Corymbia citriodora
(lemon-scented gum) Myrtaceae
This is a Queensland eucalypt, but grows remarkably well in the Mediterranean climate of Adelaide. It can be seen in numerous parks. The related spotted gum (*Corymbia maculata*) features at the Central Bus Station in Franklin Street. Of *Eucalyptus* itself, sugar gum (*E. cladocalyx*) has been much planted, and *E. camaldulensis* grows along the River Torrens.

Jacaranda mimosifolia
(jacaranda) Bignoniaceae
Jacaranda (from Bolivia and Argentina) is something of a signature tree in the city, and when in flower (November/December) becomes quite a talking point, being a common street tree.

Phoenix canariensis
(Canary Island date palm). Arecaceae.
This is perhaps the commonest palm in Adelaide. However, near the Torrens Parade Ground and the Women's Pioneer Memorial Park are some fine specimens of the true date palm (*Phoenix dactylifera*), and also *Washingtonia filifera*.

Pinus halepensis
(Aleppo pine) Pinaceae
This is worth a second mention as it is to be seen throughout the city, and grows very well here. It is clearly more drought-tolerant than *P. radiata*. At the War Memorial near Government House on North Parade is a Turkish red pine (*Pinus brutia*), planted to commemorate Gallipoli. Canary Island pine (*P. canariensis*) is also seen in the city parks.

Platanus* × *acerifolia
(London plane) Platanaceae
This is one of the commonest Adelaide street trees. *Platanus orientalis* is also present.

Pyrus calleryana
(Callery pear) Rosaceae
Several city streets are graced with this handsome Chinese species. Manchurian pear (*Pyrus ussuriensis*) is also commonly planted.

Ulmus procera
(English elm) Ulmaceae
This does well as a street tree in Adelaide. The township of Hahndorf in the Mt Lofty Ranges also has fine avenues of it. Lacebark elm (*Ulmus parvifolia*) is also commonly seen in Adelaide.

Plants of the Kaironk Valley, Schrader Range, Papua New Guinea: III, the kawsi (*Impatiens hawkeri*, Balsaminaceae)[1]

Rhys Gardner

In its large-spurred magenta flowers and whorls of red-nerved leaves this "New Guinea impatiens" is widely thought to be one of the most garden-worthy members of the genus (Fig. 1). A medium-sized herb of montane forest, it belongs to a temperate Asian alliance, so any "tropical" label is deserved more on account of distribution (New Guinea to the Solomon Islands) than habitat. Here in Auckland it can grow outside as a pampered pot plant but will not survive summer drought, or cold, or wind at any season.

I would see *I. hawkeri* along rocky streamsides in the "cultivation zone" of the Kaironk Valley, at c. 1500–2000 m altitude. It was best in damp and shady places where some *Lithocarpus-Castanopsis* forest cover had been left. Not only did habitat suit but it was clear that the plant itself held few attractions for that other ubiquitous destroyer of forest and plant life, the pig. In this lower altitudinal range the flowers were various shades of pink. At a little more than 2000 m, though, at the lower edge of the southern beech (*Nothofagus grandis*) forest, it grew mainly in trackside depressions, and here its flowers were always white.

The species is abundant through New Guinea and is particularly variable in the flower's form and colouring. This is discussed and beautifully illustrated by the modern authority on the genus, Christopher Grey-Wilson, who with respect to white or pale-coloured flowers says: "I suspect their selection is due primarily to pollinators ... White-flowered forms [from mainly red-coloured infraspecific groupings] also tend to have longer than average spurs" (Grey-Wilson 1980, p. 679).

[1] For I & II see the following Auckland Bot Soc Jnls: Vol 56 (2001) p. 32 [*Corsia merimantaensis*]; Vol 57 (2002) pp. 26–27 [*Cordyline ledermannii*].

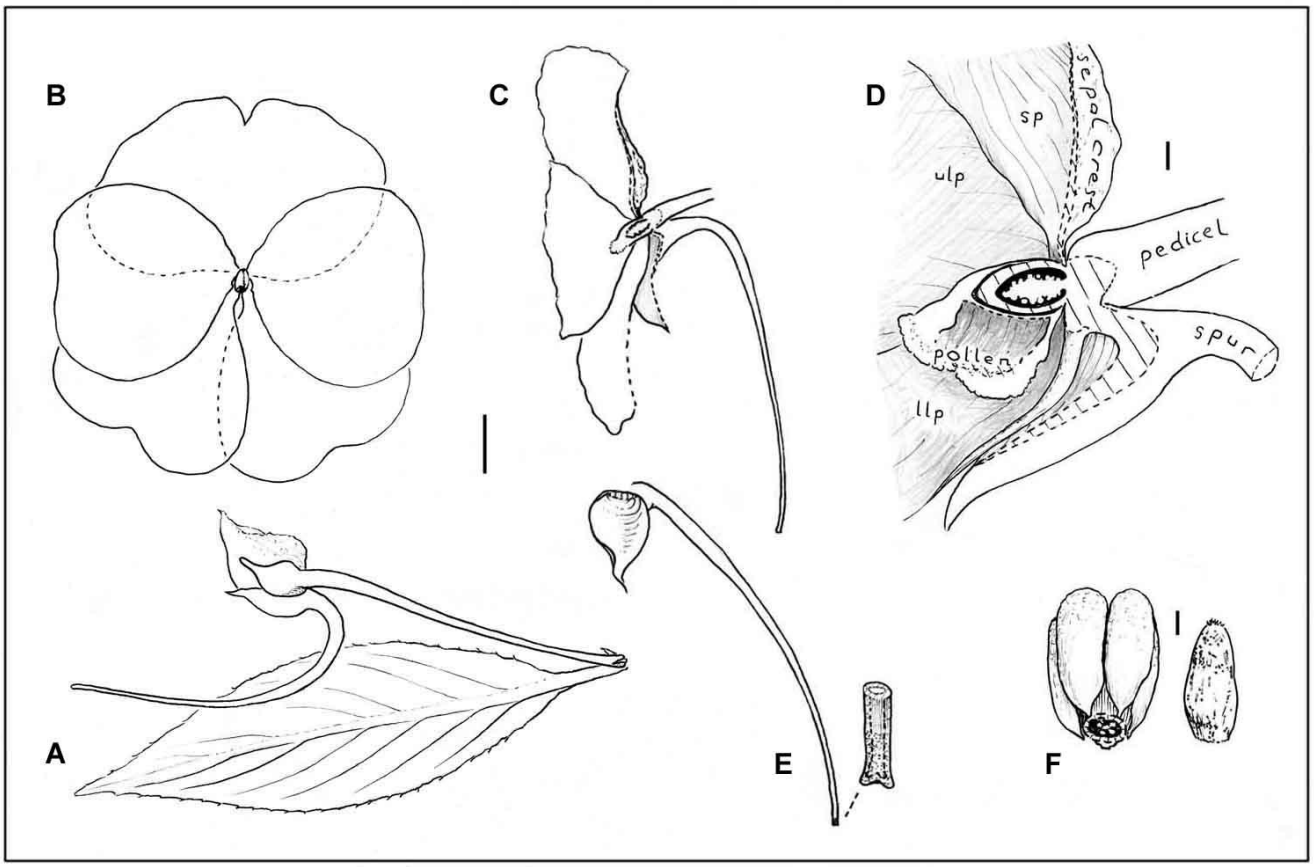

Figure 1: Floral morphology of *Impatiens hawkeri* (cult., no voucher). Scale bars 1 cm for A, B, C and E; 1 mm for D and F. A: Flower bud and leaf, the pedicel with a pair of basal bracts; standard petal uppermost, fused to a sepal and opposite the spurred dorsal sepal. B: Face view of newly opened flower, standard petal uppermost. C: Newly opened flower in side view, longitudinal section. D: Enlargement showing the mass of white pollen released to lie on the sides and underside of the more or less fused stamens, the receptive papillae of the ovary not yet elongated. sp = standard petal, ulp = upper lateral petal, llp = lower lateral petal. E: Detached dorsal sepal and its basal prolongation as a spur, this tapering to a solid greenish shortly bifid tip (enlarged). F: At left, detached staminal column from above and slightly to rear (base of fifth anther just visible below ovary); on right, detached ovary after the staminal column has fallen away, showing the rather sparse papillae of the stigma.

Presumably, white flowers are pollinated by moths and reddish ones by butterflies, but I did not see such events. The topic is not mentioned in a comprehensive book on the butterflies of a slightly lower-altitude region of New Guinea (Parsons 1991). Fruit has not been set by the plants I have cultivated at home.

In its striking appearance *I. hawkeri* epitomizes the New Guinea aesthetic (just as birds of paradise and vireya rhododendrons do) and, still something of a novelty, has become popular as an exotic springtime gift. The short-lived nature of such an offering can hardly please gardeners but perhaps does not greatly trouble the conscience of our plant-barn magnates.

So much for local ethnobotany. Slightly modified, here is the entry in the recently published encyclopaedic dictionary of the Kaironk's Kalam people and their environment (Pawley & Bulmer 2011), a 50 years long project in which I had a minor role:

"KAWSI Herb, *Impatiens hawkeri*. A Kalam generic, within which five or more kinds are distinguished by size and colour of foliage and colour of blossom. Those with bright red flowers and red-tinged foliage are extensively used in ritual. All are wild plants, growing in damp and generally shaded places. [Also] planted at edge of gardens to decorate them, and especially in irrigated taro plots to encourage taro to grow. Keeps the *kceki* (nature spirits) away. Also used in propitiatory rites to ghosts when pigs are killed, and in beauty-magic before festivals."

References

Grey-Wilson, C. 1980: *Impatiens* in Papuasia. *Kew Bulletin* 34: 661–687.
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Pawley, A.; Bulmer, R. 2011: *A dictionary of Kalam*. Pacific Linguistics, Australian National University, Canberra.