

Veronica barkeri

COMMON NAME

Barker's koromiko, Chatham Island tree hebe

SYNONYMS

Hebe barkeri (Cockayne) Cockayne, *Hebe gigantea* (Cockayne) Cockayne (*Veronica gigantea* Cockayne) might also belong here but the type material is inadequate to allow confident identification.

FAMILY

Plantaginaceae

AUTHORITY

Veronica barkeri Cockayne

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

HEBBAR

CHROMOSOME NUMBER

2n = 40

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: CD, IE, RF

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: CD, IE, RF

2009 | Threatened – Nationally Critical | Qualifiers: CD, IE

2004 | Threatened – Nationally Vulnerable

BRIEF DESCRIPTION

Bushy small tree bearing narrow pairs of leaves with a finely hairy margin (lens needed) inhabiting the Chatham Islands. Leaves taper towards tip, to 79 mm long by 22 mm wide. Leaf bud without gap. Flowers whiteish, in a spike to 8 cm long.

DISTRIBUTION

Endemic. New Zealand: Chatham Islands (Rēkohu / Wharekauri / Chatham Island, Rangihau / Rangiauria / Pitt Island, Hokoreore / Rangatira / South East Island.

HABITAT

Forest and scrub, especially on coastal scarps, forested streamsides and the banks of incised streams. Often epiphytic on tree fern trunks.



Hebe barkeri in flower, Ex Cult. Chatham (Rekohu) Island, Tuku a Tamatea Nature Reserve, December 1997. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Hebe barkeri tree, Chatham (Rekohu) Island, Tuku River. Photographer: Peter J. de Lange, Date taken: 01/02/1996, Licence: CC BY-NC.

DETAILED DESCRIPTION

Tree up to 13 m tall producing a dense, rounded to conical, canopy when mature. **Branches** erect, old stems brown, branchlets green, red-brown or purple, pubescent, hairs uniform; internodes 3–30 mm. **Leaf bud** pubescent (rarely glabrous) sinus absent. **Leaves** erecto-patent to patent; lamina 24–90 × 4–30 mm, linear-lanceolate or lanceolate, subcoriaceous, flat to weakly concave, apex acute; margin narrowly cartilaginous, minutely pubescent (hairs eglandular), upper surface yellow-green to light green, midrib distinctly hairy, hairs glandular or rarely eglandular, lower surface paler than upper, conspicuously (or faintly) pitted, each pit containing a single twin-headed glandular hair, midrib hairy, sometimes the rest of the underside also uniformly eglandular pubescent or glabrous.

Inflorescence racemose, lateral and unbranched, 20–50-flowered, 28–80 mm long, mostly equal to subtending leaves rarely shorter or longer; peduncle 6–15 mm; rachis 22–68 mm. **Bracts** alternate, deltoid, oblong, obtuse to acute. **Flowers** hermaphrodite or gynodioecious. **Pedicels** 1.0–6.0 mm long, always longer than bracts. **Calyx** 1.5–4.2 mm long; lobes deltoid, lanceolate to broadly lanceolate, acute to obtuse, externally hairy. **Corolla tube** 1.4–2.0 × 1.6–1.9 mm, broadly funnelform, shorter than calyx; lobes longer than corolla tube, white tinged with pale blue or mauve, or distally or completely dark blue or pink at anthesis, white or pale blue with age, elliptic, lanceolate, rhomboid or ovate, obtuse, cucullate, suberect to recurved. **Stamen** filaments 4–5 mm long, white, mauve or blue, straight or incurved at apex in bud; anthers 1.5–2.0 mm long, purple. **Ovary** 1.1–1.3 mm long, ovoid, hairy; style 2.5–4.5 mm long, hairy. **Capsules** 4.0–5.0 × 2.8–3.3 mm, hairy, loculicidal split extending $\frac{1}{3}$ – $\frac{3}{4}$ -way to base. **Seeds** 1.1–2.0 × 1.0–1.4 mm, strongly flattened, ellipsoid-oblong to broadly ellipsoid, winged, pale to dark brown.

SIMILAR TAXA

Could be confused with the Chatham Island endemic *Veronica dieffenbachii* from which it can be distinguished by the tree habit and upright branches. The leaf buds, mid rib and margin are minutely puberulent. The mature leaves are also broadest at their midpoint. The corolla tube also differs from *V. dieffenbachii* in that it does not exceed the calyx, and is shorter than the corolla lobes.

FLOWERING

December–March

FLOWER COLOURS

Lavender, White

FRUITING

January–April

LIFE CYCLE

Seeds are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from fresh seed. Can be hard to strike from cuttings and difficult to maintain in humid climates.

THREATS

Extinct in the northern two thirds of the main Chatham Island (though it has been planted at several reserve within that area). Browsing animals (especially cattle, sheep, possums and pigs) pose the greatest threat. Fire and clearance for farming are other threats. Young plants on the ground are highly vulnerable to being browsed. Stem borers can limit fruit production in some seasons. There is some evidence to suggest that isolated trees set lower levels of viable seed. This needs further research.

ETYMOLOGY

veronica: Named after Saint Veronica, who gave Jesus her veil to wipe his brow as he carried the cross through Jerusalem, perhaps because the common name of this plant is 'speedwell'. The name Veronica is often believed to derive from the Latin vera 'truth' and iconica 'image', but it is actually derived from the Macedonian name Berenice which means 'bearer of victory'.

barkeri: Named in honour of Samuel D. Barker (1948-1901)

ATTRIBUTION

Fact Sheet Prepared by P.J. de Lange (1 November 2009). Description based on Bayly & Kellow (2006) but see also de Lange et (2010)

REFERENCES AND FURTHER READING

- Bayly MJ, Kellow AV. 2006. An illustrated guide to New Zealand Hebes. Te Papa Press, Wellington, NZ. 388 p.
- de Lange PJ, Heenan PB, Norton DA, Rolfe JR, Sawyer JWD. 2010. Threatened Plants of New Zealand. Canterbury University Press, Christchurch. 471 p.
- Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/veronica-barkeri/>