Plagianthus regius subsp. chathamicus

COMMON NAME

Chatham Island ribbonwood

SYNONYMS

Plagianthus chathamicus Cockayne; Plagianthus betulinus var. chathamicus (Cockayne) Cockayne

FAMILY

Malvaceae

AUTHORITY

Plagianthus regius subsp. chathamicus (Cockayne) de Lange

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Yes

ENDEMIC FAMILY

Nο

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

PLARSC

CHROMOSOME NUMBER

2n = 42

CURRENT CONSERVATION STATUS

2017 | At Risk - Recovering | Qualifiers: CD, IE

PREVIOUS CONSERVATION STATUSES

2012 | At Risk - Recovering | Qualifiers: CD, IE

2009 | At Risk - Recovering | Qualifiers: CD, IE

2004 | Serious Decline

BRIEF DESCRIPTION

Tall tree with soft jagged pointed leaves and long sprays of tiny yellowish flowers and small green fruit that fall as a unit inhabiting the Chatham Islands. Wood soft. No marked juvenile growth form. Leaves 3-7.5cm long, much wider at base.

DISTRIBUTION

Endemic. Rekohu (Chatham), Rangihaute (Pitt), Maung're, Tapuaenuku, and Hokorereoro (South-east) Islands.

HABITAT

Found on free draining, fertile soils throughout the main islands. Often an important species on soils derived from limestone, and basalt. This tree avoids poorly drained soils and peat.





Nikau Bush, Chatham Island. Feb 1995. Photographer: Geoff Walls, Licence: CC BY-NC.



Te Awatea Scenic Reserve, Chatham Island. Mar 1999. Photographer: Geoff Walls, Licence: CC BY-NC.

DETAILED DESCRIPTION

Deciduous, dioecious, rounded or flat-topped trees 10-16(-18) m tall. Trunk up to 1 m d.bh., bark smooth, if torn peeling in long fibrous strips; surface brown-grey to grey, colour usually obscured by dense lichen growth (Amandinea, Bacidia, Lecanora, Pyrenula, Ramalina and Xanthoria species especially). Branches divergent to upright, often densely branched; branchlets, terete, pliant when young, brittle with age, if broken, leaving long tears of bark beyond damage point; initially finely pubescent, pubescent-villous, hairs grey-white, ± patent, hairs shedding with age. Buds, solitary, acute, densely covered in pubescent-villous, grey-white hairs; bud scales valvate (3-)4-5, (0.4-)0.6-0.8 mm long, deltoid, ± subulate, abaxially pubescent-villous, caducous. Leaves exstipulate, alternate distichous, ± closely spaced toward branchlet apices, soft and pliant, somewhat chartaceous with pinnate venation, surfaces finely pubescent when young, hairs shedding with age, ± glabrescent, adaxially light lime green to green, abaxially paler; midrib concolorous with lamina adaxially, paler beneath, not or scarcely raised above, distinctly so abaxially, finely pubescent, indumentum shedding in irregular patches with age; petioles, 15-20(-25) mm long, terete, finely pubescent, glabrescent. Lamina of juvenile 40-70(-80) × 26-34(-40) mm, of adult $70-90(-100) \times 40-60(-65)$ mm; ovate, ovate-deltoid, apices acute to acuminate, base obtuse to subcordate, biserrate. Inflorescences axillary or terminal, borne in much-branched, suberect or pendent, compound, cymose panicles (65–)100(–140) × 80–100(–160) mm long, green to yellow green. Inflorescences axis terete, initially pubescent, indumentum shedding with maturity, leaving sparse to dense patches of patent hairs; branch axis, bracteate, bracts 3-5 × 3-6 mm, caducous, ovate-deltoid, deltoid, acute, surfaces finely pubescent. Flowers yellow-green or greenish-white, sweetly scented; ■ light green, without scent. Calyx campanulate to funneliform, 1.8-2.0 mm long, pale green or yellow-green, with 5 deltoid or oblong, acute or mucronate teeth. Petals 2.4-2.8 mm long (■), 2.0-2.4 mm long (**■**), spathulate-oblong, oblong, clawed, yellowgreen, greenish-white or green, shedding after anthesis. with exserted staminal column, anthers 10-12, 0.3-0.5 mm long, sessile, pale yellow or yellow-orange, gynoecium vestigial, surmounting column. androecium vestigial, forming a ring below stigma; stigma (3-5)-6, spreading, greenish. Fruits usually exserted from persistent calyx, 3-5 mm long, ovoid, apex acute.

SIMILAR TAXA

Plagianthus regius subsp. chathamicus is one of the tallest trees on the Chatham Islands, and it is also the only deciduous one. The stout greyish trunk, broad canopy, lime green soft leaves with doubly serrated margins, and pendent greenish-yellow inflorescences and flowers readily identify it. In autumn the foliage turns yellow-green or yellow before falling. Plagianthus regius subsp. chathamicus is closely related to the Aotearoa / New Zealand subsp. regius, from which it differs by the lack of the filiramulate, divaricating juvenile growth habit (Cockayne 1912; de Lange 2008). Though the foliage of subsp. chathamicus is smaller than the adult, the branchlets are not interlaced; rather they tend to be erect and/or spreading. The juvenile state of subsp. chathamicus is usually very short-lived and is sometimes absent.

FLOWERING

October - February

FLOWER COLOURS

Green

FRUITING

December - June

PROPAGATION TECHNIQUE

Easily grown from fresh seed. A very fast growing tree ideal for providing quick cover. Does best on free draining, but moist and fertile soils in full sun but can tolerate some shade.

THREATS

Threatened from browsing by sheep, cattle and horses which browse foliage, ring bark or strip the bark off adult trees and kill seedlings. Pigs root up seedlings and saplings and may browse them as well. Possums browse foliage, flowers and seedlings. Land clearance for farming and fires are additional threats. Very few populations of manatu are secure from these threats on the islands.

ETYMOLOGY

plagianthus: Oblique or lop-sided flower (petals uneven at the base)

regius: Royal

chathamicus: From the Chathams

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 12 May 2022. Description by P.J. de Lange.

REFERENCES AND FURTHER READING

Cockayne, L. 1912: Observations concerning evolution, derived from ecological studies in New Zealand.

Transactions and Proceedings of the New Zealand Institute 44: 1–50.

de Lange, P.J. 2008: *Plagianthus regius* subsp. *chathamicus* (Malvaceae) - a new combination for the Chatham Islands endemic tree. *New Zealand Journal of Botany 46*: 381-386.

NZPCN FACT SHEET CITATION

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https://www.nzpcn.org.nz/flora/species/plagianthus-regius-subsp-chathamicus/ (Date website was queried)

MORE INFORMATION

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