix
1 A well-supported phylogenetic framework for the monocot order Alismatales reveals multiple losses of the plastid NADH dehydrogenase complex and a strong long-branch effect	1
WILLIAM J. D. ILES, SELENA Y. SMITH and SEAN W. GRAHAM	
2 The fossil record of noncommelinid monocots	29
SELENA Y. SMITH	
3 Is syncarpy an ancestral condition in monocots and core eudicots?	60
DMITRY D. SOKOLOFF, MARGARITA V. REMIZOWA and PAULA J. RUDALL	
4 Diversification of pollen and tapetum in early-divergent monocots	82
CAROL A. FURNESS	
5 Macroecological correlates of global monocot species richness	99
E. ANDREW JONES, BENJAMIN SOBKOWIAK, C. DAVID L. ORME, RAFAËL GOVAERTS and VINCENT SAVOLAINEN	
6 In time and with water ... the systematics of alismatid monocotyledons	118
DONALD H. LES and NICHOLAS P. TIPPERY	
7 Evolution of floral traits in relation to pollination mechanisms in Hydrocharitaceae	165
NORIO TANAKA, KOICHI UEHARA and JIN MURATA	
8 Patterns of bract reduction in racemose inflorescences of early-divergent monocots	185
MARGARITA V. REMIZOWA, DMITRY D. SOKOLOFF and PAULA J. RUDALL	
9 Recent progress in the phylogenetics and classification of Araceae	208
SIMON J. MAYO, JOSEF BOGNER and NATALIE CUSIMANO	
10 The first evolutionary classification of Araceae: A. Engler's Natural System	243
SIMON J. MAYO and JOSEF BOGNER	
11 Aroid floral morphogenesis in relation to phylogeny	279
DENIS BARABÉ	

12 Some observations on the homology of the daffodil corona	297
ROBERT W. SCOTLAND	
13 Anther, ovule and embryological characters in Velloziaceae in relation to the systematics of Pandanales	304
MARIA DAS GRAÇAS SAJO, RENATO MELLO-SILVA and PAULA J. RUDALL	
14 Contrasting patterns of support among plastid genes and genomes for major clades of the monocotyledons	315
JERROLD I. DAVIS, JOEL R. MCNEAL, CRAIG F. BARRETT, MARK W. CHASE, JAMES I. COHEN, MELVIN R. DUVALL, THOMAS J. GIVNISH, SEAN W. GRAHAM, GITTE PETERSEN, J. CHRIS PIRES, OLE SEBERG, DENNIS W. STEVENSON and JIM LEEBENS-MACK	
Taxonomic index	350
Subject index	357

Colour plate section appears between pages 180 and 181.