Dracophyllum palustre

COMMON NAME

swamp neinei

SYNONYMS

Dracophyllum virgatum (Cheeseman) Cockayne; Dracophyllum uniflorum var. virgatum Cheeseman

FAMILY

Ericaceae

AUTHORITY

Dracophyllum palustre Cockayne ex W.R.B.Oliv.

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

DRAPAL

CHROMOSOME NUMBER

2n = 26

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Low-growing, erect grassy shrub with sparse long narrow leaves at tips of narrow twigs inhabiting wetlands mostly in the northern South Island. Leaves 14-27mm long by 0.5-1mm wide, leaf tip nearly blunt, base enclosing stem and with fine hairs on margin (lens needed). Flower solitary, below leaves.

DISTRIBUTION

Endemic. New Zealand: South Island (most commonly seen in the northern half but extending south to western Southland)

HABITAT

Sea level to alpine. Dracophyllum palustre is a species of mostly openly vegetated poorly draining, boggy, swampy or permanently moist habitats.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).





Dracophyllum palustre. Photographer: Sandra Wotherspoon, Licence: CC BY-NC.

DETAILED DESCRIPTION

Multi-stemmed scrambler or sub-shrub, 0.2–1.0 m tall. Branches spreading to decumbent. Bark on old branches dark grey, smooth, young stems reddish brown to purplish brown. Leaves erect to spreading, olive green; lamina sheath 2.5–6.0 × 2.2–4.0 mm, tapering to truncate and margin membranous, ciliate; lamina 14.0–27.0 × 0.5–1.0 mm, linear, adaxial surface flat, occasionally minutely scabrous with a tuft of scabrid hairs at the base; margins serrulate with 70-110 teeth per 10 mm; apex keeled, triquetrous. Inflorescence a solitary terminal, sessile flower on shortened lateral branchlets (these shorter than leaves); inflorescence bract equaling flower, 4.0-4.5 x 1.5-2.0 mm, light to dark green, ovate-lanceolate, adaxial surface pubescent at apex; margin ciliate; apex obtuse to acute; flower bracts over-topping flowers, 5.0–5.5 × 2.0–2.5 mm, ovate–lanceolate to ovate, surfaces glabrous with a tuft of scabrid hairs at base of adaxial surface; margins prominently white and ciliate; apices acute to slightly obtuse. Sepals $4.0-5.5 \times 1-2$ mm, ovate to triangular, equaling corolla tube, glabrous with the top half of the abaxial surface pubescent; margins ciliate; apices acute. Corolla white to light pink; corolla tube 3.5-5.0 x 2.0-2.2 mm, cylindrical; corolla lobes reflexed, 1.6-3.0 × 1.3-2.2 mm, ovate-triangular, shorter than corolla tube, apices inflexed, acute; adaxial surface papillate. Stamens inserted on corolla tube in the upper third, filaments 0.5-0.7 mm long; anthers included, 0.7–0.9 mm long, oblong, light yellow. Ovary 0.7–1.2 × 0.6–1.0 mm, obovate, apex truncate; nectary scales rectangular, 0.8–1.5 × 0.6–0.7 mm, apices retuse; style included, 1.0–1.2 mm long, glabrous; stigma five-lobed. Fruit $3.5-4.0 \times 2.8-3.0$ mm, light brown, obovoid, apex round to slightly truncate, glabrous. Seeds 0.95-1.0 mm long, yellowish brown, ovoid, testa slightly reticulate.

SIMILAR TAXA

Dracophyllum palustre is recognised by the long, slender, sparingly leafy stems; leaves which are $14-27 \times 0.5-1.0$ mm, and whose apices are bluntly pointed while the shoulders of the lamina sheaths are rounded and ciliate; by the solitary flowers borne on the lateral branches; broad flower bracts with very wide pale margins and corolla tubes ranging from 3.5-5.0 mm long with acute lobes. Dracophyllum palustre is most similar to D. rosmarinifolium in that both species have solitary flowers and narrow short leaves, but it differs in the slender, strict, sparingly leafy habit, and small leaves while the small flowers are arranged on short peduncles. It is even more similar to the North Island endemic D. subulatum from which it differs in the absence of juvenile leaves, flowers which are solitary not arranged in spikes with the inflorescence bract equaling the flower and having a ciliate not serrulate margin. The sepal is longer (4.0-5.5 cf. 2.6-3.2 mm) with the top half of the abaxial surface pubescent. The corolla tube is also much larger $(3.5-5.0 \times 2.0-2.2 \text{ cf. } 1.8-2.0 \times 1.0-1.2 \text{ mm})$ with larger nectary scales $(0.8-1.5 \times 0.6-0.7 \text{ cf. } 0.4-0.5 \times 0.3-0.5 \text{ mm})$ and fruit $(3.5-4.0 \times 2.8-3.0 \text{ cf. } 2.9-3.0 \times 1.7-1.8 \text{ mm})$.

FLOWERING

October - July

FRUITING

December - September

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Difficult - should not be removed from the wild

ETYMOLOGY

dracophyllum: Dragon leaf, from its likeness to the dragon tree of the Canary Islands

palustre: From the Latin palus 'swamp', meaning growing in swamps

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (16 April 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.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Dracophyllum palustre Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

https://www.nzpcn.org.nz/flora/species/dracophyllum-palustre/ (Date website was queried)

MORE INFORMATION

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