Juncus sarophorus

COMMON NAME broom rush, fan-flowered rush

SYNONYMS Agathryon sarophorum (L.A.S. Johnson) Záveská Drábková & Proćków

FAMILY Juncaceae

AUTHORITY Juncus sarophorus L.A.S.Johnson

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON No

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Rushes & Allied Plants

NVS CODE JUNSAR

CURRENT CONSERVATION STATUS 2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

DISTRIBUTION

Indigenous. North Island, South Island, Stewart Island/Rakiura, Chatham Islands and Campbell Island/Motu Ihupuku. Also in Australia.

HABITAT

Coastal to lowland in damp, open ground. Often in pasture or on the margins of coastal wetlands, and along river flats. Sometimes a troublesome weed.

WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland Usually is a hydrophyte but occasionally found in uplands (non-wetlands).





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



Inflorescence. In cultivation. Photographer: Jeremy R. Rolfe, Date taken: 21/10/2007, Licence: CC BY.

DETAILED DESCRIPTION

Densely tufted, tussock-forming, dull blue-green perennial herb. **Stems** tightly clumped and erect near base, usually drooping in upper half to one third. **Rhizome** stout, 5–10 mm diameter, horizontal. **Flowering stems** 1–2 m tall, 2–3 mm diameter, numerous, pliant though wiry, basally very hard, ridged, not shining; internal pith cobwebby, irregularly interrupted, rarely continuous. **Leaves** absent. **Basal** bracts basally black, otherwise dark red-purple, closely sheathing the stem, the uppermost bract usually straw-coloured and up to 250 mm long. **Inflorescence** lateral, many-flowered, very pale brown or cream, massed together as a dense fan-shaped head of flowers; flowers closely spaced along the numerous, stiffly erect to spreading branchlets which are pressed up hard against the very long subtending floral bract; bract overtopping flower, sometimes up to 300 mm long; flowers 2 mm long, tepals white and membranous, centrally striped green, later straw-coloured and more rigid. **Stamens** 3(–6). **Capsule** from slightly > 1.5 mm to slightly > 2 mm long, equal to or slightly > tepals, narrow, ovate-oblong, obtuse, very pale brown.

SIMILAR TAXA

Easily distinguished by the combination of the dense, tussock forming habit, blue-green, wiry, drooping stems, and compact, many-flowered, fan-shaped inflorescences. Most similar to <u>J. inflexus L.</u> which is a naturalised species differing from J. sarophorus by the diffuse rather than dense fan-shaped inflorescence; by the inflorescence not firmly appressed to the subtending bract; and dark purple-brown rather than light-brown capsules 2.5–3.5 rather than 1.5–2.0 mm long.

FLOWERING

September–January

FLOWER COLOURS Green

FRUITING October–May

LIFE CYCLE

Mucilaginous seeds are dispersed by attachment, wind and water (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easy from fresh seed and the division of whole plants. Can be invasive, and one of the few indigenous species that can be a pasture weed.

ETYMOLOGY

juncus: From the Latin jungere 'to tie or bind', the stems of some species being used to make cord (Johnson and Smith)

sarophorus: (As in Juncus sarophorus) meaning 'broom bearing', from Greek saron brush, broom (from sairein to sweep); -phorus = bearing, carrying

WHERE TO BUY

Not commercially available

TAXONOMIC NOTES

Proćków et al. (2023) proposed a taxonomic segregation of *Juncus* into six genera based on molecular and morphological evidence. Whilst it has long been recognised that the current circumscription of *Juncus* includes morphologically divergent taxa—reflected in the recognition of numerous subgenera and sections—the consensus view of the NZPCN website taxonomy subcommittee, taking into consideration advice from Australian *Juncus* expert Dr Karen Wilson (NSW Herbarium) and others in Europe is that the generic segregations proposed need further consideration and testing. Accordingly, it has been decided to maintain the current broad circumscription of *Juncus*, but to include all new names as synonyms in factsheets. We thank, in particular, Dr Wilson for her helpful comments.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (1 September 2006). Description based on Moore & Edgar (1970).

REFERENCES AND FURTHER READING

Johnson, A. T. and Smith, H. A (1986). Plant Names Simplified: Their pronunciation, derivation and meaning. Landsman Bookshop Ltd: Buckenhill, UK.

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. I. Government Printer, Wellington. Proćków, J., Záveská Drábková, L. 2023. A revision of the Juncaceae with delimitation of six new genera: nomenclatural changes in *Juncus*. *Phytotaxa 622(1)*: 17–41.

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

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/juncus-sarophorus/