

Eleocharis pusilla

SYNONYMS

None—though New Zealand plants have at times been referred to the northern hemisphere *Eleocharis acicularis* (L.) Roem. et Schult.

FAMILY

Cyperaceae

AUTHORITY

Eleocharis pusilla R.Br.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

ELEPUS

CHROMOSOME NUMBER

$2n = 30$

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened | Qualifiers: SO

2009 | Data Deficient | Qualifiers: SO

2004 | Not Threatened

DISTRIBUTION

Indigenous. In New Zealand known from North Island and South Island—often uncommon over large parts of its range, and showing a decided preference for clean waterways free from pollution. Present in Australia.

HABITAT

Usually found on the margins of and submerged within lakes, tarns and slow flowing rivers and streams. When submerged it often grows amongst drifts of quillworts (*Isoetes* spp.) and is rarely fertile. In emergent situations it is easily overlooked because it has inconspicuous flowers and can be mistaken for a small tuft of grass.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

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



In cultivation ex tarns near Lake Ohau. Dec 1986. Photographer: Colin C. Ogle, Licence: CC BY-NC.



Eleocharis pusilla inflorescence with leaves of *Myriophyllum votschii*. Lake Wairarapa. Photographer: Colin C. Ogle, Licence: CC BY-NC.

DETAILED DESCRIPTION

Emergent or aquatic diminutive, sedge forming bright green (when exposed) or dark green to brown-green tufts.

Rhizomes 1–3 mm diameter (usually very slender), pale brown. **Culms** densely tufted, 10–120 mm long, setaceous, < 0.5 mm diameter, bright green (when exposed), dark green to brown green with yellowish transverse bars when submerged; sheaths membranous, more or less hyaline, red-veined, uppermost sheaths colourless and inflated below the oblique orifice. **Spikelet** 2.5–3.0 × c. 1 mm, (1)–5-flowered, ovate, sharply acute. **Glumes** 1.5–2.0 mm long, ovate, obtuse. **Hypogynous bristles** mostly absent, rarely 2–3 present. **Stamens** 3. **Style** 3-fid. **Nut** c. 1.0 × 0.5 mm, narrowly obovoid, obscurely trigonous, almost white, each face with 3–4 thick, vertical ribs joined by fine transverse bars; the persistent style very small, much constricted at the base.

SIMILAR TAXA

Most likely to be confused with *Eleocharis gracilis* R.Br. from which it differs by the smaller spikelets (up to 3 mm long) and by the nut which has prominent vertical ribs and fine transverse bars. The culms of this species are often bright green, and distinctly tufted so as to resemble a small grass. In submerged plants the culms often have an obvious yellow transverse patterning on the otherwise dark green to brown-green coloured culms.

FLOWERING

September–February

FRUITING

November–April

LIFE CYCLE

Bristly nuts are dispersed by water and possibly wind and attachment (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Can be tricky to establish. Does best as a submerged aquarium plant where it can be very attractive. Prefers semi-shade and regular immersion in water.

THREATS

Not Threatened—but not very common in the northern part of its range where it is clear, based on herbarium evidence that it has undergone a large decline. Still abundant in the deeper, cleaner and less polluted lake systems of the North Island. Common in the South Island.

ETYMOLOGY

eleocharis: Charm of the swamp

pusilla: Small

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Description adapted from Moore and Edgar (1970)

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.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/eleocharis-pusilla/>