

Great Barrier Island - comments on vascular flora

E.K. Cameron

On 19 Nov 2002 I had the opportunity to look at several areas on Great Barrier and add to previous published comments and plant lists; I also received feedback on the Great Barrier flora list published in the last issue of the journal.

1. Comment on native vascular plant list for Great Barrier Island

I received specific comments from Colin Ogle on the previously published list (see Cameron et al. 2002) which adds one species to the list:

Senecio hispidulus was omitted by mistake (add to list).

Add "+" to the following records because they are additions to the list of Bartlett & Gardner (1983): *Euchiton audax*, *Adelopetalum tuberculatum*, *Nematocerus acuminata* and *Prasophyllum* aff. *colensoi*.

Omit "+" because it was recorded by Bartlett & Gardner (1983): *Melicytus novae-zelandiae*.

2. Additions to the Whangapoua wetland vascular flora (cf. Cameron 1999, Cameron et al. 2002: 82). Some of these records are vouchered in the Auckland Museum herbarium (AK) (collecting numbers cited), and others are only sight records. Yanbin Deng (pers.comm.) has surveyed this area from 1999 onwards and has several additional records not included here.

(a). Floodplain between 2 streams, north side of Fitroy-Harataonga Road (map: S08 272581)

This wonderful wetland area (c.80m x 80m) is dominated by cabbage trees (*Cordyline australis*) and kanuka (*Kunzea ericoides* s.lat.) 6-10m tall with associated raupo (*Typha orientalis*) wetlands. It was briefly commented on (viewed from the road) by Cameron (1999) but not visited at that time. The floodplain is 0-1m above the normal level of the streams, but there was evidence that it had recently been completely flooded – presumably from the 'weather bomb' that struck the island on 20 June 2002. Mats of *Deparia petersenii* and *Microlaena stipoides* with Mexican devil (*Ageratina adenophora*) were common, with regenerating puriri (*Vitex lucens*), five-finger (*Pseudopanax arboreus*), mahoe (*Melicytus ramiflorus*), kowhai (*Sophora microphylla* s.lat.), mamaku (*Cyathea medullaris*) and manuka (*Leptospermum scoparium*). Additions to Whangapoua wetland list included: *Acaena anserinifolia*, *Adiantum aethiopicum*, *Bromus willdenowii*, *Callitriche muelleri* (EKC 11273), *Carex dissita*, *Carex lessoniana* (previously wrongly recorded for saltwater wetland), *Colocasia esculenta* (EKC 11277) (2 young plants – parent upstream?), *Coprosma rhamnoides*, *Deparia petersenii* (EKC 11271), *Diplazium australe* (EKC 11274), *Entelea arborescens*, *Gahnia lacera*, *Galium aparine* (EKC 11276), *Geniostoma rupestre*, *Geranium homeanum* (EKC 11275) (previously only recorded for dunes), *Gleichenia microphylla*, *Microlaena stipoides* (EKC 11272), *Oplismenus hirtellus*, *Pseudopanax*

arboreus, *Senecio diaschides*, *Verbena bonariensis* and *V. littoralis*.

(b). Roadside drains by entrance to Okiwi airstrip (S08 282583)

These ditches are nearly 1m deep, and are marginally part of the freshwater system which drains into the estuary. The upper drain margins were dominated by kikuyu (*Pennisetum clandestinum*) swards and the lower part of the drains were 50% bare clay and 50% herbaceous adventive species. Additions to the Whangapoua wetland list included: *Anagallis arvensis* var. *coerulea* (EKC 11270), *Gamochaeta spicata*, *Lythrum junceum*, *Myosotis discolor* (EKC 11269), *Parentucellia viscosa*, *Plantago australis*, *Sisyrinchium* "yellow" (EKC 11268) (1 plant), and *Trifolium dubium*.

(c). Hollows by Okiwi airstrip and estuary access road (S08 282584 to 284591)

Despite searching all the local shallow drains and hollows between the main road and camping area by the estuary mouth, I could not relocate *Centipeda minima* s.str. which I recorded here in April 1992 (AK 207429). It appears the open habitat required by this low annual herb has been swamped at this locality by weeds, especially kikuyu. Fortunately it was collected by Peter de Lange elsewhere in the same catchment in March 2001 (AK 253294).

Juncus flavidus (EKC 11265) was locally common along a shallow drain by the estuary access road and airstrip.

3. *Cyathea smithii* – confirmed for central Great Barrier

After the Bot Soc traverse of Hirakimata, central Great Barrier (see Cameron et al. 2002), I reiterated a point I made in the Great Barrier book (Cameron 2001: 86) that *Cyathea smithii* was oddly only known around Tataweka (northern Great Barrier). Why was it absent from the higher central area? To which Maureen Young replied "I'm sure I saw it on the east side of Windy Canyon". This present trip was the first opportunity I had to look for myself. Sure enough, some 300m in from the road, *C. smithii* was locally common (EKC 11279) mainly on the north side of the track (350m asl) with trunks up to 5m tall in 4-8m tall secondary forest of kanuka, kohekohe (*Dysoxylum spectabile*), towai (*Weinmannia sylvicola*), five-finger, mamangi (*Coprosma arborea*), toro (*Myrsine salicina*), nikau (*Rhopalostylis sapida*), ponga (*Cyathea dealbata*) and mamaku. How have I missed it before? This is important confirmation to its apparent localised distribution on the island. But why is it absent from the higher unlogged forest around Hirakimata – or is it absent?

Acknowledgements

Colin Ogle and Maureen Young for their comments.

References

- Cameron, E.K. 1999: Botany of Whangapoua wetlands and dunes, north-eastern Great Barrier Island. *Auckland Botanical Society Journal* 54(1): 56-67.
- Cameron, E.K. 2001: Chapter 5: Flora. Pp 82-103. *In*: Great Barrier Island (Don Armitage ed.). Christchurch University Press.
- Cameron, E.K., Preston-Jones, H., Jane, G. & Wilcox, M. 2002: Great Barrier Island, Anniversary weekend 25-28 January 2002. *Auckland Botanical Society Journal* 57(1): 76-84.



A Mexican migrant: the naturalisation of *Monstera deliciosa* (fruit salad plant) in New Zealand

T J Martin

Introduction

Monstera deliciosa Liebm. (Araceae), commonly known as "fruit salad plant" or in its native lands as "ceriman", is native to the humid, tropical forests of Central America, from southern Mexico to Panama (Mason & Mason 1987). The literal translation of the botanical name is "delicious monster", in reference to the "banana pineapple" flavoured fruits (Fig.2,4), and the large perforated leaves somewhat reminiscent of a strange creature (Mason & Mason 1987). The holes in the leaves are caused by localised slowing of the growth of the leaf during formation (Mabberley 1997).

Fruit salad plant is a large stout-stemmed vine, climbing or sprawling to c. 20 m (Huxley et al. 1992). The flowers are typical of the Araceae family, being clustered on a central fleshy axis called a "spadix", surrounded by a spathe (Mason & Mason 1987). *Monstera* flowers are bisexual (Smith 1979), and in the family Araceae obligate outcrossing is usual, as male

and female flowers do not mature simultaneously on the same plant (Mayo et al. 1997). The spadix can reach a temperature c. 15°C above surrounding air temperature when it is ready for pollination (Mabberley 1997), which is carried out by trigonid bees (Mayo et al. 1997). Monkeys are possibly the dispersal vectors for the seeds of fruit salad plant (Mayo et al. 1997).

Fruit salad plant has a long history as a popular houseplant throughout the world. The plant will also grow well in gardens when provided with warm and moist conditions, and is easily propagated from stem sections with a leaf attached (Whistler 2000).

This article discusses the likely sources of known fruit salad plant naturalisations in New Zealand, outlines the factors that presently appear to be limiting its rate of spread, and assesses its potential 'weediness'.



Fig. 1. A colony of fruit salad plant, Mt Eden rock forest