# Loxogramme dictyopteris

COMMON NAME

lance fern, whare ngārara

## SYNONYMS

Polypodium cunninghamii Hook.; Polypodium dictyopteris Mett.; Dictyopteris lanceolata J.Sm.; Anarthropteris lanceolata (Hook. f.) Pic.Serm.; Polypodium attenuatum sensu A.Rich.; Anarthropteris dictyopteris (Mett.) Copel.; Anarthropteris lanceolata (J.Sm.) L.B.Moore in Allan; Dictymia lanceolata J.Sm. ex Hook.f.

FAMILY Polypodiaceae

AUTHORITY Loxogramme dictyopteris (Mett.) Copel.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS Yes

ENDEMIC FAMILY No

STRUCTURAL CLASS Ferns

NVS CODE LOXDIC

CHROMOSOME NUMBER 2n = 74

CURRENT CONSERVATION STATUS 2017 | Not Threatened

**PREVIOUS CONSERVATION STATUSES** 

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: North Island (widespread except for the central volcanic plateau and adjacent axial ranges), South Island (common in the north to Greymouth and Banks Peninsula), Chatham Islands (scarce, reaching its national southern limit at Canister Cove, Pitt Island (Rangiauria).

## HABITAT

Coastal to montane but mostly in coastal and lowland areas. *Loxogramme* seems to be most abundant in regions where base rich rocks such as basalt, limestone and calcareous sandstones and mudstones are exposed, in these sites it often forms luxuriant carpets on shaded rock outcrops. However, *Loxogramme* is not tied to base rich rocks and is sometimes nearly as common on rhyolite and ignimbrite exposures. It is also a common low epiphyte on trees, especially in alluvial forest.





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



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

#### **DETAILED DESCRIPTION**

Epiphytic, rupestral or terricolous fern forming leafy patches over substratum. **Rhizomes** tufted, scaly, producing numerous creeping, proliferous roots; these producing new plants at intervals. **Fronds** undivided, subcoriaceous, 70–300 × 7–23 mm, adaxially dark green to bright green above, abaxially paler, narrowly elliptic (rarely broadly so to almost rhomboidal), tapering to an acute apex, base narrowly cuneate extending as an indistinct stipe wing; midrib prominent, veins inconspicuous, reticulate. **Sori** oval, prominent, abaxially sunken, thereby forming a prominent bulge on the adaxial laminal surface, in one row either side of midrib set away from pinna margins, indusia absent. **Spores** orange-brown.

#### **SIMILAR TAXA**

Easily recognised by the proliferous roots, such that this species usually covers much of the surrounding substratum in a mass of simple, subcoriaceous, dark green to bright green fronds. The prominent, oval, abaxially sunken sori are also characteristic of this species.

## LIFE CYCLE

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

## **PROPAGATION TECHNIQUE**

Although it can be cultivated *Loxogramme* is often difficult to maintain. Its does best in shaded, permanently damp (but not waterlogged) conditions, planted in a rich, free draining soil enriched with lime and humus.

#### **ATTRIBUTION**

Fact sheet prepared for NZPCN by P.J. de Lange (13 January 2012). 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.

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. <u>https://doi.org/10.1016/j.ppees.2009.06.001</u>.

## NZPCN FACT SHEET CITATION

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https://www.nzpcn.org.nz/flora/species/loxogramme-dictyopteris/ (Date website was queried)

#### **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/loxogramme-dictyopteris/