

Ptisana salicina

COMMON NAME

king fern, para, tawhiti para, horseshoe fern

SYNONYMS

Marattia salicina J.E. Sm.; Marattia fraxinea Smith, Marattia fraxinea sensu J.B.Armstr.

FAMILY

Marattiaceae

AUTHORITY

Ptisana salicina (J.E.Sm.) Murdock

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

PTISAL

CHROMOSOME NUMBER

2n = 78

CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: SO

2009 | At Risk – Declining | Qualifiers: SO

2004 | Serious Decline

DISTRIBUTION

Indigenous. New Zealand throughout the north-western half of the North Island from inland Wanganui northwards. Waikato is probably its stronghold where it is known from many remnants and forested areas in the west. Also South Pacific (possibly elsewhere).

HABITAT

Favouring lowland, karst habitats (cave entrances and tomo shafts) and dark stream sides, often amongst supplejack (*Ripogonum scandens*) and parataniwha (*Elatostema rugosum*).

DETAILED DESCRIPTION

A large, robust fern with fronds to 5 m tall arising from a stout, starchy base that was a traditional food for the Māori. **Leaf stalks** cane-like, green, 1–3 m long, and have a large basal, ear-like lobe that protects the uncoiling frond. **Fronds** dark glossy green (or yellow-green in stressed sites), 2-pinnate, up to 4 m × 2 m. Juvenile fronds less robust, wilting easily on exposure to sunlight, with the strap-like secondary pinnae often lobed or serrated. **Midribs of the primary pinnae** swollen at the junction with the main stem. **Secondary pinnae** entire, oblong, strap-like, and taper towards the tip. **Sori** distinctively boat-shaped. An unusual form with crested tips to the adult pinnules is sometimes found in the wild around the Kawhia area.



Mature plant (cultivated). Photographer: Bec Stanley, Licence: CC BY-SA.



Portion of frond (close up). Photographer: Bec Stanley, Licence: CC BY-SA.

SIMILAR TAXA

None

FLOWERING

Specimens of suitable age may produce sporangia at any time.

FLOWER COLOURS

No flowers

PROPAGATION TECHNIQUE

Difficult. Can be grown from spores but very slow.

THREATS

Feral and domestic stock, wild pig and goat browse are serious threats throughout its range. Indeed large specimens are only found where there has been intensive animal control, in inaccessible cave and tomo entrances or in steep-walled limestone gorges. Aside from animals the most serious threat to this species comes from plant collectors who have been responsible for the recent loss of several large, reasonably accessible populations near Kawhia.

ETYMOLOGY

ptisana: From the Latin ptisana 'barley grains', in reference to the fused sporangia of the fern have the appearance of pearl barley

salicina: Willow-like

WHERE TO BUY

Periodically offered by most commercial garden centres. Plants are held by several specialist native plant nurseries.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 August 2003.

REFERENCES AND FURTHER READING

Murdock AG. 2008. A taxonomic revision of the eusporangiate fern family Marattiaceae, with description of the new genus *Ptisana*. *Taxon* 57(3): 737–755. <https://doi.org/10.1002/tax.573007>.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/ptisana-salicina/>