

Kunzea serotina

COMMON NAME

Makahikatoa, kanuka

SYNONYMS

None - first described in 2014

FAMILY

Myrtaceae

AUTHORITY

Kunzea serotina de Lange et Toelken

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 22

CURRENT CONSERVATION STATUS

2018 | Threatened – Nationally Vulnerable

PREVIOUS CONSERVATION STATUS

2013 | Not Threatened

BRIEF DESCRIPTION

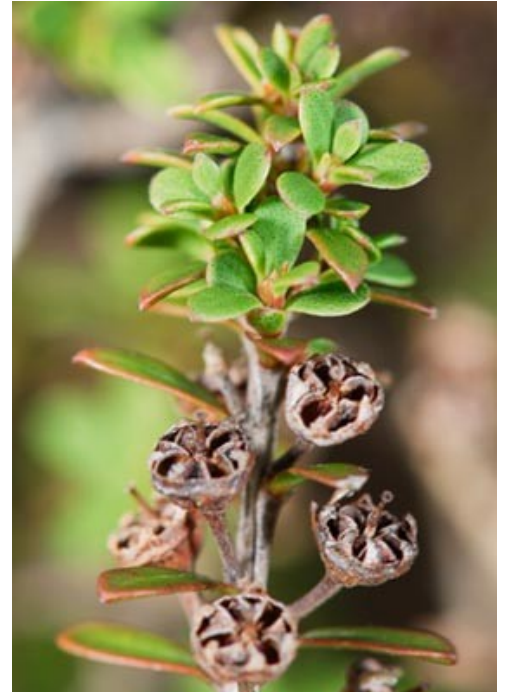
Small columnar tree of mountains and intermontane basins of the North and South Islands. Bark copiously flaking, and often massing at trunk base in piles like wood shavings. Branches obliquely fastigate ascending, bearing masses of small dark green to bronze green leaves and clusters of small white flowers. Branchlets finely, copiously covered in short, erect hairs. Leaves to 6.3 mm long, coriaceous. Flowers borne in dense 'corymbiform' clusters, white with a red centre. Fruit a small dry capsule 1.2–3.0 × 1.2–3.4 mm.

DISTRIBUTION

Endemic. New Zealand. North and South Islands from Central Volcanic Plateau south through central North Island and east to the southern Wairarapa, thence easterly from Marlborough to Central Otago

HABITAT

Kunzea serotina, in the North Island part of its range is mostly a montane to subalpine species, extending into lowland sites in forest flats and other places where temperature inversions occur. In the South Island it is more wide ranging but still most confined to mountain areas and intermontane basins.



In cultivation ex Te Porere. Jul 2007.
Photographer: Jeremy Rolfe



In cultivation ex Te Porere. Jul 2007.
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FEATURES

Erect, columnar to tightly pyramidal, fastigiate, densely branched shrubs or trees 3–20 × 2–4 m developing with time into less densely branched, open pyramidal crowns. Trunk usually single, very rarely 2–3 arising from base, 0.10–0.86 m d.b.h., with basal portion of trunk covered in numerous, curled, chartaceous bark remnants. Bark chartaceous, greyish-white to pinkish-white, heavily cracked, often crumpled, detaching as inrolled, curled, sinuous, irregular pieces, pieces often congregating in branch forks and forming deep drifts at trunk base. Branches numerous arising at or near trunk base; short and stout, obliquely ascending, fastigiate; branchlets numerous, very leafy; indumentum copious, sericeous; persistent, divergent 0.05–0.08 µm, apices curved or slightly curled. Leaves heterophyllous; seedling, subadult leaves and that of reversion shoots, spreading to patent; lamina 0.8–7.8 × 0.6–1.2 mm, red-green, pale green suffused with red, rarely bright green, linear-lanceolate to lanceolate; flat or involute, apex acute to obtuse, finely cuspidate; adult leaves, usually densely aggregated along brachyblasts, lamina 2.0–6.3 × 0.8–1.8 mm, dark glossy green or bronze-green, linear-oblongate, oblongate to obovate; strongly recurved from about ½ of total length, apex initially acute to subacute, maturing obtuse to rounded, often cuspidate; base attenuate; glandular punctate, glabrous, very rarely with fine antrorse hairs near base; lamina margin sparsely hairy, usually in one interrupted row failing well short of leaf apex. Inflorescence a compact 1–12-flowered corymbiform botryum up to 25 mm long, borne on alternate, distinctly spiralled, densely leafy, brachyblasts up to 15 mm long. Pherophylls deciduous, mostly foliose, 0.9–2.5 mm long, green to bronze-green, spatulate, spatulate-orbicular, rarely pandurate or lanceolate, margins and apex finely ciliate. Flower buds clavate to pyriform, apex flat to weakly domed prior to bud burst, calyx valves not or scarcely meeting. Fresh flowers 2.8–8.8 mm diam. Hypanthium 1.6–3.4 × 1.5–3.8 mm, dark green or red-green, drying brown-green to red-brown; urceolate to campanulate terminating in a distinctly thicker rim bearing five persistent calyx lobes; copiously dotted with red oil glands, finely puberulent to ± glabrescent; hairs if present short, divergent. Calyx lobes 5, upright, 0.8–1.2 × 0.7–1.2 mm, persistent, ovate to broadly ovate, central portion of lobe pale green or yellow-green, with margins usually cream to pale pink, surface glandular punctate, oil glands usually pink in exposed situations otherwise ± colourless, glabrous except ciliate margins. Receptacle pink at anthesis, darkening to dark crimson magenta after fertilisation. Petals 5–6, 1.4–2.0 × 1.2–2.0 mm, white, sometimes basally flushed pink, narrowly orbicular to broadly ovate or cuneate, apex obtuse to rounded, margins ± frayed to finely and irregularly toothed, oil glands yellow when fresh, when dried very pale yellow to colourless. Stamens 20–38 in 1–2 weakly defined whorls, arising from receptacular rim, filaments white occasionally tinged rose-pink toward base. Anthers dorsifixed, 0.04–0.06 × 0.02–0.04 mm, testiculate to ellipsoid. Pollen white. Anther connective gland prominent, orange often flushed rose when fresh, drying dark orange-brown or purple, spheroidal, distinctly papillate. Ovary 3–5 locular, each with 10–23 ovules in two rows on each placental lobe. Style 0.6–1.2 mm long, white; stigma capitate, scarcely wider than style, usually flat to very weakly domed, greenish-white, cream or pale pink, surface finely papillate. Fruits rarely persistent 1.2–3.0 × 1.2–3.4 mm, light brown to grey, finely hairy, urceolate to shortly-campanulate, rarely cupular, splits concealed by dried, suberect to erect, free portion of hypanthium and incurved calyx lobes. Seeds 0.60–1.00 × 0.48–0.60 mm, narrowly oblong, oblong, oblong-obovate, orange-brown to dark brown, surface coarsely reticulate.

SIMILAR TAXA

Kunzea serotina is frequently sympatric with *Kunzea robusta*, and to a lesser extent *K. ericoides* and *K. tenuicaulis*. *Kunzea serotina* is distinguished from these species by the obliquely ascending, fastigiate branches, divergent branchlet hairs mostly divergent 0.03–0.12 mm long; pherophylls foliose, mostly spatulate (sometimes pandurate), and by the flower petals which have yellow oil glands when fresh or dry.

FLOWERING

November - May

FLOWER COLOURS

White

FRUITING

January - December

PROPAGATION TECHNIQUE

Easily grown from fresh seed. Can be grown with difficulty from semi-hard and hardwood cuttings. Although *Kunzea serotina* will flourish in any well drained soil, planted in full sun it does best in cooler climates.

THREATS

Myrtle Rust (*Austropuccinia psidii*) is an invasive fungus which threatens native myrtle species - learn more myrtlerust.org.nz

ETYMOLOGY

kunzea: Named after Gustav Kunze (4 October 1793, Leipzig -30 April 1851), 19th century German botanist from Leipzig who was a German professor of zoology, an entomologist with an interest mainly in ferns and orchids

serotina: Late flowering

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 25 August 2014. Description modified from de Lange (2014).

REFERENCES AND FURTHER READING

de Lange, P.J. 2014: *A revision of the New Zealand Kunzea ericoides* (Myrtaceae) complex. *Phytokeys* 40: 185p doi: 10.3897/phytokeys.40.7973.

CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/kunzea-serotina/>