



Pittosporum serpentinum

Common Name(s):

Kohuhu Tangihua, Surville Cliffs Kohuhu

Current Threat Status (2012):

Threatened - Nationally Critical

Distribution:

Endemic. North Island, Te Pahi, North Cape, Surville Cliffs. Confined to the 120 ha exposure of ultramafic rocks at the North Cape Scientific Reserve, Surville Cliffs.

Habitat:

A strictly ultramafic endemic shrub preferring exposed cliff faces and associated talus slopes. Very rarely found on semi-stabilised boulder falls and talus slopes as an understory associate of small copses dominated by another, as yet unnamed Surville Cliffs endemic, *Phyllocladus* aff. *trichomanoides*.

Features*:

Sprawling, heavily branched, semi-erect shrub up to 1.2m tall and 2.5m wide. Branches prostrate, rooting on contact with the ground; branchlets semi-erect; young branchlets densely clad in dark orange-brown, ferruginous tomentum, this fading to buff yellow and then grey as branchlets mature. Young bark purple-black, glabrate, fading to greyish-black. Leaves crowded at the tips of branches, with dead leaves long persistent; 10–50 × 12–28mm, alternate, obovate, obovate-elliptic to rhomboidal, coriaceous, apex ± emarginate, obtuse to subacute, often mucronate; base cuneate to obcordate; margin entire, markedly thickened and recurved; petioles 4–6mm long; upper leaf surface grey-green, covered in deciduous buff-yellow hairs, these fading to greyish-white with age; lower surface densely clad in a persistent dark-orange, ferruginous indumentum, this fading to dark grey with age. Inflorescences terminal, fascicled, 1–4-flowered; pedicels covered in dark-orange, ferruginous tomentum, 2–6mm long. Flowers night-fragrant, gynodioecious. Sepals lanceolate, 4–5mm long, pilose, hairs yellow-orange; petals oblanceolate, acute to subacute 9–12 × 2–3.5mm, chocolate, reddish-black, red, occasionally yellow. Anthers oblong, acute, yellow, 2–4mm long, filaments 5–6mm long, reddish-black, red, occasionally yellow. Ovary ovoid or ellipsoid, thickly invested in ferruginous, pilose hairs, 3–5mm long; style 4–6mm long, stigma capitate. Capsules 2-valved, globose, apex occasionally with a small 1–2mm mucro, c. 10 × 10mm, external surface smooth to faintly rugose, copiously covered in ferruginous tomentum, this fading from buff-yellow to greyish-white with age, valves ± woody, much thickened at apex; mucilage orange-brown. Seeds 2–15, 3.5–4.5mm long, broadly elliptic or irregular, lustrous red-brown or black.

Flowering:

July - October. Sexes on different plants.

Fruiting:

August - January

Threats:

Pittosporum serpentinum is known from 153 individuals in the wild (138 of these are reproductive adults). These are at serious risk from browsing animals such as possums. Indeed possums are now severely impacting the species (de Lange et al. 2011). Weeds such as pines (*Pinus radiata*), pampas grass (*Cortaderia selleana*) and needle-leaved hakea (*Hakea sericea*) are also a long-term potential risks to this shrub, and indeed all of the Surville Cliffs flora. Although seedlings have never been seen, in 2009 and 2011 the first ever saplings (a total of 15) were seen (de Lange et al. 2011). It should be noted that all of the North Cape area is potentially at risk from fire.

*Attribution:

Fact sheet prepared for NZPCN by P.J. de Lange 30 September 2003 (original) updated 31 August 2011. Description adapted from de Lange (1998, 2003) and de Lange et al. (2010).

References and further reading:

de Lange, P. J. 1998: *Pittosporum ellipticum* subsp. *serpentinum* (Pittosporaceae) – a new ultramafic endemic from the Surville Cliffs, North Cape, New Zealand. *New Zealand Journal of Botany* 36: 389–97.

de Lange, P.J. 2003: *Pittosporum serpentinum* (de Lange) de Lange (Pittosporaceae), a new species combination for an ultramafic endemic from North Cape, New Zealand. *New Zealand Journal of Botany* 41(4): 725–726.

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: *Threatened Plants of New Zealand*, Christchurch, Canterbury University Press.

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Webb, C.J.; Simpson, M.J.A. 2011: *Seeds of New Zealand Gymnosperms and Dicotyledons*. Christchurch, Manuka Press.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=86



Caption: Surville Cliffs.

Photographer: Jeremy Rolfe



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