



Sophora davidii. Photo by Tim Wood;
<http://plant-quest.blogspot.com>

I went to Yunnan in China this year and was determined to find this kowhai. I saw many rare and wonderful plants going as high as 3,900m near Zhondian close to the Tibet plateau. It wasn't till the return journey that we visited the Stone Forest near the old city of Dali; a much larger version, but reminiscent of the limestone rocks at Castle Hill. Finally there beside the track was the plant I had been looking for – a rather straggly bush that can grow to 3m. This one certainly wasn't as big, but was in flower with quite large white to green inflorescences.

CORDYLINE – A BOTANICAL WAIF

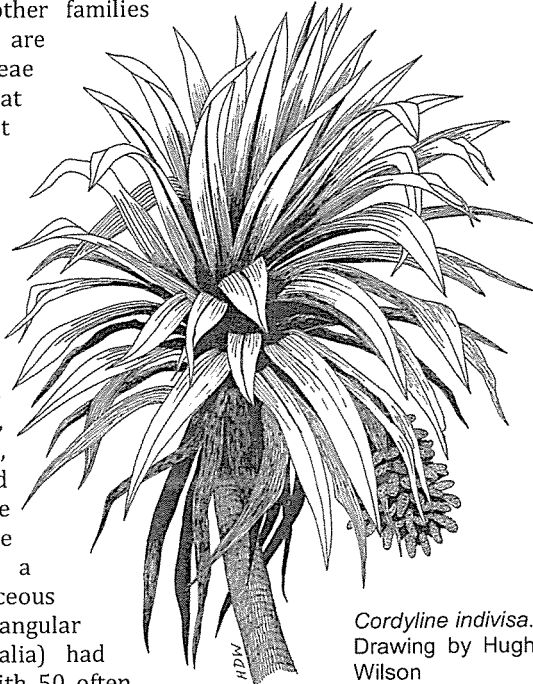
Colin Burrows

In 1998 my article in Canterbury Botanical Society Journal No.32 referred to the complicated history of *Cordyline's* family placement. Familial attributions for the cabbage tree genus between 1925 and 1998 were to: Liliaceae – Cheeseman 1925; Agavaceae – Moore & Edgar 1970; Asteliaceae – Dahlgren, Clifford & Yeo 1985; Dracaenaceae – Takhtajan 1986; Asphodelaceae – Webb, Johns & Sykes 1990; Lomandraceae – Chase, Ruddall & Conran 1996; Conran, in Kubitzki 1998. There may be others that I hadn't noticed.

Arthropodium, the renga lily genus, is placed by different authors in the same family as *Cordyline* or in other families. Phil Simpson, in *Dancing Leaves*, his excellent book about cabbage trees, used Lomandraceae as the family name. He also provided much information about the various monocot genera that have, at times, been linked with *Cordyline*. These many changes in supposed family connections reflect the difficulties of characterising relationships among the “tree-like” or “shrub-like” (as well as herbaceous) monocots, based on purely morphological features. They are also the result of successive advances in anatomic, chemotaxonomic and DNA studies of the monocots.

I sought more recent information for the family entry for *Cordyline* in a booklet on the plants of Otamahua/Quail Island that Hugh Wilson and I are preparing. At least two more family name options have emerged. They originate from different attitudes to classification of the monocots, overall. Mabberley (2008) puts *Cordyline* into an expanded Asparagaceae. Thirteen other families (103 genera, 2,250 species) are also lumped into Asparagaceae and, by this treatment, that family attains almost cosmopolitan extent.

By contrast, Seberg (in Heywood et al. 2007) places *Cordyline* in a small family Laxmanniaceae, with a few genera, represented in Madagascar, Indian Ocean islands, S.E. Asia, Malesia, New Guinea, Australia, New Caledonia, Norfolk I., New Zealand and S. and N. America. As the basis of a family name *Laxmannia* (with about a dozen perennial, herbaceous species, with rounded or triangular leaf section, all in Australia) had priority over *Lomandra* (with 50 often tussock-forming, flat-leaved, herbaceous species in Australia, New Guinea and New Caledonia).



Cordyline indivisa.
Drawing by Hugh
Wilson

For the present I will use Laxmanniaceae as the appropriate family name for *Cordyline*. DNA studies show that there are two groups in the Laxmanniaceae: *Laxmannia*, *Lomandra*, and their close relatives and *Cordyline* and its relatives, including *Arthropodium* (Madagascar, Australia, New Caledonia, New Zealand), *Sowerbaea* (Australia) and *Eustrephus* (New Guinea, Australia, New Caledonia).

Seberg (2007) notes that by several molecular analyses the *Lomandra* and *Cordyline* groups are monophyletic and form a sister group to other families, mainly of herbaceous form: Convallariaceae (lily of the valley, Solomon's seal and others) plus Asparagaceae in a restricted sense (*Asparagus* and a few other genera); or to Anthericaceae (*Anthericum*), spider plants and

others; or Aphyllanthaceae, (*Aphyllanthus*, the monotypic, blue-flowered “rush”).

Seberg also writes of the Laxmanniaceae that its circumscription has been controversial and is likely to change in the future. This family, then, may not be a final word on a permanent family home for *Cordyline*. Could it be that we may end up with a family name based on its generic name? From a plant geographical point of view that would make sense.

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