

Dicksonia squarrosa

COMMON NAME

wheki, rough tree fern, harsh tree fern

SYNONYMS

Trichomanes squarrosum G.Forst., *Dicksonia gracilis* Colenso; *Dicksonia squarrosa* var. *gracilis* (Colenso) C.Chr.; *Balantium squarrosum* (G.Forst.) Kunze;

FAMILY

Dicksoniaceae

AUTHORITY

Dicksonia squarrosa (G.Forst.) Swartz

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

DICSQU

CHROMOSOME NUMBER

2n = 130

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Tree fern up to 8 m tall. Usually forming colonies. Trunks covered in dead, black stipe ends, not dense, and often bearing aerial buds. Live fronds often untidy and tattered, usually falling when dead, or forming an irregular, messy skirt.

DISTRIBUTION

Endemic. North, South, Stewart and Chatham Islands.



Christchurch. Photographer: Jeremy Rolfe



Stokes Valley, Lower Hutt. Photographer: Jeremy Rolfe

FEATURES

Tree ferns up to 8 m tall. Rhizomatous usually forming colonial stands. Rhizomes numerous spreading from main stock 1–2 m or more distant, giving rise to subsidiary erect caudices. Trunk slender, solitary, bifurcated (sometimes several times over), up to c.200 mm diam., composed of long-persistent, black stipe bases, interwoven dark brown to black rootlets, red-brown hairs and dormant or active aerial buds. Fronds numerous, persistent or not in death, either falling or forming an untidy, tattered skirt (especially on young plants); in life erect, arching, forming an often tattered, untidy crown, 1.0–2.0(–2.6) m long, 0.5–1.0 m wide. Stipes (180–)280–300(–320) mm long, black, ± rugose, base densely clad deciduous dark red-brown to brown filiform hairs 30–40(–55) mm long; rachises initially clad in dark reddish brown hairs when young, becoming rugose with age. Lamina (0.68–)1.6–(2.28) m long, oblong-lanceolate, (2–)3–4-pinnate, adaxially light to dark glossy green, abaxially paler, harshly coriaceous; primary pinnae 250–500 mm long, deltoid-ovate to lanceolate, acuminate; secondary pinnae close-set to ± overlapping, 50–80 mm long, acute. Barren pinnules 10–18 mm, acute, often sharply toothed, widened and confluent at base, shallowly concave; fertile pinnules close-set, narrowly confluent at base, 10–15 mm long; lobes strongly concavo-convex c.5 mm. long, rounded, each bearing a sorus. Sorus ± rounded, terminating veins at fertile pinnae margins; sporangia on raised receptacle, partially obscured by in rolled pinnae margin, and delicate, submembranous inner indusium. Spores golden brown to red-brown.

SIMILAR TAXA

Dicksonia squarrosa is easily recognised by the rhizomatous growth habit; the plants forming interconnected colonial stands of tree ferns up to 7 m tall and with slender trunks, up to 200 mm diameter. The trunks of this species are not dense, and are made up of persistent, dead, black stipe bases, interwoven with dark brown to black rootlets, and bearing aerial buds. The dead fronds of *D. squarrosa* are not persistent, or if so, they form an untidy skirt. The fresh stipes of this species are distinctly rough to the touch.

FLOWERING

Not applicable - spore producing

FLOWER COLOURS

No flowers

FRUITING

Not applicable - spore producing

PROPAGATION TECHNIQUE

Easily grown from fresh spores, by division of plantlets and by transplanting the mature trunks. Tolerant of a wide range of situations and soil types. *Dicksonia squarrosa* needs room to spread and can become aggressive in some garden situations. This species often naturally appears in garden situations.

ETYMOLOGY

dicksonia: After James Dickson (1738-1822), British botanist and nurseryman

squarrosa: Rough, with scale-like projections; from the Latin squarrosus; leaves and leaf stalks

WHERE TO BUY

Commonly available from mainstream and specialist native plant nurseries.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (10 November 2012). Description by P.J. de Lange.

REFERENCES AND FURTHER READING

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/dicksonia-squarrosa/>