Hypolepis millefolium

COMMON NAME

thousand leaved fern

FAMILY

Dennstaedtiaceae

AUTHORITY

Hypolepis millefolium Hook.

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

HYPMIL

CHROMOSOME NUMBER

2n = 104

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

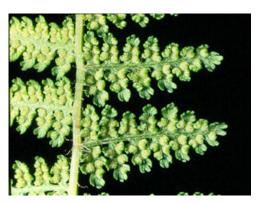
2009 | Not Threatened

2004 | Not Threatened





Sabine river, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Sabine river, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DISTRIBUTION

Endemic. New Zealand: North Island (Mt Pirongia and East Cape south, though mostly from the Central Volcanic Plateau, Mt Egmont and main axial ranges. One unusual, North Island lowland record from a roadside near Kihikihi may have came from plants that temporarily established there from road machinery that had been used to work the Western Taupo Road where this fern is common), South Island, Stewart Island/Rakiura, Chatham Islands, Antipodes Islands, Auckland Islands and Campbell Island/Motu Ihupuku.

HABITAT

Coastal to alpine, In northern part of range virtually confined to montane–alpine areas but descending to sea level on the Subantarctic islands. *Hypolepis millefolium* is a common fern of grassland and rock strewn slopes. It also extends into scrub and forest. On the Chatham Islands it grew in restiad peat bogs, while on the subantarctic islands it grows amongst tussock grassland and open *Dracophyllum* scrub.

DETAILED DESCRIPTION

Rhizome subterranean, long-creeping, 1.5–3.0 mm diameter, glabrous or bearing scattered pale brown hairs (especially near growing point), stipes arising at intervals of 15–130 mm. **Stipes** 50–350 mm long, 1.5–3.0 mm diameter, red-brown below, pale brown above, a few pale or reddish brown hairs along stipe. **Laminae** rhombic, ovate or broadly ovate, 150–400–(700) × 80–250 mm, membranous to slightly coriaceous, normally tripinnate (bipinnate in smallest specimens) at apex to quadripinnate or sometimes almost 5-pinnate at base. **Rachis** pale brown to yellowish green, bearing pale brown or colourless eglandular hairs c. 1 mm long. **Primary pinnae** in 20–25 pairs, the lowest arising at 30–50° to stem, upper ones at 70–90°, opposite below, subopposite or alternate above, the longest below middle 70–260 × 35–130 mm; lowest pinnae 35–150 mm apart, middle pinnae 15–50 mm apart; upper pinna narrowly ovate, lower ones ovate, midrib narrowly winged towards apices. **Secondary pinnae** narrowly ovate to ovate, midribs broadly winged, 25–80 × 10–35 mm, those on the lower pinnae decreasing in length along the pinnae. **Tertiary pinnae** 5–20 × 3–10 mm, 2-6 deep serrations per pinnule. **Quaternary pinnae** 0.1–0.5 × 0.1–0.4 mm, sometimes deeply divided. **Hairs**: glistening, colourless, scattered along midribs of pinnae and pinnules, on both surfaces, up to 1 mm long. **Veins** reaching margin at tooth apex. **Sori**: one on each ultimate segment, though often absent from lowest two pairs of pinnae, originating away from margin, unprotected at maturity or partially covered by a green reflexed marginal flap. **Spores** pale brown, echinate.

SIMILAR TAXA

Hypolepis millefolium is easily recognised on account of its brittle, vivid bright green to yellow-green and finely divided ('lacy') fronds. From other New Zealand Hypolepis it is also distinguished by the unprotected (or scarcely so) sorus; brittle stipes and fertile fronds which are 1.5-5.0 mm diameter; absence (or near absence) of glandular hairs; by the laminae of the fertile fronds > 400×250 mm, with the ultimate segments < 1 mm wide; and by the complete absence of hairs from the sorus.

FLOWER COLOURS

No flowers

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Hypolepis millefolium is very attractive fern that is easily grown from fresh spores and rooted pieces. Despite its typical associated within montane to alpine habitats it can be grown easily at low elevations. Unlike many other Hypolepis, H. millefolium is less inclined to be short-lived and, as a rule is less 'weedy'.

ETYMOLOGY

hypolepis: From the greek hypo (under) and lepis (scale), referring to the position of the sori on the ferns **millefolium**: Many leaved; from the Latin mille and folium

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (7 November 2012). Description from Brownsey & Chinnock (1984).

REFERENCES AND FURTHER READING

Brownsey PJ, Chinnock RJ. 1984. A Taxonomic revision of the New Zealand species of *Hypolepis*. *New Zealand Journal of Botany 22*: 43–80. https://doi.org/10.1080/0028825X.1984.10425234.

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

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

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/hypolepis-millefolium/