SYSTEMATICS ASSOCIATION SPECIAL VOLUME SERIES

Early Events in Monocot Evolution

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 phylogenetic tree of early monocots based on sequence data from 17 plastid regions, and a review of monocot phylogeny as a whole, placing in an evolutionary context a plant group of major ecological, economic and horticultural importance.

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