

# 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

2012 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Tree fern with green-stalked soft leaves to 4m long that are distinctly silver on the underside. Trunk to 10m 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. From the 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.



Emerging frond, Waitakere Range.  
Photographer: Jeremy Rolfe



Sori, Wellington. Photographer: Jeremy Rolfe

## FEATURES

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 Island Group) 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

None (spore bearing)

## FLOWER COLOURS

No flowers

## FRUITING

None (spore bearing)

## 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 these most common indigenous tree fern.

## 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, P.J.; Smith-Dodsworth, J.C. 2000: New Zealand Ferns and Allied Plants. Auckland, David Bateman

## 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/>