

# Pentapogon micranthus

## COMMON NAME

purple plume grass

## SYNONYMS

*Stipa micrantha* Cav., *Agrostis sciurea* R.Br., *Dichelachne sciurea* (R.Br.) Hook.f., *D. crinita* var. *intermedia* Hack., *Dichelachne micrantha* (Cav.) Domin

## FAMILY

Poaceae

## AUTHORITY

*Pentapogon micranthus* (Cav.) P.M. Peterson, Romasch. et Soreng

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Grasses

## NVS CODE

DICMIC

## CHROMOSOME NUMBER

2n = 70

## CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: DP, SO, Sp

## PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: DP, SO, Sp

2009 | Threatened – Nationally Vulnerable | Qualifiers: DP, SO, Sp

2004 | Not Threatened

## DISTRIBUTION

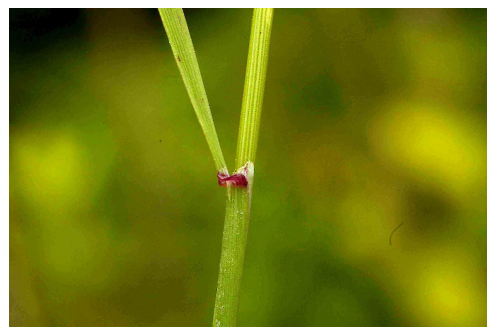
Indigenous. Local from Three Kings Islands, and Te Paki south to about Auckland. Also around East Cape and the eastern Wairarapa (northern Aorangi Range). never very common. Outside New Zealand common on Norfolk Island, also known from Australia, New Guinea and Easter Island.

## HABITAT

Coastal to lowland. Usually in open shrubland, on clay pans or within open grassland. Often on cliff faces, amongst talus, on lava fields on at the back of boulder beaches. Fast becoming scarce.



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



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

## DETAILED DESCRIPTION

Stout, rigid, tufted grass with leaves rigid, shorter than the stiffly erect culms. **Branching** extravaginal. **Leaf-sheath** straw-coloured often lined with purple or dull brown, with minute, appressed, scattered hairs. **Ligule** 0.3–1.0 mm long, membranous, truncate, minutely ciliate, undersides scabrid, often asymmetric. **Leaf-blade** to 200 × 1.5–2.5 mm, stiff, flat, tapered towards apex, undersides sparingly and minutely scabrid, upper surface scabrid on ribs towards apex, minutely scabrid on margins. **Culm** 0.4–1.0 m, internodes minutely scaberulous throughout, or glabrous but minutely scaberulous below panicle, variously purplish. **Panicle** 100–250 mm, erect, spicate, often purplish (or tinged with red), branches spreading at first; rachis, branchlets and pedicels closely short-scabrid. **Spikelets** numerous, close-set on branchlets, delicate. **Glumes** narrow-lanceolate, acute to acuminate, often suffused with purple or red; lower 3–4 mm long, more or less equivalent in length to lemma, upper 3.5–5.0 mm, greater than lemma. **Lemma** 2.5–4.0 mm long, sometimes purplish; awn 12–18 mm, very fine, column straight, awn curving above and twisted 2–3 times along whole length, inserted 0.6–0.9 mm below minutely bifid lemma-tip. **Palea** 2–3 mm long, narrow-linear, keels scabrid above, apex ciliate. **Callus hairs** 0.3–0.5 mm long. **Rachilla** prolongation c. 0.05 mm long. **Lodicules** 0.4–0.8 mm long, hyaline, elliptic-oblong, unequally bilobed, sometimes minutely ciliate. **Anthers** 1, 1.2–1.4 mm long in open flowers, 0.6–0.8 mm long in cleistogamous flowers. **Seed** 2.0–2.3 × 0.3–0.4 mm.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

## SIMILAR TAXA

Most frequently confused with *Pentapogon rarus* an eastern Australia species which is now widely naturalised in the North Island and northern South Island. *Pentapogon rarus* differs from *P. micranthus* by its usually smaller, narrower panicles, and by the lower glume which is usually greater than rather than shorter than 4 mm long, and obviously much larger than rather than more or less equal in length to the lemma.

## FLOWERING

September–January

## FRUITING

October–May

## LIFE CYCLE

Florets are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easy from fresh seed. Rather short-lived, self sowing readily, and in gardens can be invasive. Does best in dry, open, clay soils.

## THREATS

*Pentapogon micranthus* was formerly widespread but over the last 20 years or so its range has contracted considerably. Partly this is due to the progressive loss of the open, coastal shrublands and clay pans it favours, as these give way to taller mature vegetation but mostly it seems to be due to the ever increasing numbers of naturalised plants which are now occupying its favoured habitats. It has been observed that in many of the places it was formerly common, these places are now dominated by *Pentapogon rarus*, which appears to be expanding its range, and is certainly increasing in abundance.

## ETYMOLOGY

**micranthus**: Small flower

## WHERE TO BUY

Not commercially available.

## ATTRIBUTION

Description modified from Edgar and Connor (2000)

## REFERENCES AND FURTHER READING

Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Manaaki Whenua Press, Christchurch, NZ. 650 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**

Please cite as: de Lange, P.J. (Year at time of access): Pentapogon micranthus Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/pentapogon-micranthus/> (Date website was queried)

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/pentapogon-micranthus/>