

# Festuca matthewsii subsp. matthewsii

## COMMON NAMES

Matthews's fescue, blue fescue

## SYNONYMS

*Festuca ovina* subsp. *matthewsii* Hack.; *Festuca ovina* var. *matthewsii* (Hack.) Cheeseman; *Festuca petriei* Howarth; *Festuca petriei* f. *petriei*

## FAMILY

Poaceae

## AUTHORITY

*Festuca matthewsii* (Hack.) Cheeseman subsp. *matthewsii*

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Grasses

## CHROMOSOME NUMBER

$2n = 42$

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: South Island (east and west of Main Divide from Waiiau River, Canterbury, to Fiordland, occasional in Marlborough).

## HABITAT

Montane to alpine in tussock grassland.



Clinton River, Fiordland. Photographer: Jane Gosden, Date taken: 16/11/2019, Licence: CC BY-NC.



Spikelets, Clinton River, Fiordland. Photographer: Jane Gosden, Date taken: 16/11/2019, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Smooth soft to stiff green or glaucous tufted or occasionally shortly stoloniferous tussock with long wide-angled inflorescences of evidently awned florets held high above hexagonal leaf-blades from swollen collars. **Branching** intravaginal. **Leaf-sheath** 30–110 mm, glabrous, keeled centrally, ridged elsewhere, much wider than leaf-blade, stramineous, margins becoming membranous; apical auricles 0.6–1.5 mm, rounded, shortly ciliate. **Ligule** as for auricles. **Collar** conspicuously thickened. **Leaf-blade** 100–300 × 0.5–0.8 mm, mostly hexagonal, ribbed, undersides glabrous except for scabrid tip rarely minutely scabrid elsewhere, upper surface and margins abundantly covered in short, white hairs. **Culm** 0.25–1.0 m, usually » leaves, nodes black, lowermost often geniculate, internodes smooth, often slightly scabrid below inflorescence node. **Panicle** rather open, 70–200 mm, with 5–10 nodes, of 15–50 spikelets, branches pulvinata, flexible and widely divergent sometimes contracted, basal branches 20–100 mm solitary or occasionally binate, with 3–5 spikelets, naked below, branches becoming progressively shorter and uppermost 3–4 spikelets solitary on short pedicels; rachis, branches and pedicels prickly-toothed to sparsely so becoming smooth or almost so. **Spikelets** 9–20 × 3–5 mm wide, stramineous or sometimes bronze or slightly purpled, of 4–8 florets. **Glumes** unequal, keeled, centrally green to stramineous occasionally with purpled veins, triangular acute to obtuse, apex ciliate; lower 3–6 mm, 1-nerved, upper 3.5–8.0 mm, 3–5-nerved. **Lemma** 5–9 mm, lobes 0 or very small, rounded on back becoming keeled above, prickly-teeth below on outer nerve and on margin, and above near awn; awn 1–4 mm. **Palea** 4.5–9.0 mm, frequently < lemma, long acute, deeply bifid, keels prickly-toothed to base or almost so, interkeel hairs mostly in upper 1/3, margins of flanks ciliate above sometimes to base. **Callus** 0.2–0.4 mm, centrally glabrous very shortly bearded laterally; articulation oblique to ± flat. **Rachilla** 1.0–1.6 mm, short stiff hairy. **Lodicules** 0.6–1.5 mm, ≥ ovary, often lobed, frequently hair-tipped. **Anthers** 2–4 mm, yellow or yellow-purpled. **Ovary** 0.6–1.0 mm, hispid hairs at apex; stigma-styles 1.5–2.5 mm. **Seed** 3–4 mm.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

## FLOWERING

October–December

## FLOWER COLOURS

Violet/Purple, Yellow

## FRUITING

November–March

## LIFE CYCLE

Florets are dispersed by wind, water and attachment (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easily grown from fresh seed and rooted pieces. An attractive grass tolerant of most conditions but dislikes humidity.

## ETYMOLOGY

**festuca**: From the Latin festuca 'stem' or 'blade of grass'

**matthewsii**: After Mathews

## CULTIVATION

Occasionally available from specialist native plant nurseries.

## ATTRIBUTION

Description modified from Edgar and Connor (2000)

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## REFERENCES AND FURTHER READING

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/festuca-matthewsii-subsp-matthewsii/>

**PDF DATE**

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