REVIEW

GUILLAUME TCHERKEZ: **Flowers – Evolution of the Floral Architecture of Angiosperms.** Science Publishers, Inc., Enfield (NH), USA, 2004. 182 pp., illus. ISBN 1-57808-311-7. Price: EUR 78.

The 'take home' message from this book is that botany, like all other life sciences, developed into a complete science over the past two centuries. To understand the form and function of flowers, we nowadays use concepts not only from taxonomy and biogeography, but also from evolutionary biology, ecology, physiology and developmental genetics. New data are gathered in experimental study as well as by observation and statistical modelling. References to studies in all these different fields are given and make the book a useful synthesis. I especially liked the fact that a nice overview is given of new insights provided by different *Arabidopsis* mutant studies which I, so far, always had to extract from separate publications.

The first two chapters focus on the architecture of inflorescences and flowers. Only very basal descriptions are given here which sometimes could have benefited from an extra explanatory table on for instance the 21 different architectural models currently in use for inflorescences. An illustration of the phylogeny of MADS box genes might have been handy as well to show the evolutionary relationships between the main lineages. The subsequent two chapters deal with the evolution of floral structures and pollination and include illustrative examples from phylogenetic, ontogenetic, chemical, field and theoretical studies on a wide variety of angiosperms. The last chapter aims to unravel the selective processes that led to the evolution of the flower such as dispersal, sexuality, fertility and hybridization by using a theoretical framework.

According to the backflap text, the book is primarily written to update graduate students of plant biology as well as teachers, researchers and amateurs with current research on the evolution of flowers. The many black-and-white illustrations included certainly make the text attractive to these potential readers. Light and scanning electronic microscope photographs and *in situ* hybridization pictures are, however, completely lacking and including these might have provided a more complete overview of spectacular recent findings in especially the fields of floral structures and developmental genes. Maybe the author could do this when he is asked to make a second edition?

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