# Adiantum formosum

### **Common Name(s):**

Giant maidenhair, Plumed maidenhair

### **Current Threat Status (2012):**

At Risk - Relict

### **Distribution:**

Indigenous. North Island only, with historic records from near Ahipara (Reef Point), Herekino, and the North Wairoa River near Dargaville. The only extant populations now known occur along either side of the Manawatu River Gorge, and in forest near the eastern and western ends, as well as around Woodville. Present in Eastern Australia (Queensland, New South Wales and Victoria) where it is abundant and under no threat.

### **Habitat:**

A species of alluvial forest and gorge sides. Usually found in shaded sites amidst drifts of leaf litter with little (if any) associated vegetation. It rarely grows in full sun.

### Features\*:

Tall, widely creeping fern form diffuse patches up to 3 x 1.8 m. Rhizome buried (rarely at surface), long-creeping, much-branched to 10 mm diameter; scales golden brown with an acuminate apex and blunt marginal teeth. Fronds usually widely and irregularly placed along rhizome, up to 1.8 m tall. Stipe up to 0.9 m, wiry, basally dull black, distally glossy black, scabrous, finely tuberculate. Frond lamina 0.15-1 x 0.15-0.9 m, 2-4-pinnate,



**Caption:** Adiantum formosum **Photographer:** John Barkla



**Caption:** Under low forest, Ashhurst Domain, Manawatu

Photographer: Colin Ogle

deltoid to pentagonal, firmly membranous to subcoriaceous; adaxial surfaces of rachises and pinna stalks clad with dense antrorse red-brown hairs. Higher order segments of frond (except pinnules) elliptic or triangular. Primary pinnae progressively reducing in size and degree of branching from base to apex. Pinnules symmetric, flabellate or dimidiate and rectangular to trapeziform, undersides glabrous or sparsely clothed with pale divergent (patent) hairs; distal margins irregularly lobed, dentate when sterile. Sori 1-10 on distal margins only, 1 or 2 per lobe; soral flaps lunate to subreniform, glabrous.

# Flowering:

### Fruiting:

Not applicable - spore producing

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#### **Threats:**

It would appear that this species is spreading vegetatively as preliminary studies on spore germination suggest that while viable spores are produced they cannot germinate within the typical range of New Zealand temperatures (J. E. Braggins & S. Van der Mast pers. comm.). The only known wild populations are thriving but are rather localised and vulnerable to weeds

### \*Attribution:

Fact Sheet Prepared for NZPCN by P.J. de Lange (Updated July 2004). Description adapted from Bostock (1998).

### References and further reading:

Bostock, P.D. 1998: Adiantaceae. Flora of Australia 48: 248-263.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 2009 Vol. 11 No. 4 pp. 285-309

## For more information, visit:

http://nzpcn.org.nz/flora\_details.asp?ID=707