

Adiantum diaphanum

COMMON NAME

tuberous maidenhair, small maidenhair

SYNONYMS

Adiantum setulosum J.Smith, *A. affine* Hook. non Willd., *A. polymorphum* Colenso, *A. diaphanum* var. *polymorphum* (Colenso) Cheeseman, *Adiantum tuberosum* Colenso

FAMILY

Pteridaceae

AUTHORITY

Adiantum diaphanum Blume

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

ADIDIA

CHROMOSOME NUMBER

2n = 232

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: Kermadec (Raoul Island), North Island (common from Te Pahi to Waikato otherwise rather local), South Island (rather local reaching as far south as Dunedin), Chatham Islands. Also southern China, Japan, Taiwan, Vietnam. Malesia, Australia, Norfolk and Lord Howe Islands and the wider Pacific.

HABITAT

Coastal to lowland in closed or open forest. Often on clay banks, under overhangs, on rubble slopes or along rocky stream sides.



Great Mercury Island. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Great Mercury Island. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Tufted, terrestrial fern. **Rhizomes** erect, c. 2 mm diameter; scales concolorous, golden brown, with entire margins and prominent apical seta. **Roots and rootlets** bearing ovoid proliferous tubers to c. 1.5 mm long. **Fronde**s tufted, adaxially dark green, abaxially paler, to 360 mm long. **Stipe** to 180 mm long, smooth adaxially, scabrous abaxially. **Lamina** 20–170 × 20–130 mm, 1-pinnate, or 2–(3)-pinnate at the base and 1-pinnate above, subpedate, hastate or deltoid, membranous; rachises flexuous, glossy, glabrous. **Basal pinna**, when present, 1 or 2 (rarely more), narrowly deltoid, 1–2-pinnate. **Pinnules** dimidiate, rectangular to subtrapeziform, becoming cuneate-flabellate in apical segments, abaxially sparsely to very sparsely setose or glabrous, adaxially glabrous or setose hairy; distal margins shallowly lobed, denticulate when sterile; veins dark brown near stalk, otherwise pale. **Sori** 1–10 along distal margins, usually 1 per lobe; soral flaps round to subreniform, setose or glabrous, deeply immersed in the lobe. **Spores** c. 64 per sporangium, yellow, perine scabrous; largest diameter (25.6)–33.9–(51.9) µm.

SIMILAR TAXA

Easily distinguished by the tuberous roots and rootlets, and small, sparingly divided frond. It can be confused with diminutive forms of *Adiantum hispidulum* with which it sometimes grows and from which it is reliably distinguished by the tuberous rootlets.

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown in a shady site planted in a light, well-drained soil.

ETYMOLOGY

adiantum: From the Greek a- 'without, lacking' and diantos 'moistened', the fronds of this fern are supposed to remain dry after submersion in water

diaphanum: From the Greek diaphanes, meaning transparent or filmy

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (Updated 4 May 2011). Description adapted from Bostock (1998).

REFERENCES AND FURTHER READING

Bostock PD. 1998. Adiantaceae. *Flora of Australia 48, Ferns Gymnosperms and allied groups*: 248–263. ABR/CSIRO Victoria, Australia.

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/adiantum-diaphanum/>