

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

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

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 coloniser 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.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).



Coromandel, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Coromandel, November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

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*. David Bateman, Auckland, NZ. 168 p.

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. <https://doi.org/10.1016/j.ppees.2009.06.001>.

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Histiopteris incisa* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/histiopteris-incisa/> (Date website was queried)

MORE INFORMATION

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