

## African honeysuckle (*Halleria lucida*) naturalised

EK Cameron

While looking for epiphytic Moreton Bay figs (*Ficus macrophylla*) in the Auckland Domain (see Cameron 1997) I discovered a shrub which was previously unrecorded as naturalised in New Zealand. It was a 3 m tall African honeysuckle (*Halleria lucida*, Scrophulariaceae), in the head of an old 8 m tall jelly palm (*Butia capitata*), just north of the Watson Bequest. From the top of an extension ladder I could just reach its lower branches (AK 232492-93, Cameron 8815, 13 June 1997). There were many stems and its pale roots ran round the palm's trunk. It was unclear if the stems were separate plants or suckers from the spreading roots of a single plant. In the head of the same palm was a 1.5 m tall Moreton Bay fig and a hanging fern, *Asplenium polyodon*.

Opposite the entrance to the Domain nursery in the head of a 16 m tall Canary Island palm (*Phoenix canariensis*), some 160 m south of the jelly palm, is an even larger African honeysuckle. This plant has branches at least 4 m long and was flowering and fruiting (viewed with binoculars, no voucher specimen collected). It is rooted below the leafy palm's head with many branches amongst the palm leaves on the palm's northern side. All these branches possibly originate from the one plant.

There is also a cultivated shrub of African honeysuckle in the Domain, some 30 m south-east of the Valkyrie Statue. This plant is c. 100 m away from the jelly palm and c. 140 m away from the Canary Island palm with the epiphytic African honeysuckle. The multi-trunked cultivated African honeysuckle is c.7 m tall by c.10 m across. Sucker shoots were frequent at the base of the plant. On 13 June this plant was in full flower and covered in green succulent, almost spherical, fruit up to 10-(15) mm long by 9-(15) mm wide, which turn black when ripe. The paucity of black fruit I attribute to birds probably eating the ripe fruit. A very long style base persists on the fruit. The tubular hanging flowers have a slightly curved corolla tube (up to 16 mm long), pale orange with crimson, fading to paler orange with less crimson. The corolla has scattered fine glandular hairs. The style and four stamens (anthers crimson) become exerted with age. The flowers are in fascicles from the leafy nodes on the outer branchlets. Leaves (Fig.1) are in opposite pairs, ovate, 28-45-(70) mm long by 12-25-(50) mm across (excluding a petiole 6-11 mm long), finely toothed lamina margins and with an acuminate tip.

Based on seven AK and AKU herbarium specimens from three Auckland City sites, African honeysuckle appears to flower and fruit for most of the year (specimens show it flowers April to November, and fruits March to November).

The first herbarium collection of the cultivated Domain plant was in 1972 when it was fruiting (AK 130026). Judging from its size the epiphyte in the Canary Island palm could well be over 20 years old. Several frugivorous bird species in the Domain could potentially transfer the seeds up into the nearby palms. While briefly watching the cultivated African honeysuckle blackbirds silvereyes and tui visited the plant. Blackbirds were eating the fruit, silvereyes getting nectar from the flowers, I did not see whether the tui was after the fruit or flowers or both.

Moll (1992) shows the natural distribution of African honeysuckle as mainly the south and east coast of South Africa in coastal scrub to evergreen forest, and describes it as a 2-3-(12) m shrub, bisexual, propagated by layering (which supports that these are probably single layered plants in the Domain palm tree heads) and attractive to a wide variety of birds.

African honeysuckle appears to be rare in cultivation in New Zealand. I only know of four cultivated plants which are all in Auckland. It also appears to have been slow to naturalise here. However, it has characters that could make it a problem weed - self fertile, small fleshy fruit with numerous tiny seeds, fruit apparently attractive to a wide range of bird species at a

time when food is scarce. Therefore it would be wise to monitor around the planted specimens to make sure they do not naturalise further without being noticed.

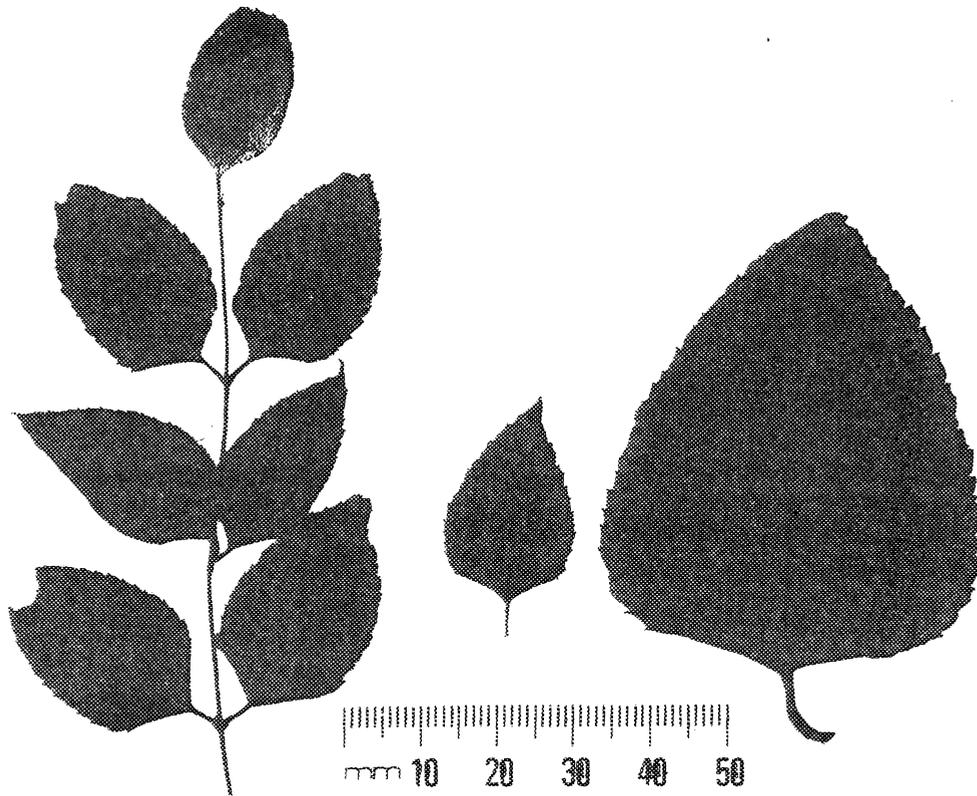


Figure 1. *Halleria lucida* leaves, right-hand leaf from sucker shoot.

#### References

- Cameron, E.K. 1997: More wild Moreton Bay figs. *NZ Botanical Newsletter* 48: 12-13.  
Moll, E.J. (ed.) 1992: Keith Coates Palgrave trees of southern Africa. Struik Publishers, Cape Town.

#### Lucy Cranwell Award Report

Susan Leitch

This is to, once again, thank you and to bring you up to date with the findings of my thesis. My research investigated the distribution, and the variables that govern that distribution of epiphytic bryophytes on three tree-ferns, (*Cyathea dealbata*, *Cyathea smithii*, and *Dicksonia squarrosa*). I studied the variables both in the field and in laboratory experiments.

My field study was carried out at Spraggs Bush in the Waitakere Ranges. Epiphytic bryophytes on tree-ferns were sampled to determine how the percentage area cover of both species and growth habits, and the total number of species, varied with trunk region, trunk aspect and between tree-fern species. Permanent quadrats were set up in different trunk regions on a number of tree-ferns and growth rates of *Bazzania tayloriana*, *Chiloscyphus lentus*, and *Calomnion complanatum* were measured over a 6 month period.

The laboratory experiments involved determining the water absorption capacity, rate of water loss, pH and dimensions of tree-fern bark. Three bryophyte species, *Symphyogyna subsimplex*, *Calomnion complanatum* and *Racopilum convolutaceum*, were cultured in a