

# *Adiantum diaphanum*

## Family:

Pteridaceae

## Botanical name

*Adiantum diaphanum* Blume

Link to Australian Plant Name Index for publication details and synonyms:

<https://id.biodiversity.org.au/name/apni/76428>

## Common name:

Maidenhair Fern

## Description

Rhizome erect, c. 2 mm diam.; scales concolorous, golden brown, with entire margins and prominent apical seta. Roots with ovoid proliferous tubers to c. 1.5 mm long. Fronds tufted, to 36 cm long. Stipe to 18 cm long, smooth adaxially, scabrous abaxially. Lamina 1-pinnate, or 2 (–3)-pinnate at the base and 1-pinnate above, subpedate, hastate or triangular, 5–17 cm long, 2–13 cm wide, membranous; rachis flexuose, glossy, glabrous. Basal pinnae, when present, 1 or 2 (rarely more), narrowly triangular, 1–2-pinnate. Pinnules dimidiate, rectangular to subtrapeziform, becoming cuneate-flabellate in apical segments, sparsely to very sparsely setose; 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 (rarely glabrous), deeply immersed in the lobe. Spores ?64 per sporangium, yellow; perine scabrous; largest diam. (25.6–) 33.9 (–51.9)  $\mu\text{m}$ .

## Distribution

Widespread in QLD from CYP to northern NSW. Also widespread in Asia, Malesia, Pacific Islands and New Zealand.

## Habit and habitat

Terrestrial or lithophytic in rainforest growing on a variety of substrates, usually in moist areas in watercourses. This species can spread adventitiously from its root system.

## Cultivation

This is a commonly cultivated ornamental fern in tropical, subtropical and temperate areas. It is suited to cultivation in a shaded and moist part of the garden or in a greenhouse. It is suited to cultivation in the ground or in a container planted in a free-draining but moisture retaining terrestrial growing medium. A tidy plant can be produced by removal of old fronds once per year just prior to the emergence of new fronds in spring. New plants are readily produced from root offsets which will emerge from drainage holes in a pot or through the wall of a coir lined hanging basket.

## Similar species

Key to some *Adiantum* species of tropical Australia.

1a. Fronds pinnate = *Adiantum philippense*

1b. Fronds bipinnate or higher = 2

2a. Pinnules flabellate to rounded = 3

2b. Pinnules obliquely oblong to rhomboid = 5

3a. Soral flaps broadly attached to lamina and situated on the ends of lobes with incisions between them = *Adiantum capillus-veneris*

3b. Soral flaps reniform and narrowly attached to lamina and situated in incisions of the lamina margin with lobes between them = 4

4a. Rhizome long creeping, rhizome scales translucent with entire margins, plants stoloniferous and spreading, pinnae pale bright green when mature = *Adiantum aethiopicum*

4b. Rhizome short creeping, rhizome scales opaque with denticulate margins, not stoloniferous plants tufted, pinnae dark green when mature = *Adiantum atroviride*

5a. Rhizome long creeping, fronds scattered = 6

5b. Rhizome not long creeping, fronds tufted = 7



Close up of frond showing sori.

© G. Sankowsky



Complete frond. © G. Sankowsky



Habit. © G. Sankowsky



Complete frond. © G. Sankowsky



Habit. © G. Sankowsky

6a. Primary pinnae progressively reducing in length from base to apex of frond resulting in a triangular lamina = *Adiantum formosum*

6b. Primary pinnae equal in length resulting in an ovate lamina = *Adiantum silvaticum*

7a. Pinnae soft and membraneous with fine black hairs on the undersurface, root tubers present, often proliferous, stipe smooth = *Adiantum diaphanum*

7b. Pinnae herbaceous to coreaceous with white hairs, root tubers absent, not proliferous, stipe not smooth = *Adiantum hispidulum*

#### Citation of Australian Tropical Ferns and Lycophytes

Field AR, Quinn CJ, Zich FA (2022) Australian Tropical Ferns and Lycophytes. [apps.lucidcentral.org/fern/text/intro/index.htm](https://apps.lucidcentral.org/fern/text/intro/index.htm) (accessed online INSERT DATE).

Field AR, Quinn CJ, Zich FA (2022) '*Platyserium superbum*', in Australian Tropical Ferns and Lycophytes. [apps.lucidcentral.org/fern/text/entities/platyserium\\_superbum.htm](https://apps.lucidcentral.org/fern/text/entities/platyserium_superbum.htm) (accessed online INSERT DATE).

---

Copyright © Australian Tropical Herbarium 2022, all rights reserved.



Web edition hosted at <https://apps.lucidcentral.org/ferns>