

## *Platycterium hillii*

### Family:

Polypodiaceae

### Botanical name

*Platycterium hillii* T.Moore

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

<https://id.biodiversity.org.au/name/apni/79649>

### Description

Rhizome short creeping, clothed with chaffy lanceolate scales, embedded in a nest of fronds and roots. Roots proliferous. Fronds dimorphic with sterile base fronds laminating against the host and sterile or fertile foliage fronds emergent. Base fronds rounded-reniform, 15.5–36 cm long, at least 15–26 cm wide; upper margin entire to slightly wavy, firmly appressed to substrate, soon becoming brown. Foliage fronds ascending, 23–90 cm or more long, to 60 cm wide; base cuneate, spreading out to a broad apex; distal one-third forked 1–5 times; ultimate segments oblong, 1–6 cm wide, dark green, glabrous or almost so. Sporangia covering most of the undersurface of ultimate segments of foliage fronds, frequently reaching apex and sometimes extending around sinus of the ultimate fork. Spores 40–52.5 µm long, 20–35 µm wide.

### Distribution

Occurs in NE QLD from Iron Range to Cape Hillsborough.

### Habit and habitat

Epiphytic or lithophytic in lowland vine forest. Most commonly seen as a large mass forming epiphyte in beach scrubs and along creeks in wet areas.

### Natural history

The nest fronds of this species are thick and corky and contribute to a thick sponge-like nest. The upper margin of the nest-fronds are not lobed and seal the upper surface of the nest.

### Cultivation

Readily cultivated on a tree, rock, slab or in a pot of coarse material. Grows well in a garden or fernhouse in the tropics and subtropics. A useful host for growing pendulous epiphytes.

### Similar species

Key to Australian *Platycterium* spp.:

- 1a. Nests with a solitary growing point, fertile fronds with a single large sorus in the first sinus, nest-fronds forming a wide-spreading fan of lobes = *Platycterium superbum*
- 1b Nests forming a colony with several growing points, fertile fronds with sori on the penultimate lobes and not in the sinuses, nest fronds not forming a wide spreading fan of lobes = 2.
- 2a. Nest fronds with an entire upper margin and not forming a basket = *Platycterium hillii*
- 2b. Nest fronds with a lobed upper margin and forming a basket = 3
- 3a. Plants with a dense covering of stellate hairs, foliage fronds white below obscuring venation, nest fronds drying to a mushroom pink or grey, upper lobes narrow and finger like = *Platycterium veitchii*
- 3b. Plants with sparse covering of stellate hairs, veins visible on lower surface of foliage fronds, nest fronds drying to a coppery brown, upper lobes not as above = *Platycterium bifurcatum*

### 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) '*Platycterium superbum*', in Australian Tropical Ferns and Lycophytes. [apps.lucidcentral.org/fern/text/entities/platycterium\\_superbum.htm](https://apps.lucidcentral.org/fern/text/entities/platycterium_superbum.htm) (accessed online INSERT DATE).



Close up of frond showing sori.

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