

REVIEW

A. DAFNI, M. HESSE & E. PACINI (eds.): **Pollen and Pollination**. Special edition of *Plant Systematics and Evolution* 222. Springer-Verlag, Wien & New York, 2000. ix + 336 pp., illus. ISBN 3-211-83514-8 (hard cover). Price: USD 149.

After several volumes of the *Plant Systematics and Evolution Supplementum Series* dealing with pollen and pollination (Suppl. 5: Morphology, development and systematic relevance of pollen and spores; Suppl. 6: Secondary pollen presentation; Suppl. 7: The tapetum), this special edition of *Plant Systematics and Evolution* 222 (1–4) is a welcome addition, including many aspects not treated before. The title of the book covers its theme very well. All 16 contributions consider connections between pollen characters (amount, morphology, development, cytochemistry, odour, colour, electrostatics, viability, digestibility, etc.) and pollination features (e.g. abiotic pollination, collection of pollen by bees, bat pollination, beetle pollination), most of them reviewing the literature of the last decades. All are well-written and very worth reading, but I especially want to mention those on cytochemistry (listing easy technics grouped to specificity), pollen viability and longevity (reviewing tests), ecology and evolution of pollen odours, ecology and evolution of visual pollen signals, nutritional content and digestibility, pollen morphological evolution in bat-pollinated plants, structure and function of orchid pollinaria, thread-like structures associated with pollen and anthers, and the evolution of the beetle pollination syndrome.

As a systematic herbarium pollen morphologist I often have to select and recommend pollen text books to students explaining the wide palynological variation in seed plants. The present book seems to me compulsory additional reading in order to avoid a strongly biased knowledge of pollen based on dead exine structures alone. Moreover, this is a well-produced book, provided with an extensive index. The “67 partly coloured figures” announced on the title page are actually c. 140 figures (often more than 1 photo per plate) of which 24 are in full-colour.

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