

Fimbristylis velata

COMMON NAME

Fimbristylis

SYNONYMS

Fimbristylis squarrosa Vahl

FAMILY

Cyperaceae

AUTHORITY

Fimbristylis velata R.Br.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2009 | At Risk – Naturally Uncommon | Qualifiers: SO

2004 | Sparse

DISTRIBUTION

Indigenous. North Island from Ngawha Springs, the Bay of Islands, Pouto Peninsula and Great Barrier Island south to Lake Taupo. Most common in the Huntly Basin, particularly around Lakes Whangape, Rotongaro and Rotongaroiti. It is present near Ohinemutu and Whakarewarewa Geothermal Fields, near Rotorua and at Karapiti near Wairakei. Present in Australia and probably elsewhere.

HABITAT

A strict annual which is most often found along the shoreline or receding shallow lakes and river margins where it grows in damp mud and organic sediments. It has also been found growing on permanently damp ground around active fumaroles within geothermal areas, and as a sporadic weed in ephemeral wetlands created by urban redevelopment within Hamilton City.

FEATURES

Annual sedge forming small pubescent, spreading tufts on freshly exposed sunny, usually damp and/or muddy ground. Culms 30-280 x 0.5-0.8 mm, rather flaccid and spreading, finely pubescent. Leaves usually < culms, brown-green to glaucous green, filiform to linear-lanceolate, channelled near base; sheaths broader, light brown to pale grey. Inflorescence a compound spreading umbel 10-40-80 mm long, sometimes reduced to a few near sessile spikelets; subtending bracts 3-4(-6) leaf-like, 1-3 of these > umbel width. Spikelets 3.5-8 mm long, stalked, pale brown to glaucous brown. Glumes numerous, elliptic, with a prominent, rigid, dark green scabrid keel, often extending to a mucro, and usually recurved in the lowermost glume of each spikelet. Stamens 1(-2), Style bifid, the bulbous base ringed by fine retrorse cilia, sufficiently copious to cover the ovary, but not (or rarely) extending beyond the mid-point. Nut 0.8-1 x 0.5-0.6 mm diameter, cream-coloured, biconvex, orbicular, smooth.



Fimbristylis velata specimen. Photographer: Bec Stanley



Lake Whangape. Mar. Photographer: John Smith-Dodsworth

SIMILAR TAXA

None though it could be confused with some annual species of *Juncus*, for example *J. bufonius* L. with which it often grows. From that species it is readily distinguished by its wide spreading, pubescent culms, umbellate inflorescences, and obvious spikelets.

FLOWERING

October - March

FRUITING

October - June

LIFE CYCLE

Nuts are possibly wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easy from fresh seed. Can become quite invasive but it is cold sensitive and cannot tolerate much competition from taller plants. Does best in pots or in permanently damp ground in a warm, sheltered, sunny place.

THREATS

Long regarded as seriously at risk of extinction because the few known occurrences were on the brink of extinction this situation changed in the late 1980s following its surprise rediscovery in the Waikato lowlands, where, particularly around Lakes Whangape, Rotongaro and Rotongaroiti it can be one of the dominant species growing on the receding lake shores during summer. Ecologically this is a biologically sparse species which appears to be an opportunistic of freshly disturbed wetland habitats. For example it has even been collected as a wetland weed in parts of Hamilton City.

WHERE TO BUY

Not commercially available

TAXONOMIC NOTES AND COMMENTS

The New Zealand plant was last treated here by the New Zealand Flora series as *F. squarrosa* (Moore & Edgar 1970). However, the New Zealand plant has since been shown by Wilson (1993) to be referable to *F. velata*. It has been suggested that this species is naturalised in New Zealand. That suggestion partly stemmed from an imperfect understanding of this species ecology, distribution, and its confusion with *F. squarrosa*. It is now recognised as quite widespread and its occurrences appear to be quite natural. The species was probably introduced to New Zealand by dabbling water fowl such as Grey Teal and other ducks, which frequent its preferred habitats in Australia.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (6 August 2006). Description adapted from Moore & Edgar (1970).

REFERENCES AND FURTHER READING

- Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Wellington, Government Printer (as *Fimbristylis velata*)
- 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
- Wilson, K.L. 1993: Cyperaceae. *Flora of New South Wales* 4: 378-379

CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/fimbristylis-velata/>