# Pentapogon lautumia

# **SYNONYMS**

Deyeuxia "Flaxbourne", Deyeuxia "Waima", Dichelachne lautumia Edgar et Connor

#### **FAMILY**

Poaceae

#### **AUTHORITY**

Pentapogon lautumia (Edgar & Connor) P.M. Peterson, Romasch. & Soreng

# **FLORA CATEGORY**

Vascular - Native

## **ENDEMIC TAXON**

Yes

## **ENDEMIC GENUS**

Νo

## **ENDEMIC FAMILY**

Nο

#### STRUCTURAL CLASS

Grasses

# **NVS CODE**

**DICLAU** 

## **CHROMOSOME NUMBER**

2n = 70

# **CURRENT CONSERVATION STATUS**

2017 | Threatened - Nationally Endangered | Qualifiers: RR, St

# **PREVIOUS CONSERVATION STATUSES**

2012 | Threatened - Nationally Critical | Qualifiers: RR, St

2009 | Threatened - Nationally Critical | Qualifiers: St, RR

2004 | Range Restricted

# **DISTRIBUTION**

Endemic. New Zealand: South Island (Marlborough, mainly found near the mouth of the Flaxbourne River. Also recorded slightly further south from the lower Waimā River).

# **HABITAT**

One population is found mainly on limestone talus, both soil and rocky debris derived from quarrying activities, with a few plants in crevices and on ledges on natural rock faces. The second population is on limestone derived alluvial terraces. All plants are in full light with very little shelter.





Dichelachne lautumia. Photographer: Jan Clayton-Greene, Licence: CC BY-NC.



Fruiting panicle. Photographer: Cathy Jones, Licence: CC BY.

#### **DETAILED DESCRIPTION**

Robust grey-green to orange-green tufts 450–650 mm tall. Branching extravaginal. Leaf-sheath chartaceous with membranous margins, more or less distinctly ribbed, glabrous, straw-coloured, or reddish purple, especially in culm leaves. Ligule 0.7–1.0 mm long, truncate, erose, sparsely ciliate, undersides scabrid. Leaf-blade 60–200 x 15–30 mm, greyish green maturing orange-green or reddish, undersides smooth, upper surface strongly ribbed, prickle-toothed on ribs; margins finely prickle-toothed. **Culm** 300–450 mm long, nodes green to purple with an upper fringe of dense, appressed hairs, internodes glabrous. Panicle 100-160 x 10-15 mm, linear-lanceolae, dense, contracted above, longer lower branches in slightly more distant clusters, scarcely spreading, spikelet bearing to base; rachis, branches and pedicels with short hair-like prickle-teeth. Spikelets 6-8 mm, green to straw-coloured or suffused with purple. Glumes 1-nerved, equal or upper very slightly longer, c. 6 mm, submembranous, ellipticlanceolate, acuminate, keels finely prickle-toothed. Lemma less than or equal to glumes, 6-7 mm, subcoriaceous, papillose, minutely prickle-toothed above, apex bifid with hyaline finely acuminate lobes 0.5-1.0 mm long; awn 8–12 mm, mid-dorsal, or arising from slightly above midway, geniculate, twisted, very hairy below. Palea less than lemma, folded, keels prickle-toothed above, apex ciliate. Callus c. 0.2 mm long, hairs up to 4 mm long. Rachilla 0.2-0.7 mm, glabrous or with a few hairs; prolongation 0.5 mm long. Lodicules 0.5 mm, cuneate, ciliate. Stamens 3; anthers 1.0–1.5 mm long. **Ovary** 1.0–1.3 mm; stigma-styles 0.7–1.5 mm long, hairs almost to base. **Seed** 3.5  $\times$ 1.0 mm, beaked.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

#### **SIMILAR TAXA**

Distinguished from the allied <u>Pentapogon crinitus</u> by the callus hairs with are equal to or greater than 3 mm (in *D. crinita* they are less than 1 mm); by the shorter awn (8–12 mm cf. 20–30 mm in *P. crinitus*) and by the twisted rather than straight column.

## **FLOWERING**

November-January

## **FRUITING**

December-May

# LIFE CYCLE

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

# **PROPAGATION TECHNIQUE**

Difficult to grow. Needs very well drained soil (it does best with the addition of limestone chips), in a sunny location. Dislikes humidity and damp ground. Fresh seed germinates easily.

## **THREATS**

Known from a only a few populations. Currently these seem to be secure and stable although the species remains very uncommon.

## **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. <a href="https://doi.org/10.1016/j.ppees.2009.06.001">https://doi.org/10.1016/j.ppees.2009.06.001</a>.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Pentapogon lautumia Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <a href="https://www.nzpcn.org.nz/flora/species/pentapogon-lautumia/">https://www.nzpcn.org.nz/flora/species/pentapogon-lautumia/</a> (Date website was queried)

#### MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/pentapogon-lautumia/