Dracophyllum strictum

COMMON NAME
tōtorowhiti

FAMILY
Ericaceae

AUTHORITY
Dracophyllum strictum Hook.f.

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

NVS CODE
DRASTR

CHROMOSOME NUMBER
2n = 26

CURRENT CONSERVATION STATUS
2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened

BRIEF DESCRIPTION
Shrub with tufts of rapidly tapering grass-like leaves that spread widely from stem inhabiting the North Island. Adult leaves 47-75mm long by 5-8mm wide, leaves of juveniles longer. Flowers white, in clusters on a red stalk at the end of branches.

DISTRIBUTION
Endemic. New Zealand: North Island (From Thames and East Cape South), also known from Tuhua (Mayor Island). Most commonly found within the ignimbrite country of the Central Volcanic Plateau.

Kawerau. Jul 2008. Photographer: Matt Renner, Licence: CC BY-NC.

In cultivation ex Waihaha. Photographer: Jeremy R. Rolfe, Date taken: 13/05/2011, Licence: CC BY.

HABITAT
Coastal to subalpine. Usually on siliceous rocks such as rhyolite, andesite and ignimbrite, sometimes found on sandstones and calcareous mudstone. Usually favouring well-lighted, sparsely vegetated sites, or within Machaerina sinclairii around seepages, sometimes colonising open riverbanks or open shrubland

DETAILED DESCRIPTION

A shrub to small tree, 0.5–3.0 m tall. Branches. Bark on old branches dark brown, finely fissured, young stems yellowish brown. Leaves dimorphic; juvenile leaves spirally arranged along branches, spreading, lamina sheath light green, glaucous to light brown, 14–20 × 9–16 mm, tapering and margin minutely ciliate in upper half; lamina coriaceous, glaucous to light green, broadly linear–triangular, 100–140 × 7–10 mm; surfaces glabrous, margins serrulate with 40–50 teeth per 10 mm; apex acute; adult leaves crowded at tips of branches, spreading; lamina sheath glaucous to light brown, 7–15 × 6–14 mm, coriaceous, striate, tapering to rounded; margin membranous and minutely ciliate; adult lamina coriaceous, glaucous to light green, lighter coloured below, linear–triangular to lanceolate, 47–75 × 5–8 mm, surfaces glabrous, slightly striated; margins serrulate with 40–50 teeth per 10 mm; apex thickened, acute. Inflorescence over topping the leaves, erect, dense, 50–100 mm long, pyramidal and sparingly branched; rachis and pedicels hirsute; inflorescence axis light green, 1.5–1.7 mm in diameter; basal inflorescence branch 0.5–1.0 mm long, widely spreading; inflorescence bracts caducous, over topping flowers, whitish at base, pink–tipped to wholly pink, broadly ovate at base, 7.5–18.0 × 6.0–8.5 mm; adaxial surfaces with minute scabrid hairs; abaxial surfaces glabrous, margins ciliate. Flowers 15–60, in groups of 5–10 at base of inflorescence; bracteoles persistent, recaulescent with one bracteole situated just below the perianth and the other in the middle of the pedicel, shorter than flower, linear, 3–4 × 0.3–0.6 mm, glabrous; pedicels green to reddish brown, straight, 0.6–2.0 mm long, pubescent. Sepals green to rose–coloured, ovate to broadly ovate, 1.7–3.0 × 1.3–1.5, shorter than the corolla tube, striate, surfaces glabrous; margins ciliate. Corolla white to light pink; corolla tube narrowly campanulate, widened at mouth, 3.5–6.0 × 1.5–2.0 mm; corolla lobes reflexed, ovate–triangular to triangular, shorter than corolla tube, 1.5–2.5 × 1.5–2.2 mm, inflexed for the entire length, apices subacute; adaxial surface papillate. Stamens inserted on corolla tube in upper third, filaments 0.5–1.3 mm long; anthers included, oblong, deep yellow and 0.7–0.8 mm long. Ovary obovate, 1–2 mm long and wide, glabrous, apex round; nectary scales rectangular, 0.8–1.0 × 0.4–0.5 mm, apices subacute; style included, 1.5–2.0 mm long, glabrous; stigma capitate. Fruit light brown to reddish brown, 1.8–2.0 × 1.7–2.0 mm, depressed–globose, apex round, glabrous. Seeds yellowish brown, ovoid, 0.6–0.7 mm long, testa slightly reticulate.

SIMILAR TAXA

Dracophyllum strictum is easily recognised by the glaucescent foliage, large juvenile leaves, dense panicles with scabrous short secondary branches, short bracteoles (3–4 mm), small flowers (4–6 mm), short sepals (2–3 mm) and 4–6 mm long corolla. It is perhaps most similar to the Australian (New South Wales) endemic Dracophyllum secundum, is a much smaller shrub, from which D. strictum differs by the dimorphic foliage, presence of more teeth (40–50 compared to 18–27) per 10 mm on the lamina margin, hairy rather than glabrous inflorescence rachis, shorter (7.5–18.0 mm compared to 35–105 mm) inflorescence bracts, pubescent pedicels not glabrous, shorter sepals (2–3 mm compared to 4–6 mm), corolla tube widened at the mouth not narrowed, longer corolla lobes (2.0–2.5 mm compared to 1–2 mm) having subacute not obtuse apices, nectary scale apices subacute not obtuse to irregularly toothed, shorter style (1.5–2.0 mm compared to 3–4 mm) and slightly reticulated testa.

FLOWERING

October - May

FLOWER COLOURS

Red/Pink, White

FRUITING

Throughout the year

LIFE CYCLE

Minute seeds are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Difficult. Like the majority of Dracophyllum species D. strictum is best admired left alone in the wild. Plants have been grown via transplants but are general fickle and prone to sudden collapse. Some success has been obtained through raising plants from seed, and there have been reports of plants being successfully raised from striking hard-wood cuttings but, as a rule like most (ifnot all) Dracophyllum species cultivation is usually impractical.

ETYMOLOGY

dracophyllum: Dragon leaf, from its likeness to the dragon tree of the Canary Islands
strictum: From the Latin strictus ‘upright, stiff’

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (29 March 2012). Description adapted from Venter (2009)

REFERENCES AND FURTHER READING

Venter, S. 2009: A taxonomic revision of the genus Dracophyllum Labill. (Ericaceae). Unpublished Phd Thesis, Victoria University of Wellington, Wellington.

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Dracophyllum strictum Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/dracophyllum-strictum/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/dracophyllum-strictum/