

Contents

1. Relationships of Angiosperms to Other Seed Plants 1
 2. The Age and Diversity of Early Angiosperms:
Integration of the Fossil Record and Molecular Dates 22
 3. Phylogeny of Angiosperms: An Overview 35
 4. The ANA Grade 63
 5. Magnoliids and Chloranthales 84
 6. Character Evolution: The Ancestral Angiosperm and General Trends 94
 7. Monocots 130
 8. Eudicots (+ Ceratophyllaceae): Introduction and Early-Diverging Lineages 162
 9. Core Eudicots: Introduction, Gunnerales, and Dilleniales 187
 10. Superrosids 191
 11. Superasterids 247
 12. Angiosperm Classification 304
 13. Parallel and Convergent Evolution 319
 14. Floral Diversification 344
 15. The Evolution of Genome Size 378
 16. Polyploidy 396
- Descriptions of Major Clades 407
- Acknowledgments 445
- Reference List 447
- Photo Credits 565
- Index 569