

Histiopteris incisa

COMMON NAME

histiopteris, water fern, mātātā, bat's wing fern

SYNONYMS

Pteris incisa Thunb.; *Pteris montana* Colenso; *Pteris vespertilionis* Labill.; *Phegopteris incisa* (Thunb.) Keyserl.; *Pteris alpina* Field; *Pteris brunoniana* Endl.; *Histiopteris vespertilionis* (Labill.) J.Sm.; *Litobrochia incisa* (Thunb.) C.Presl; *Litobrochia vespertilionis* (Labill.) C.Presl

FAMILY

Dennstaedtiaceae

AUTHORITY

Histiopteris incisa (Thunb.) J. Sm.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

HISINC

CHROMOSOME NUMBER

2n = 192, 208

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: Also eastern and south-eastern Australia and Tasmania, Lord Howe and Norfolk and throughout the tropics and southern temperate regions.

HABITAT

Coastal to subalpine. Usually in open sites. *Histiopteris* is typically a primary colonizer of disturbed ground such as in clearings caused by tree falls, or in forest that has been seriously damaged by browsing animals. It is often common in pine forest, on roadside cuttings, and sometimes may be found in urban areas.



Coromandel, November. Photographer: John Smith-Dodsworth



Coromandel, November. Photographer: John Smith-Dodsworth

FEATURES

Terrestrial often summer green fern (deciduous in cooler areas). Rhizomes long-creeping, scaly. Stipe and rachis chestnut-brown at base otherwise mostly yellow-brown (sometimes glaucescent), glabrous except for basal scales, glossy; stipe 0.15-1.2 m long, 5-10 mm diameter. Lamina 0.3-2.3 × 0.15-1.2 m, yellow-green, glaucescent or glaucous (irrespective distinctly glaucous when young), glabrous, ovate, 3-4-pinnate at base. Pinnae sessile, basal pinnules reduced, stipuliform; veins reticulate. Primary pinnae in opposite pairs; longest 130-600 × 70-350 mm, arising at narrow angles, sessile. Secondary pinnae opposite, arising at wide angles; longest 40-200 × 20-90 mm, with basal pair sometimes reduced to stipules. Tertiary pinnae opposite; longest 10-45 × 6-15 mm, sometimes divided into quaternary pinnae. Ultimate pinnules adnate to midribs; margins entire or crenate; apices obtuse. Sori ± continuous around margins, borne on connecting vein, bearing paraphyses; indusia absent, sori protected by reflexed membranous lamina margin. Spores pale, tuberculate.

SIMILAR TAXA

Easily recognised by the glabrous, yellow-green glaucescent or glaucous fronds (always glaucous when emergent), pinnae with reticulate venation, by the continuous marginal sori and the absence of an indusia, and by the basal pair of secondary pinnae on the primary pinnae overlapping the rachis.

FLOWERING

None (spore bearing)

FRUITING

None (spore bearing)

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Very easily grown from fresh spores and young plants. Inclined to be weedy. Does best in an open site planted in a deep, fertile, moist soil.

ETYMOLOGY

histiopteris: Webbed fern; from the greek histion and pteris; netted veins of the leaves

incisa: Incised or cut in two; from the Latin incidere; incised leaf

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange 11 January 2011. Description adapted from Brownsey (1998) and Brownsey & Smith-Dodsworth (2000)

REFERENCES AND FURTHER READING

Brownsey, P.J. 1998: Dennstaedtiaceae: Flora of Australia 48: 214-228.

Brownsey, P.J.; Smith-Dodsworth, J.C. 2000: New Zealand Ferns and Allied Plants. Auckland, David Bateman

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 11: 285-309

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/histiopteris-incisa/>