

Pentapogon micranthus

COMMON NAMES

purple plume grass

BIOSTATUS

Native

CURRENT CONSERVATION STATUS

2023 | Threatened – Nationally Critical | Qualifiers: Sp, DPR, DPS, DPT, SO

[Jump to previous conservation statuses](#)

CATEGORY

Vascular

STRUCTURAL CLASS

Grasses

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.

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.

DISTRIBUTION

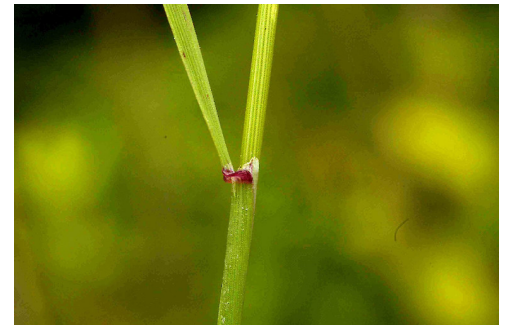
Indigenous. Local from Three Kings Islands, and Te Pahi south to about Auckland. Also around East Cape and the eastern Wairarapa (northern Aorangi Range). never very common. Outside New Zealand common on Norfolk Island, also known from Australia, New Guinea and Easter Island.

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.

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.

GENUS

Pentapogon

FAMILY

Poaceae

AUTHORITY

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

SYNONYMS

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

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

FLOWERING

September–January

FRUITING

October–May

LIFE CYCLE AND DISPERSAL

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.

WHERE TO BUY

Not commercially available.

ETYMOLOGY

micranthus: Small flower

MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to the grasses of New Zealand](#)

NVS CODE

PENMIC

CHROMOSOME NUMBER

2n = 70

PREVIOUS CONSERVATION STATUSES

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

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

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

2004 | Not Threatened

[Jump to current conservation status](#)

REGIONAL CONSERVATION STATUSES

Auckland: 2025 | Regionally Data Deficient | Qualifiers: SO Help

The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the [“Conservation status of vascular plant species in Tāmaki Makaurau / Auckland”](#) Simpkins E et al. (2025) report.

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.

ATTRIBUTION

Description modified from Edgar and Connor (2000)

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NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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

PDF DATE

25 May 2026