

# Lachnagrostis Iyallii

## COMMON NAME

mountain wind grass

## SYNONYMS

*Agrostis Iyallii* Hook.f., *Deyeuxia forsteri* var. *Iyallii* (Hook.f.) Hack. comb. illeg., var. *epithet legit.*, *D. forsteri* var. *semiglabra* Hack. comb. illeg., var. *epithet legit.*, *Lachnagrostis filiformis* var. *semiglabra* (Hack.) Zotov

## FAMILY

Poaceae

## AUTHORITY

*Lachnagrostis Iyallii* (Hook.f.) Zotov

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Grasses

## NVS CODE

LACLYA

## CHROMOSOME NUMBER

2n = 98

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. Common in mountain regions from the Central North Island and throughout the South Island. Also recorded once from Northland, and around the western Waikato.

## HABITAT

Usually montane in open tussock grassland, on cliff faces and rock outcrops and on rock outcrops. Sometimes along the margins of lakes and becoming more common in lowland areas heading south. Coastal on the Chatham Islands.

## WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



*Lachnagrostis Iyallii*. Photographer: Kerry Ford, Licence: All rights reserved.



Spikelet of a stream bank plant, Pureora Taupo. Photographer: Marley Ford, Date taken: 24/04/2021, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Usually large, rather laxly tufted, stoloniferous, perennial grass forming patches 50–150 mm with wide, flat, or narrow and folded, light or dull green leaves, and lax, often rather large panicles in proportion to plant. Sometimes short, densely tufted plants with narrow involute leaves. **Branching** extravaginal. **Leaf-sheath** submembranous, distinctly ribbed, smooth or minutely scabrid above, green to creamy brown, sometimes purplish. **Ligule** 0.6–4.0 mm, ovate-oblong, more or less truncate, denticulate to lacerate, undersides minutely scabrid. **Leaf-blade** 20–150 × 0.3–6.0 mm, flat or folded, upper surface smooth to finely scabrid on ribs throughout or near apex, undersides finely scabrid on ribs; margins minutely scabrid, apex subacute. **Culm** 30–450 mm, erect or geniculate at base, longer culms projecting beyond uppermost sheaths, internodes usually finely scabrid below panicle. **Panicle** 40–250 × 10–160 mm, very lax or sometimes contracted after flowering, with widely spreading, finally horizontal branches; branches rather few, very finely, more or less sparsely scabrid, with 1–2–several spikelets at branchlet tips. **Spikelets** 2.3–5.0 mm, pale green to light straw-coloured, greenish brown or purplish. **Glumes** subequal, ovate-elliptic or narrowly elliptic-lanceolate, acute, mid-nerve and hyaline margins scabrid near apex or in upper half. **Lemma** 1.5–2.8 mm,  $\frac{1}{2}$ – $\frac{3}{4}$  length of glumes 5-nerved, with numerous to sparse, scattered, short fine hairs, sometimes glabrate, or the upper  $\frac{1}{3}$  glabrous, elliptic-oblong, truncate, lateral nerves slightly to obviously excurrent; awn 1.7–6.0 mm long, geniculate, more or less mid-dorsal. **Palea** length about  $\frac{1}{2}$  or = to lemma, keels very faint, 0.1–0.2 mm apart, apex truncate, or obtuse, or shallowly notched. **Callus** hairs moderately dense, to 1 mm long, to  $\frac{1}{3}$  length of lemma. **Rachilla** prolongations absent or up to 1 mm long, tipped by a few equally long, or longer hairs. **Lodicules** 0.7–0.9 mm, linear, acute. **Anthers** 0.3–1.5 mm. **Seed** 1.2–2.0 × 0.4–0.8 mm.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

## SIMILAR TAXA

Distinguished from all other New Zealand species of *Lachnagrostis* by the extravaginal branching and geniculate awns. *Lachnagrostis lyallii* is rather variable and two forms have been provisionally recognised. A stout, lax, large plant with flat leaves and spikelets 4–5 mm long, glabrate to glabrous 2.5 mm long lemmas, palea about half the length of the lemma, and with anthers 0.8–1.2 mm long. The second form is much smaller, and has inrolled leaves, smaller spikelets 2.5–3.5 mm long, smaller, densely hairy lemmas, 1.8–2.2 mm long, with the palea three-quarters to about the same length as the lemmas, and rather short anthers (0.3–0.8 mm long). These forms appear to intergrade.

## FLOWERING

October–January

## FRUITING

November–May

## PROPAGATION TECHNIQUE

Easy from fresh seed. Prefers full sun, and minimal competition.

## ETYMOLOGY

**lachnagrostis**: From “lachne” (wool) referring to the distinctive callus hairs of this genus and “agrostis” by which Trinius (1820) actually meant “a grass” (not an Agrostis). So the generic name means “a hairy (woolly) grass” not “a hairy (woolly) Agrostis” as is often incorrectly stated (see Gardner 2014).

**lyallii**: Named after David Lyall (1817–1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

## TAXONOMIC NOTES

There is some morphological evidence to suggest that *Lachnagrostis lyallii*, as currently circumscribed may warrant taxonomic revision. At least two entities are suggested based on a preliminary investigation.

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April June 2005. Description modified from Edgar & 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.
- Gardner RO. 2014. Notes on the wind grass *Lachnagrostis filiformis* (Poaceae). *Auckland Botanical Society Journal* 69: 168–170.
- Trinius CB. 1820. *Fundamenta Agrostographiae*. J.G.Huebner, Vienna.

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/lachnagrostis-lyallii/>