

## Lowland ribbonwood (*Plagianthus regius*) at Clevedon

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Lowland ribbonwood, riverbank ribbonwood, or manatu (*Plagianthus regius* (Poit.) Hochr.) of the family Malvaceae is generally acknowledged to be New Zealand's largest deciduous native tree (Nicholls 1990). It is found over most of New Zealand, including Stewart Island and the Chatham Islands, and favours river banks from sea level to 450 m, preferring moist soil. It has distinct seedling, juvenile and adult forms. It used to be called *Plagianthus betulinus* A. Cunn., and before that, *Philippodendrum regium* Poiteau (Melville 1967; Connor and Edgar 1987). Lowland ribbonwood was undoubtedly once much more common than it now is as its favoured habitat is (or was) on the banks and fertile floodplains of lowland streams, most of which are now farmland.

There is a notable population in the Clevedon district. Around twenty adult trees occur scattered along the bank of the Taitaia Stream over a distance of 300 m, where it flows through the Clevedon Scenic Reserve. The biggest of these trees is 40 cm diameter at breast height x 15 m tall. The main associates here are pukatea (*Laurelia novae-zelandiae*), titoki (*Alectryon excelsus*), lemonwood (*Pittosporum eugenioides*), kahikatea (*Dacrydium dacrydioides*), mahoe (*Melicactus ramiflorus*), milk tree (*Streblus heterophyllus*), kaikomako (*Pennantia corymbosa*), kowhai (*Sophora microphylla*), *Coprosma areolata*, and passion vine (*Passiflora tetrandra*). Just four juvenile saplings of ribbonwood were noted, regeneration being effectively prevented by a thick ground cover of wandering jew (*Tradescantia fluminensis*), periwinkle (*Vinca major*), and honeysuckle (*Lonicera japonica*).

Cameron, Hayward & Murdoch (1997) mention ribbonwood growing in a roadside remnant of floodplain forest by the Clevedon Polo Ground. This population is even more impressive than the Taitaia Stream trees, and comprises about ten adult trees in a group, the largest two which measure 55 cm in diameter at breast height x 19.3 m tall and 52 cm x 20.2 m tall. Allan (1961) and Salmon (1980) describe the species as being up to c. 15 m tall, while Poole & Adams (1964) extend this to 17 m. The biggest specimen documented by Burstall & Sale (1984) was a tree at Eskdale, Hawkes Bay, measuring 73 cm x 17.1 m. It appears therefore that these two Clevedon trees could be the tallest in existence. As well as the associates met with before, this stand contains matai (*Pumnopitys taxifolia*) and some hawthorn (*Crataegus*



Fig.1: Group of lowland ribbonwood (*Plagianthus regius*) on the bank of the Taitaia Stream, Clevedon Scenic Reserve.

22 Nov 02.

*monogyna*), and it too has a dense ground cover of wandering jew. One of the ribbonwood trees had in November 2002 a spectacular cluster of fruiting bodies of the fungus *Agrocybe parasitica*. Except for one big tree which had a large colony of *Collosporum hastatum*, and some *Earina mucronata* and *Pyrrosia eleagnifolia*, the species here is free of epiphytes.

Elsewhere in the Auckland Region, lowland ribbonwood appears to be scarce. In lower Northland, Maureen Young (pers. comm.) records it as following the Hotoe River from about Logues Bush, down through Wayby, where the Hotoe River crosses SH1 south of Wellsford, then right to near the mouth of the river. Apart from a tree at Kaiwaka, it does not appear to occur away from the Hotoe River in this district. It seems to be absent from the Waitakere Ranges and Great Barrier Island.

The other ribbonwood, saltmarsh ribbonwood (*Plagianthus divaricatus* J. R. & G. Forst.) is an abundant shrub throughout the region, fringing salt marshes and mangrove estuaries. It forms dense twiggy thickets, and does not look in habit at all like *P. regius* or the variant, var. *chathamicus* Cockayne from the Chatham Islands. So what are the defining features of *Plagianthus*? They are dioecious trees or shrubs with stellate hairs, the female flowers have 2 clavate style arms, the fruits are 1-seeded solitary carpels, with the seeds of the two species being rather similar in shape (Webb & Simpson 2001). As pointed out by Melville (1967), the structure of the individual flowers in the two species is very similar, despite the inflorescence of *P. regius* being a large, diffuse panicle and that of *P. divaricatus* axillary and solitary.

*Plagianthus* is endemic to New Zealand, though 14 species of Australian shrubs, namely *Asterotrichon discolor* (Hook.) Melville, *Gynatrix pulchella* (Willd.) Alef., *Lawrenzia berthae* (F. Muell.) Melville, *L. buchananensis* Lander, *L. chrysoderma* Lander, *L. cinerea* Lander, *L. densiflora* (Bak. f.) Melville, *L. diffusa* (Benth.) Melville, *L. glomerata* Hook., *L. helmsii* (F. Muell. & Tate) Lander, *L. incana* (J. M. Black) Melville, *L. repens* (S. Moore) Melville, *L. spicata* Hook., and *L. squamata* Nees, were at one time included in it (Melville 1967; Lander 1984).

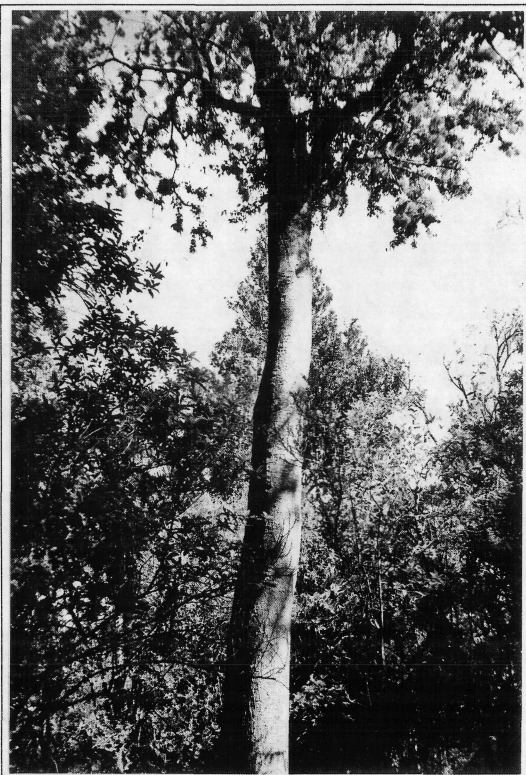


Fig.2: Lowland ribbonwood (*Plagianthus regius*), 55 cm diameter x 19.3 m height, Cleveland polo ground. 22 Nov 02.

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Fig.3: Poplar mushroom (*Agrocybe parasitica*) growing from the stem of a living *Plagianthus regius*, Clevedon polo grounds. 22 Nov 02.



Fig.4: Lowland ribbonwood (*Plagianthus regius*) on the bank of the Taitaia Stream, Clevedon Scenic Reserve. 22 Nov 02.

