

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Record Nr.           | UNINA9910452500803321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Titolo                  | Early events in monocot evolution / / edited by Paul Wilkin and Simon J. Mayo, Herbarium, Library, Art and Archives Directorate, Royal Botanic Gardens, Kew [[electronic resource]]                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Pubbl/distr/stampa      | Cambridge : , : Cambridge University Press, , 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ISBN                    | 1-139-88847-1<br>1-107-24123-5<br>1-139-00295-3<br>1-107-24835-3<br>1-107-25084-6<br>1-107-25001-3<br>1-107-24752-7<br>1-107-24918-X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Descrizione fisica      | 1 online resource (xii, 361 pages) : digital, PDF file(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Collana                 | Systematics Association special volume series                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Classificazione         | 42.42<br>42.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Disciplina              | 580                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Soggetti                | Monocotyledons<br>Monocotyledons - Evolution<br>Angiosperms<br>Angiosperms - Evolution<br>Plants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Note generali           | Title from publisher's bibliographic system (viewed on 05 Oct 2015).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Nota di bibliografia    | Includes bibliographical references and indexes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Nota di contenuto       | 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 / W.J.D. Iles, S.Y. Smith and S. W. Graham -- 2. The fossil record of non-commelinid monocots / S.Y. Smith -- 3. Is syncarpy an ancestral condition in monocots and core eudicots? / D.D. Sokoloff, M.V. Remizowa and P.J. Rudall -- 4. Diversification of pollen and tapetum in early-divergent monocots / C. A. Furness -- 5. Macroecological correlates of global monocot species richness / F.A. Jones, B. Sobkowiak, C.D.L. Orme, R. Govaerts and V. |

Savolainen -- 6. In time and with water ... the systematics of alismatid monocotyledons / D.H. Les and N.P. Tippery -- 7. Evolution of floral traits in relation to pollination mechanisms in Hydrocharitaceae / N. Tanaka, K. Uehara and J. Murata -- 8. Patterns of bract reduction in racemose inflorescences of early-divergent monocots / M.V. Remizowa, D.D. Sokoloff and P.J. Rudall -- 9. Recent progress in the phylogenetics and classification of the Araceae / S.J. Mayo, J. Bogner and N. Cusimano -- 10. The first evolutionary classification of the Araceae: A. Engler's natural system / S.J. Mayo and J. Bogner -- 11. Aroid floral morphogenesis in relation to phylogeny / D. Barabe -- 12. Some observations on the homology of the daffodil corona / R.W. Scotland -- 13. Anther, ovule and embryological characters in Velloziaceae in relation to the systematics of Pandanales / M.G. Sajo, R. Mello-Silva and P.J. Rudall -- 14. Contrasting patterns of support among plastid genes and genomes for major clades of the Monocotyledons / J.I. Davis, J.R. McNeal, C.F. Barrett, M.W. Chase, J.I. Cohen, M.R. Duvall, T.J. Givnish, S. W. Graham, G. Petersen, J.C. Pires, O. Seberg, D.W.M. Stevenson and J. Leebens-Mack.

---

### Sommario/riassunto

Tracing the evolution of one of the most ancient major branches of flowering plants, this is a wide-ranging survey of state-of-the-art research on the early clades of the monocot phylogenetic tree. It explores a series of broad but linked themes, providing for the first time a detailed and coherent view of the taxa of the early monocot lineages, how they diversified and their importance in monocots as a whole. Featuring contributions from leaders in the field, the chapters trace the evolution of the monocots from largely aquatic ancestors. Topics covered include the rapidly advancing field of monocot fossils, aquatic adaptations in pollen and anther structure and pollination strategies and floral developmental morphology. The book also presents a new plastid sequence analysis of early monocots and a review of monocot phylogeny as a whole, placing in an evolutionary context a plant group of major ecological, economic and horticultural importance.

---