

Stuckenia pectinata

COMMON NAMES

fennel-leaved pondweed, sago pondweed

BIOSTATUS

Native

CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Monocots

DETAILED DESCRIPTION

Aquatic rhizomatous herb. Rhizomes forming extensive networks in soft sediment, forming swollen bulb-like buds in autumn. Branches numerous, slender, delicate (rather brittle), 0.1-3 m or more long. Stipulate, with stipules fused to leaf base, forming a sheathing ligulate stem for 10-40 mm, the free portion (ligule) membraneous, 5 mm long. Leaves all submersed, 50-120 x 1 mm, dark green to brown-green, entire, narrow-linear (with transverse veins visible), tapering to an acute, membraneous tip. Peduncles slender, of varying length. Inflorescence a discontinuous brown spike 20-40 mm, with the lower flower clusters (whorls) well separated. Fruit, an achene 3 x 2.5 mm, light pinkish brown, turgid and rounded, without keel or beak.

SIMILAR TAXA

Most likely to be confused with *Ruppia* spp. with which it often grows and from whose species it can be distinguished by the ligulate acute-tipped leaves, tuberous stems, and spicate inflorescences.

DISTRIBUTION

Indigenous to New Zealand where it has been collected from the North, South and Chatham Islands. A cosmopolitan species known from throughout the world. No critical study on its worldwide variation seems to have been done.

HABITAT

Usually in brackish water, such as in slow moving tidal streams or lagoons, but also found in shallow lowland pools.

CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: SO

THREATS

Probably more overlooked than actually threatened. Nevertheless there is some evidence that this species has declined for sites where it was formerly common over the least 20 or so years, and it remains absent from large stretches of apparently suitable habitat where it was once known 100 or more years ago. The main threat seems to be wetland modification and or drainage, particularly of those brackish wetland systems, or where streams and rivers enter the sea. However, the species can survive some modification and has even been collected in recently established channels, and within pools of water on the floor of gravel quarries. Thus this species may prove to be naturally uncommon rather than genuinely declining. Further field survey is needed to clarify its exact status.



Close up of fennel-leaved pondweed.
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Fennel-leaved pondweed. Photographer: Rohan Wells, Licence: All rights reserved.

DETAILED TAXONOMY

FAMILY

Potamogetonaceae

AUTHORITY

Stuckenia pectinata (L.) Börner

SYNONYMS

Potamogeton pectinatus L., *Coleogeton pectinatus* (L.) D.H.Les et R.R.Haynes comb. inval.

TAXONOMIC NOTES

The genus *Stuckenia* was erected in 1912. It differs from *Potamogeton* by the long stipular sheaths, tubular leaves with air channels bordering the midrib, flexuous peduncles, hydrophilous pollination and a hexaploid chromosome number ($x = 13$). Submerged leaves of *Stuckenia* are characteristically opaque and somewhat turgid. *Stuckenia* is further segregated from *Potamogeton* and *Groenlandia* by the fact that it never forms hybrids with either. *Stuckenia pectinata* is known to have aneuploids but the one New Zealand count known is not aneuploid and is typical of the species.

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

ECOLOGY

FLOWERING

January - February

FRUITING

January - March

PROPAGATION TECHNIQUE

Difficult and should not be removed from the wild.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).

OTHER INFORMATION

ETYMOLOGY

pectinata: Comb-bearing

NVS CODE

STUPEC

CHROMOSOME NUMBER

$2n = 78$

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: SO, Sp

2012 | At Risk – Naturally Uncommon | Qualifiers: PD, SO, Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: DP

2004 | Sparse

REFERENCING AND CITATIONS

REFERENCES AND FURTHER READING

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (January 2006). Description adapted from Moore & Edgar (1970) Some of this factsheet information is derived from [Flora of New Zealand Online](#) and is used under a [Creative Commons Attribution 3.0 New Zealand](#) licence.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/stuckenia-pectinata/>

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