

# Dracophyllum arboreum

## COMMON NAME

Chatham Island grass tree, tarahinau

## SYNONYMS

*Dracophyllum latifolium* var. *ciliolatum* Hook. f.; *Dracophyllum scoparium* var. *major* Cheeseman

## FAMILY

Ericaceae

## AUTHORITY

*Dracophyllum arboreum* Cockayne

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

DRAARB

## CHROMOSOME NUMBER

2n = 26

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: IE, Inc

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: IE, Inc

2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

## BRIEF DESCRIPTION

Tree up to 18 m tall (known only from the Chatham islands), leaves, green, grass-like of two types (broad juvenile and narrow adult), with adult specimens bearing white flowers borne in spikes and often partially obscured by persistent hard and sharp-tipped floral bracts

## DISTRIBUTION

Endemic. Chatham Islands (Rekohu (Chatham), Rangioria (Pitt ) and Rangitira (South East) Islands)

## HABITAT

*Dracophyllum arboreum* is an important component of Chatham Island forest, especially away from the coast and on the deeper peaty soils. In these sites it is often the dominant tree. Sometimes found in restiad bog where it overlaps with and often forms hybrids with *D. scoparium* Hook.f.

## WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



*Dracophyllum arboreum* showing tree habit, Taiko Camp, Chatham Islands. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



*Dracophyllum arboreum* flowering, near Lake Rakeinui, Southern Table Lands, Rekohu (Chatham Island), July 2002. Photographer: Peter J. de Lange, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Tree 4–18 m tall. Bark on old branches greyish–brown to brown, finely fissured, young stems yellowish to reddish brown. Leaves dimorphic (juvenile and adult); juvenile leaves crowded at tips of branches, spreading; lamina sheath 9.0–17.0 × 7.4–16.6 mm, yellowish to light green, coriaceous, tapering and margin ciliate or ciliate in upper half only; lamina subcoriaceous to coriaceous, 100–220 × 10–18 mm, linear–triangular, surfaces glabrous, margins densely pubescent; adult leaves spreading; lamina sheath 6–12 × 4–12 mm, light green, membranous, tapering with a ciliate margin; lamina 25–90 × 1–2 mm, linear to linear–triangular, surfaces glabrous with a tuft of scabrid hairs at base of adaxial surface; margins densely pubescent. Inflorescence a terminal spike on lateral branchlets, shorter than leaves, erect to drooping, dense, 15–38 mm long, linear–oblong; inflorescence bract overtopping the flower, 18–20 × 3–5 mm, subulate, surfaces glabrous, adaxial surface pubescent at base, margins ciliate. Flowers 4–9, sessile; flower bract persistent, overtopping flowers, foliose, 5.5–9.0 × 2.5–3.0 mm, ovate to broadly ovate, surfaces glabrous, adaxial surface with a tuft of scabrid hair at apex; margins ciliate. Sepals 4.0–7.0 × 2.5–3.0 mm, ovate lanceolate, longer than corolla tube, surfaces glabrous with the top half pubescent; margins ciliate. Corolla white; corolla tube 4–5 × 2.5–3.0 mm, cylindrical; corolla lobes reflexed, 2.0–2.4 × 1.0–2.0 mm, triangular, shorter than corolla tube; apices acute; adaxial surface papillate. Stamens inserted on corolla tube in upper third, filaments 0.3–1.0 mm long; anthers included, 0.3–0.4 mm long, oblong, light yellow. Ovary 1.7–2.0 × 1.0–2.0 mm, obovate; glabrous, apex round; nectary scales, 1.0–1.2 × 0.5–0.8 mm, oblong, apices irregularly toothed; style included, 2.0–2.5 mm long, glabrous; stigma capitate. Fruit sessile, 1.2–1.5 × 1.0–1.5 mm, oblong, apex round, dark brown, glabrous. Seed 0.6–0.65 mm long, ovoid, yellowish brown, testa slightly reticulate.

## SIMILAR TAXA

*Dracophyllum arboreum* is a distinctive and easily recognised species, well marked by its tree-habit (growing up to 18 m tall), long and broad juvenile leaves with adult leaves densely ciliated on the margins and pubescent at the base, persistent hard and sharp-tipped bracts that are broad with long white hairs on the adaxial surface, and by the corolla tube 4–5 mm long and shorter than the sepals (and with long cilia on the lower surface).

*Dracophyllum arboreum* can be confused with *D. scoparium*, especially when it grows on the margins of the restiad bogs *D. scoparium* favours. From *D. scoparium*, *D. arboreum* differs by its taller tree habit, much larger, yellow-green rather than bronze-green to red-green, juvenile foliage, which is often carried through as reversion shoots on adult trees, and by the upper leaf surface which is pubescent rather than tomentose. *Dracophyllum scoparium* is confined to restiad bogs where it forms shrubs up to 2 m high. In disturbed habitats it frequently hybridises with *D. arboreum*.

## FLOWERING

Throughout the year

## FLOWER COLOURS

Red/Pink, White

## FRUITING

Throughout the year

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Can be grown from fresh seed. However tricky to maintain. An attractive species that flourishes best in acidic, permanently damp but not water logged peaty soils.

## THREATS

Reasonably secure and regarded as not threatened. However populations off protected land are vulnerable to clearance for farmland and fires. Many populations in the northern two thirds of the main island are remnant stands on farmed land and are in decline. Despite this tarahinau is abundant over much of the southern table lands and on Pitt Island.

## ETYMOLOGY

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

**arboreum:** Tree-like

## WHERE TO BUY

Not commercially available.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (4 October 2012). Description adapted from Venter (2009) supplemented by authors own observations and measurements.

## 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 arboreum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/dracophyllum-arboreum/>