

# Lindsaea viridis

## SYNONYMS

*Odontosoria viridis* (Colenso) Kuhn; *Sphenomeris viridis* (Colenso) Brownlie; *Stenoloma viride* (Colenso) C.Chr.

## FAMILY

Lindsaeaceae

## AUTHORITY

*Lindsaea viridis* Colenso

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

LINVIR

## CHROMOSOME NUMBER

2n = c.176

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

## DISTRIBUTION

Endemic. North and South Islands. In the North Island from Te-Hauturu-o-Toi / Little Barrier Island and Great Barrier Island (Aotea Island) south to Taranaki, Lake Taupo and the northern Hawke's Bay. In the South Island present from the Marlborough Sounds south to and west to Jacksons Bay.

## HABITAT

A rheophytic species favouring the flood zone of steep-sided streams, rivers and deep gorges. It usually grows with its roots immersed in flowing water, or in damp seepages, or permanently damp but draining moss lined cliff faces. It has also been found to be locally abundant along the bases of ignimbritic cliffs lining the shores of Lake Taupō / Taupōmoana, where it grows just within the spray zone of the lake—often with *Hymenophyllum australe*.

## DETAILED DESCRIPTION

Bright green tufted fern with pendulous heavily divided narrow fronds, occurring either as solitary plants or large patches in permanently damp places. **Rhizomes** short-creeping, ascending, scaly. **Stipes** 30–120 mm long, purplish brown. **Fronds** bright green, narrowly elliptic, narrowly ovate to lanceolate, 2–3-pinnate, 40–300 × 10–50 mm, pendulous, bright green. **Pinnae** in 7–20 pairs, aside from the basal 1–2 pairs overlapping. **Ultimate segments** 4–7 × 1–25 mm, broadest above the middle, blunt-ended, with smooth or toothed margins. **Sori** at ends of ultimate segments, almost round or broader than long. **Indusia** oblong to elongated cream to light green coloured, margins smooth or toothed.



*Lindsaea viridis* plant at Great Mercury Island. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



*Lindsaea viridis* close up of plant growing in flood zone of the upper Hihikiwi Stream, January 1985, Hihikiwi Catchment, Mt Pirongia. Photographer: Peter J. de Lange, Licence: CC BY-NC.

## SIMILAR TAXA

Rather distinctive and unlikely to be confused with any other New Zealand fern species, especially because of the habitat which it occupies. However, it could be confused with the forest dwelling *L. trichomanoides*. Aside from its ecology that species differs from *L. viridis* by its upright, less divided, wider fronds bearing fewer pinnules which scarcely (if ever) overlap with the adjoining pairs, and by its much longer creeping rhizomes.

## FLOWERING

Not applicable—spore producing

## FLOWER COLOURS

No flowers

## FRUITING

Not applicable—spore producing

## PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild

## THREATS

This species is a naturally uncommon, sparsely distributed fern, which on occasion (such as the western cliff lined shores of Lake Taupō / Taupōmoana) can be extremely common, but which is more usually known at any particular site by a handful of plants. As such at some locations it is extremely vulnerable to over collection.

## ETYMOLOGY

**lindsaea**: Named after John Lindsay, 19th century British surgeon who discovered fern spore

**viridis**: From the Latin viridis 'green'

## WHERE TO BUY

Not commercially available.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (June 2005). 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.

## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/lindsaea-viridis/>