

Arthropteris tenella

COMMON NAME

jointed fern

SYNONYMS

Polypodium filipes T.Moore; *Polypodium tenellum* G.Forst.

FAMILY

Tectariaceae

AUTHORITY

Arthropteris tenella (G. Forst.) Hook. f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

ARTTEN

CHROMOSOME NUMBER

$2n = c.84$

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: Manawatāwhi / Three Kings Islands, North Island, South Island, Chatham Islands (Chatham Island (Rēkohu) and Pitt Island (Rangiauria)). Also Australia, Lord Howe and Norfolk Islands. In New Zealand reaching its southern limits on Banks Peninsula and Pitt Island (Rangiauria).

HABITAT

Coastal and lowland forest. Usually found scrambling over rocks and climbing up tree trunks.

DETAILED DESCRIPTION

Rhizomatous terrestrial and/or epiphytic ferns. **Rhizome** 1.5–4.0 mm diameter, widely creeping; upper surface densely covered with spreading elongate, red-brown, often marginally toothed scales (these shedding with age). **Fronds** 120–300 mm long, tapering towards base and partly to apex; uppermost pinna pair and terminal pinna usually enlarged. **Stipes** 20–120 mm long; abaxial rachis surface bearing scattered scales and sparse to dense short curled hairs; adaxially sparsely invested with scales or not. **Pinnae** bearing similar hairs abaxially, ± glabrescent, and on proximal portion of adaxial and abaxial midrib (here persistent); base not auriculate; apex usually attenuate but acuminate or rounded in sterile pinnae. **Sterile pinnae** 5–110 × 10–18 mm; margins entire. **Fertile pinnae** 18–160 × 5–23 mm; margins entire to crenate (scalloped). **Sori** round, in one row either side of midrib, set at $\frac{1}{4}$ – $\frac{3}{4}$ distance from midrib to margin; indusium absent.



Coromandel, September. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Coromandel, September. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

SIMILAR TAXA

Easily recognised by the tapering, distinctly stalked pinnae which usually have crenate (scalloped) margins, and by the round sori which lack an indusia. Sometimes, such as when this fern grows on rocks or on the forest floor it may remain sterile, and such plants often have much smaller fronds whose pinnae lack the distinctive crenate margins typical of the fertile fronds of this species.

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown provided it is planted in a frost-free situation. Prefers partial shade and a free draining soil. This fern does best when it has something to climb up.

ETYMOLOGY

arthropteris: From the greek arthro (jointed) and pteris (fern)

tenella: Delicate

ATTRIBUTION

Fact sheet prepared for NZPCN by: P.J. de Lange (26 February 2012). Description adapted from Bell (1998) and Brownsey & Smith-Dodsworth (2000)

REFERENCES AND FURTHER READING

Bell GH. 1998. Davalliaceae. *Flora of Australia 48, Ferns Gymnosperms and allied groups*: 434–450. ABRS/CSIRO Victoria, Australia.

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

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/arthropteris-tenella/>