

CONSIDERATION OF *BARKLYA* AND THE SUBTRIBES OF THE
CERCIDEAE (CAESALPINIOIDEAE: FABACEAE)

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The proper placement of *Barklya syringifolia* F. Muell., Prince's Feather, a spectacular plant of northeast and eastern Queensland and the north coast of New South Wales, Australia, has been dubious until recently. Benthams (1864) referred the monotypic genus *Barklya* to the Sophoreae, although remarking that it approaches some Caesalpinioideae near *Bauhinia* in leaf and floral morphology, but has the petal aestivation descending and the embryo curved as in the Papilionoideae. Baillon (1870) found the petal aestivation to be irregular and intermediate between the two types, but never with the uppermost overlapping both laterals and as a result referred it to the Caesalpinioideae. Hutchinson (1964) placed it in the Cadieae of the Fabaceae (=Papilionoideae of authors). Yakovlev (1972) referred it to the caesalpinoid tribe Bauhinieae along with *Griffonia* and *Bauhinia*. Inclusion of *Barklya* with *Griffonia* and *Bauhinia* by Yakovlev was made on the basis of the crescentic hilum of the seed as in *Bauhinia* and unknown elsewhere in the Fabaceae as well as in the similarities in leaf morphology. Corner (1976) also noted the unusual hilum of *Barklya* along with several anatomical features of the seed which suggests a relationship with *Bauhinia* from which he questions if it is distinct. Roger Polhill (pers. comm.), in reviewing the placement of *Barklya* in the Sophoreae, also suggests it may be better placed in the Cercideae. Peter Goldblatt (pers. comm.) reports a chromosome number of $2n=26$ which is in line with the Cercideae ($2n=24, 26, 28$), but not the Cadieae ($2n=18, 20, 22$). After examining specimens of flowering and fruiting material of *Barklya syringifolia*, the author has found the species to be easily accommodated within *Bauhinia* on the basis of seed, floral, and leaf morphology and the transfer to that genus is proposed.

Bauhinia syringifolia (F. Muell.) Wunderlin, comb. nov.
Basionym: *Barklya syringifolia* F. Muell., Journ. Linn.
Soc., Bot. 3: 158. 1859.

The tribe Cercideae, or Bauhinieae of some authors, has always been considered as a natural alliance of genera since Benthams (1840, 1865) even though there has been considerable disagreement as to the number of genera (Wunderlin, 1976). However, recent studies by the author have shown that the tribe can be

divided into two discrete subtribes which are recognizable on the basis of fruit and seed morphology. The following classification is proposed.

Tribe *CERCIDEAE* Bronn, De Formis Pl. Legum. 131. 1822.

Type genus: *Cercis* L.

Subtribe *CERCIDINAE*

Trees or shrubs, unarmed and without tendrils, rarely with hooked branches below inflorescences; fruits with narrow dorsal wing or semilunate with gynophore and persistent style appearing confluent with dorsal margin or oblique and with laterally attached gynophore and persistent style; seeds with circular hilum, funicular aril-lobes absent.

1. *Cercis* L. - 6 species in warm temperate northern hemisphere.
2. *Griffonia* Baill. - 4 species in tropical west Africa.
3. *Adenolobus* (Harv. ex Benth.) Torre & Hillc. - 2 species in southwestern Africa.

Subtribe *BAUHINIINAE* (Benth.) Wunderlin, stat. nov.

Basionym: Tribe *Bauhinieae* Benth., Hook. Journ. Bot. 2: 74. 1840.

Type genus: *Bauhinia* L.

Trees or shrubs (sometimes semiscandent) with or without intrastipular spines (rarely shrubs with tendrils) or lianas (rarely vines) with or rarely without simple tendrils; fruits flat, woody to thin-valved, dehiscent or indehiscent, never with dorsal wing, nor semilunate with gynophore and persistent style appearing confluent with dorsal margin, nor oblique with laterally attached gynophore and persistent style; seeds with crescentic hilum, funicular aril-lobes present.

4. *Bauhinia* L. - Ca. 225 species, pantropical.

It is evident that the large and diverse genus *Bauhinia* should be further subdivided into a number of infrageneric units and such a revision is in preparation in collaboration with Professor Kai and Supee Larsen of the Botanical Institute, Aarhus University, Aarhus, Denmark.

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