

Alsophila tricolor

COMMON NAME

silver fern, ponga

SYNONYMS

Cyathea dealbata (G.Forst.) Sw.; *Cyathea dealbata* var. *tricolor* (Colenso) Domin; *Cyathea tricolor* Colenso; *Polypodium dealbatum* G.Forst.

FAMILY

Cyatheaceae

AUTHORITY

Alsophila tricolor (Colenso) R.M.Tryon

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

CYADEA

CHROMOSOME NUMBER

2n = 138, 144

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Tree fern with green-stalked soft leaves to 4 m long that are distinctly silver on the underside. Trunk to 10 m tall, covered by the bases of old fronds. Leaf stems covered in wavy hairs (lens needed). Sporangia arranged in small round capsules underneath leaves.

DISTRIBUTION

Endemic. New Zealand: Manawatāwhi / Three Kings Islands south to Mahers Swamp in the west and Dunedin in the east of the South Island.

HABITAT

Common, primarily coastal and lowland habitats but extending to lower montane. Preferring dry forest and shrubland, often under pines.

WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).



Emerging frond, Waitakere Range.
Photographer: Jeremy R. Rolfe, Date taken:
07/12/1982, Licence: CC BY.



Sori, Wellington. Photographer: Jeremy R.
Rolfe, Date taken: 15/11/1986, Licence: CC BY.

DETAILED DESCRIPTION

Tree fern up to 10 m tall (very rarely without trunk). **Trunk** covered in long-persistent, peg-like, stipe bases. **Stipes** slender, silvery-white when young, maturing pale brown. Harsh to the touch, covered in pale-brown scales. **Scales** without marginal spines. **Fronds** up to 4 m long, horizontal, somewhat arching, 3-pinnate. Dead fronds falling. **Longest primary pinnae** 300–550 mm, pale green above, white below (very rarely pale green) below. Under surfaces sparingly clad in curly hairs. **Indusia** covering sori at maturity, opening at maturity to form a deep cup with a smooth rim.

SIMILAR TAXA

Distinctive. In New Zealand *Alsophila tricolor* could only be confused with the Raoul Island (Kermadec Islands) endemic *A. milnei* which is occasionally cultivated on the New Zealand mainland. *A. milnei* is easily recognised by the pale green rather than white frond under surfaces, and by the persistent skirt of dead fronds. It is rather cold sensitive. Some populations of *Alsophila tricolor* at Te Paki (and less commonly elsewhere in northern New Zealand) are distinctive because their fronds have pale grey rather than silvery white under sides and often these plants have a creeping, trunk less (or nearly trunk less) habit. Their status needs further investigation, especially as this form can be found at Te Paki growing alongside *A. tricolor* plants with a well defined trunk and silvery-white frond under sides. The Te Paki form retains its trunk less (or short trunk) and pale grey frond undersides in cultivation. It is very slow growing.

FLOWERING

Not applicable—spore producing

FLOWER COLOURS

No flowers

FRUITING

Not applicable—spore producing

PROPAGATION TECHNIQUE

Can be grown from fresh spores (but slow). Young plants transplant easily and freshly felled trunks will usually resprout if planted and carefully watered. Easy, once established in a variety of conditions. Should not be removed from the wild unless with the landowners permission.

THREATS

Not threatened—widespread and common through most of its range and often seen in urban vegetation. Probably one of the most common, if not the most common, indigenous tree ferns.

TAXONOMIC NOTES

Alsophila tricolor (Colenso) R.M.Tryon is the correct name for *Cyathea dealbata* (G.Forst.) Sw. in *Alsophila*. This is because the epithet “*dealbata*” is preoccupied in *Alsophila* by *A. dealbata* C.Presl described in 1848, and now treated as a synonym of *Sphaeropteris glauca* (Blume) R.M.Tryon.

WHERE TO BUY

Sold by most commercial nurseries. Commonly cultivated.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange March 2004. 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): *Alsophila tricolor* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/alsophila-tricolor/> (Date website was queried)

MORE INFORMATION

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