

Alsophila milnei

COMMON NAMES

Milne's tree fern

BIOSTATUS

Native – Endemic taxon

CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: IE

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CATEGORY

Vascular

STRUCTURAL CLASS

Ferns

SIMPLIFIED DESCRIPTION

Tree fern with brownish-stalked soft leaves to 4 m long inhabiting Raoul Island in the Kermadec Islands. Trunk to 8 m tall, skirted by remains of old fronds. Leaf stems covered in wavy hairs (lens needed). Sporangia arranged in small small deep cups underneath fronds.

DETAILED DESCRIPTION

Tree fern up to 10 m tall. **Trunk** scaly, bearing numerous stub like, projecting stipe remnants. **Stipes** stout, initially evenly yellow, maturing pale brown, rugose, basally covered with persistent scales (usually with sparse caducous scales running along sides of the upper stipe and rachis); scales dark brown lacking marginal spines. **Fronds** up to 4 × 2 m, bright yellow green to somewhat milky-green above, paler beneath, held horizontally, 3-pinnate, coriaceous; dead fronds long persistent, forming a dense skirt around trunk. **Primary pinnae** up to 450 mm long, undersides bearing fine curly hairs. Indusia covering mature sori, opening to form a deep, cupular structure with a smooth rim. (Description adapted from Brownsey & Smith-Dodsworth (2000)).

SIMILAR TAXA

On Raoul Island this species is sympatric with *Alsophila kermadecensis* from which it differs by its smaller stature (up to 10 cf. 20 m in *A. kermadecensis*), scaly rather than scaly and hairy stipes, horizontal rather than arching fronds which are retained rather than dropping when dead to form a skirt and pinnae undersides which have fine curly scales rather than scales whose apices are terminated by single or stellate spines. *Alsophila milnei* is very similar to *A. tricolor* which is endemic to New Zealand proper. It is easily distinguished from that species by the pale brown rather than silver stipe and rachis, and pale green rather than silvery-white colour of the pinnae undersides. However, in Te Pahi especially, some populations of *A. tricolor* lack this colouration, and appear to be very similar to *A. milnei*—these plants require further study.

DISTRIBUTION

Endemic. Kermadec Islands, Raoul Island only

HABITAT

Most commonly found in the lower altitude, drier forested parts of Raoul Island. However, occasional plants are found also in the wetter, higher elevation forest.

THREATS

No apparent threats. It is a narrow range endemic naturally confined to Raoul Island where it is abundant.



In cultivation, Auckland. Feb 2007.

Photographer: Peter J de Lange, Licence: CC BY-NC.



Sporangia, Boat Cove Road, Raoul Island.

Photographer: Peter J de Lange, Date taken: 01/05/2011, Licence: CC BY-NC.

GENUS

Alsophila

FAMILY

Cyatheaceae

AUTHORITY

Alsophila milnei (Hook.f.) R.M.Tryon

SYNONYMS

Cyathea milnei Hook.f.;

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

PROPAGATION TECHNIQUE

Easily grown from spores. Initially plants are cold and drought sensitive. However once established this species is very fast growing. It prefers semi-shade in a warm, sheltered site. It should be planted in a free draining, moist soil. Once established it can tolerate drought but it should not be allowed to dry out for too long. Although more cold tolerant than *Alsophila kermadecensis* it is best grown in warmer climates.

CULTIVATION

Occasionally available from specialist native and general plant nurseries

NVS CODE

CYAMIL

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: IE

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

2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

[Jump to current conservation status](#)

REFERENCES AND FURTHER READING

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

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange July 2009. Description adapted from Brownsey & Smith-Dodsworth (2000).

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/alsophila-milnei/>

PDF DATE

27 May 2026