

Festuca ultramafica

COMMON NAME

serpentine fescue

SYNONYMS

None (first described in 1998)

FAMILY

Poaceae

AUTHORITY

Festuca ultramafica Connor

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

CHROMOSOME NUMBER

2n = 56

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: OL

2004 | Range Restricted

DISTRIBUTION

Endemic. New Zealand: South Island (Nelson—Dun Mt, near Mt Duppa, Motueka River).

HABITAT

Montane to alpine. Confined to soils derived from ultramafic parent material. Mostly in open grassland or sparsely vegetated rubble, boulder fields and scree.



Chromite Mine Track. Photographer: Shannel Courtney, Date taken: 24/11/2022, Licence: CC BY-NC.



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DETAILED DESCRIPTION

Tufted shortly rhizomatous ultramafic endemic grass with stiff, pungent, thick leaf-blades which are notably much shorter than the tall smooth culmed inflorescence of ± violet suffused spikelets. **Branching** extravaginal. **Leaf-sheath** 30–40 mm, striate, glabrous or minutely antrorsely prickle-toothed, becoming red-brown and fibrous; apical auricle 0.5–1 mm, rounded, ciliate. Ligule 0.5–1.0 mm, erose, ciliate. **Leaf-blade** 60–120 cm x 0.6–1.2 mm diameter, conduplicate, somewhat compressed, pungent, stiff, strict or slightly curved, ribbed, glabrous, adaxially and on margins abundant short white hairs. **Culm** 200–500 mm, » leaves, nodes visible, internodes glabrous, sometimes violet suffused below. **Panicle** narrow, 60–140 mm with 4–10 nodes, 12–25 spikelets; basal branch ascending, 30–80 mm, solitary or binate, with 3–5 spikelets, naked below, nodes 2–5 with branches of 2–4 spikelets, uppermost 3–5 spikelets solitary, imbricate on short pedicels; rachis glabrous or glabrous below becoming prickle-toothed, branches and pedicels prickle-toothed or glabrous, often tortuous below. **Spikelets** 8–14 × 3–4 mm, sometimes violet tinged, of 3–5 florets. **Glumes** unequal, margins long ciliate below shorter above, keeled, glabrous except for a few prickle-teeth on keel, usually violet suffused centrally or throughout; lower 2.5–4.5 mm, 1-nerved, long-triangular acute, awn 0.4–0.8 mm or absent, upper 3.5–5.3 mm, 3-nerved, oblong acute, awn 0.5–3 mm abrupt or tapering or absent. **Lemma** 5–7 mm, lobes 0 or minute, 5-nerved, glaucous, glabrous except below awn, scarcely keeled, margin long ciliate below shorter above; awn 1.5–4.2 mm. **Palea** 5.5–6.0 mm, greater than or equal to lemma, acute, deeply bifid, keels toothed above, interkeel hairs to base denser at apex, flank margins ciliate. **Callus** 0.2–0.5 mm, sparsely bearded except near rachilla, articulation ± flat to oblique. **Rachilla** 1.0–1.6 mm, densely short stiff hairy. **Lodicules** 0.7–1.2 mm, lobed, hair-tipped or glabrous. **Anthers** 2–3 mm, yellow or golden. **Ovary** 0.6 mm, hispid hairs at apex or absent; stigma-styles 2 mm. **Seed** 3.5 mm.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

FLOWERING

Unknown—insufficiently studied and collected

FLOWER COLOURS

Yellow

FRUITING

Unknown - insufficiently studied and collected

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easy from fresh seed and division of whole plants. Grows best in well drained, magnesium enriched soil. Can be very slow growing. Will not flower at low altitudes in warm areas and dislikes humidity.

THREATS

A local endemic, abundant within its preferred habitat and geographic range.

ETYMOLOGY

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

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. 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-ultramafica/>