Kunzea sinclairii

Common Name(s):
Great Barrier Island kanuka

Current Threat Status (2012):
At Risk - Naturally Uncommon

Distribution:
Endemic. New Zealand: Aotea Island / Great Barrier Island, where it is only known from the central portion of the island (de Lange & Norton 2004).

Habitat:
Rhyolite endemic, largely confined to exposed outcrops of this rock on the central portion of the island but also extending down gorges and in open clay pans and low windswepth scrub in places formerly forested (see de Lange & Norton 2004).

Features*:
Mostly decumbent, trailing, silvery grey to grey, shrubs up to 5 × 1 m, very rarely forming trees up to 6 m tall; irrespective of stature, branches widely spreading and densely leafy, sometimes rooting on contact with soil or rock. Trunk 1–4, 0.05–0.16 m d.b.h. Bark dark brown to grey-brown, coarsely stringy to tessellated and distinctly ridged or coarse-ridged, usually firmly attached, and if damaged these sites it is long so unbroken cracks. Branches numerous, prostrate and widely spreading, new growth subscandent (in tree forms this habit is retained resulting in arching, pendulous branches); branchlets numerous, widely spreading to subscandent, often coarsely interwoven, leaves usually densely crowded along stems; branchlets sericeous, indumentum ciliate, hairs, hairs antrorse-appressed, weakly flexuose to up to 0.06 mm long. Leaves heterophyllous, mostly sessile, sometimes shortly petiolate (up to 1.6 mm long). Seedling and juvenile leaves dark green to glaucous, glabrous up to 25.0 × 3.5 mm, oblong to lanceolate, apex acute, base attenuate. Mature leaf lamina 5.6–20.6 × 2.6–2.5 mm, initially silvery-white (due to dense hair covering), maturing silvery-grey to reddish grey (as some leaves are shed); lamina broadly lanceolate, elliptic to obovate, rarely oblong-obovate, apex sharply acute, often cuspidate, base attenuate; hairs of midribs and margins converging at leaf apex. Inflorescence a compact, corymbiform 4–20-flowered botryum 7.0–20.0 mm long; on occasion inflorescences may form elongated botrya on late season vegetative growth. Inflorescence axis densely invested with antrorse-appressed, weakly flexuose, silky hairs. Pherophylls deciduous, rarely present at flowering; foliose pherophylls 1.0–1.2 × 0.2–0.4 mm, oblong to oblong-lanceolate, very rarely broadly spathulate, cuspidate, cipitate invested in sericeous, antrorse-appressed hairs. Stamens 18 ± 2.0, filaments white; anther connective gland pale pink. Receptacle greenish pink or pink at anthesis, darkening to crimson after fertilisation. Petals 5, 0.9–1.6 × 0.4 mm, oblong to oblong; lobe margins ciliate, lobes apiculate, keeled, pink when fresh, drying pale orange, spheroidal, coarsely papillate. Ovary 3–3.3 mm, white, very rarely basally flushed pink, broadly ovate, suborbicular to orbicular, rarely ± cuneate-truncate, apex rounded, margins ± finely and irregularly crumpled or frayed, oil glands not evident in fresh or dried material. Stamens 18–46 in 1–2 weakly defined whorls, filaments white. Anthers dorsifixed, 0.06–0.1 × 0.06–0.09 mm, broadly ellipsoid to scutiform, latrorse. Pollen white. Anther connective gland pale pink when fresh, drying pale orange, spheroidal, coarsely papillate. Ovary 3–5 locular, each with 18–34 ovules in two rows on each placental lobe. Style 1.8–3.0 mm long at anthesis, white basally flushed pink or pale pink; stigma narrowly capitate, as wide as or scarcely wider than style, flat, greenish-pink or pink, flushed red after anthesis, surface finely granular-papillate. Fruits 2.2–3.6 × 2.7–3.9 mm, greyish white, maturing to charcoal fading to greyish-white; narrowly obconic to obconic, rarely cupular, copiously covered in short, silky, antrorse-appressed hairs. Seeds 0.52–1.09 × 0.38–0.72 mm, obovoid, oblong, or oblong-ellipsoid; testa semi-glossy, orange-brown to dark brown, surface coarsely reticulate.

Flowering:
September to January

Fruiting:
February to July

Threats:
Common within open rhyolite rock habitat (90.5 ha (0.3%) of the island (de Lange & Norton 2004)). As a consequence of past kauri logging, and associated burning, this species has extended its range to include open clay pans, windswept ridges tops, kauri kauri scoured gorges and other temporarily open sites. In these areas the species is declining through natural regeneration, and in many of these sites it is out-numbered by the hybrids K. robusta × Kunzea sinclairii. This hybrids though common does not pose a risk; ecological and genetic studies suggest hybrids are declining in abundance as a consequence of natural succession to taller forest (de Lange & Norton 2004).

*Attribution:
Fact Sheet prepared for NZPCN by P.J. de Lange 1 September 2014. Description modified from de Lange (2014).

References and further reading:


For more information, visit: http://nzpcn.org.nz/flora_details.asp?PID=355