

# Carex virgata

## COMMON NAME

swamp sedge, pukio, toitoi, toetoe

## SYNONYMS

*Carex paniculata* var. *virgata* (Boott) Cheeseman; *Carex appressa* var. *virgata* (Boott) Kük.

## FAMILY

Cyperaceae

## AUTHORITY

*Carex virgata* Sol. ex Boott

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Sedges

## NVS CODE

CARVIR

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand: North, South, Stewart and Chatham Islands.

## HABITAT

Widespread from sea level to about 1000 m a.s.l. in open, swampy conditions and also in damp sites within lowland forest. In parts of the country this sedge is often the dominant carice of lowland alluvial forest.

## 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.



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

## DETAILED DESCRIPTION

Rhizomatous, densely clumped to tussock-forming sedge. **Rhizome** 5 mm. diameter. **Culms** 150–900 mm. × c. 1.5 mm, trigonous, grooved, harshly scabrid; basal sheaths shining, grey-brown to dark brown, sometimes black. **Leaves** much > culms, 0.5–1.2 m tall, 1.5–4.5 mm wide, channelled, light green, harsh and rigid, keel and margins strongly scabrid. **Inflorescence** a narrow 100–260 mm long panicle with stiff erect branchlets, the lower-most quite distant. **Spikes** androgynous, 4–6 mm. long, sessile, grey- or yellow-brown, male flowers terminal, lower spikes on each branchlet subtended by a pale membranous bract with a long scabrid awn often > spike. **Glume** ± = or slightly < utricles, membranous, ovate, acute, dull brown, with a prominent pale midrib, this often scabrid in lowermost glumes. **Utricles** 2.0–2.5 × c. 1.0 mm, plano-convex, ovoid, light grey with distinct brown nerves; tapering to a brown beak c. 0.5 mm long with a bifid orifice and conspicuously denticulate margins; abruptly contracted to a narrow stipe c. 0.2 mm. long. **Stigmas** 2. **Nut** slightly > 1 mm. long, biconvex, ovoid, dark brown.

## SIMILAR TAXA

*Carex virgata* most closely resembles *C. appressa* R.Br., especially as the inflorescence of both species is a stiff contracted panicle, further, both species have similar distinctly nerved utricles. However, *C. virgata* has more slender culms, narrower leaves and paler brown, less dense-flowered panicles. Plants of *C. virgata* could also be confused with *C. secta* Boott as they can occasionally become elevated on trunks formed by matted rhizomes and semi-decayed culms. However, in such rare examples of *C. virgata*, plants never attain the height reached by *C. secta*. Further, the inflorescences of *C. virgata* are never drooping, and obviously branched, with the basal branchlets often distant.

## FLOWERING

October–December

## FRUITING

December–May

## LIFE CYCLE

Nuts surrounded by inflated utricles are dispersed by granivory and wind (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easily grown from fresh seed and by the division of established plants. A fast growing sedge often popular in wetland restoration and riparian plantings.

## ETYMOLOGY

**carex**: Latin name for a species of sedge, now applied to the whole group.

**virgata**: Twiggy

## NOTES ON TAXONOMY

On the Chatham Islands *C. virgata* either hybridises, or appears to intergrade, with *C. appressa*.

## ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). 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.

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/carex-virgata/>