

# Leptolepia novae-zelandiae

## COMMON NAME

lace fern

## SYNONYMS

*Dennstaedtia novae-zelandiae* (Colenso) Keyserl.; *Microlepia novae-zelandiae* (Colenso) J.Sm.; *Acrophorus hispidus* T.Moore; *Davallia novae-zelandiae* Colenso

## FAMILY

Dennstaedtiaceae

## AUTHORITY

*Leptolepia novae-zelandiae* (Colenso) Diels

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

Yes

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

LEPNOV

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. North Island, South Island, Stewart Island/Rakiura, Chatham Islands.

## HABITAT

Coastal to montane confined to deeply shaded, forested sites, where it is often found on rock piles, along streams and river banks (in places where the forest overhangs the waterways) or around seepages and springs. Often uncommon, though sometimes locally abundant.

## DETAILED DESCRIPTION

Terrestrial, rhizomatous, tufted fern. **Fron**ds set at wide intervals along shortly creeping rhizomes. **Stipes** 50–600 mm long; stipes and rachises red-chesnut-brown or black, hairy at base, smooth and polished above with occasional hairs at pinna junction. **Laminae** 150–600 × 60–300 mm, dark green (rarely yellow-green), 3–4-pinnate, ovate, elliptic, broadly elliptic or deltoid, cartilaginous, glabrous, rarely sparsely hairy. **Veins** free. **Pinnae** finely dissected, ultimate segments narrowly elliptic, apices sharply acute. **Sori** oval to rounded, terminating veins just inside pinnae margins; indusia deltoid, adnate at base with two margins free, these lacinate and opening towards pinnae margins.



Castle Rock, Coromandel. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Castle Rock, Coromandel. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## SIMILAR TAXA

*Leptolepia* is superficially similar to species of *Lastreopsis*, from these it is easily distinguished by the almost glabrous fronds (in *Lastreopsis* the stipes are usually scaly, and the stipes and laminae are covered in hairs and unicellular yellow or orange glands), by the finely dissected, broad fronds, usually with the basiscopic secondary pinnae much reduced (in *Lastreopsis* the lower most basiscopic secondary pinna on each basal primary pinna is greatly elongated downwards). The distinctive deltoid indusia with lacinate margins opening towards the pinna margins is diagnostic for this species and genus (which is endemic to New Zealand).

## FLOWERING

Not applicable—spore producing

## FLOWER COLOURS

No flowers

## FRUITING

Not applicable—spore producing

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easily grown although often slow to establish. Does best in a shaded, damp site. Tolerant of wide range of soil types but will not withstand drought. Once established *Leptolepia* can sometimes become invasive

## ETYMOLOGY

**leptolepia:** Thin scales (covering sori)

**novae-zelandiae:** Of New Zealand

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (17 March 2012). Description adapted from Brownsey & Smith-Dodsworth (2000)

## REFERENCES AND FURTHER READING

Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

## NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/leptolepia-novae-zelandiae/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/leptolepia-novae-zelandiae/>