REVIEW

G.P. LEWIS: **Caesalpinia. A revision of the Poincianella–Erythrostemon Group.** Royal Botanic Gardens, Kew, 1998. 233 pp., 57 plates (42 black-and-white, 15 colour), 22 maps. ISBN 1-900347-32-6 (softback). Price: GBP 18.

After his work on the Neotropical species of *Caesalpinia* (Lewis, 1994; PhD thesis) Lewis was able to recognise broad morphological groups within *Caesalpinia* s.l. He carried out a preliminary cladistic analysis to show the evolutionary relationships within this complex group (Lewis & Schrire, 1995). The group revised in this excellent book is one of the clades in this analysis and comprises the sections *Poincianella* and *Erythrostemon* of *Caesalpinia* s.l. The revision is not only based on herbarium study, but also on extensive field work in Mexico, Central America, Cuba, and Brazil. Living material of 33 taxa was studied, offering many new characters.

The book contains an extensive taxonomic history of the genus showing the difficulties of previous workers with genus delimitation. For the *Poincianella–Erythrostemon* 'group' the nomenclatural confusion is cleared up, but for the other species confusion will persist until they have all been studied across their full geographical ranges. In addition to the complex relations in the genus itself, part of the nomenclatural problems are caused by additional names introduced by regional Flora writers for species with a wide geographical range. Furthermore, there is a morphological section with emphasis on the group in this revision but with links to the variation in *Caesalpinia* s.l. Shorter sections on seed chemistry, insects, pollen, chromosomes, and biogeography are given at the end of the general part. The largest part of the book consists of the systematic section with the revision of the *Poincianella–Erythrostemon* 'group', a key to the species within the group, and a key to the groups within *Caesalpinia* s.l. and the related genus *Hoffmannseggia* in the Neotropics.

The *Poincianella–Erythrostemon* 'group' comprises 47 Neotropical species, in total 56 taxa. Two new species, two new subspecies and three new varieties are described. Each taxon is described, typified, and synonyms and specimen citations are given, as well as distribution, ecology, phenology, and common names. The distributions of all species is shown on 22 maps. Most taxa are beautifully illustrated by a full-page black-and-white drawing. In addition, 15 colour plates at the end of the book illustrate seeds and seedlings, and more than 20 species have one or more pictures of the attractive flowers, pods, or special characters such as bark or glands.

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References

Lewis, G.P. 1994. Systematic studies in neotropical Caesalpinia L. (Leguminosae: Caesalpinioideae), PhD thesis, University of St. Andrews, Scotland.

Lewis, G.P. & B.D. Schrire. 1995. A reappraisal of the Caesalpinia group (Leguminosae: Caesalpinioideae) using phylogenetic analysis. In: M.D. Crisp & J.J. Doyle (eds.), Advances in Legume Systematics, part 7: 41–52. Royal Botanic Gardens, Kew.