

Chionochloa spiralis

COMMON NAME

Fiordland snow tussock, spiral-leaved snow tussock

SYNONYMS

None (first described in 1963)

FAMILY

Poaceae

AUTHORITY

Chionochloa spiralis Zotov

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

NVS CODE

CHISPI

CHROMOSOME NUMBER

$2n = 42$

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, PD, RR

PREVIOUS CONSERVATION STATUSES

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

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

DISTRIBUTION

Endemic. New Zealand: South Island (Fiordland (Takahe Valley (Murchison Mountains); Lake Monk (Cameron Mountains); Mt Luxmore (Kepler Mountains)).

HABITAT

Upper montane to subalpine. On and around limestone bluffs, talus and associated soils.



Flowering. Photographer: Kelvin Lloyd, Licence: All rights reserved.



Limestone Bluffs in Takahe Valley. Photographer: Kelvin Lloyd, Licence: All rights reserved.

DETAILED DESCRIPTION

Slender tussock with narrow leaves falling and leaving inwardly spiralling sheaths. **Sheaths** to 200 mm, glabrous, pale, chartaceous, spiralling and breaking into short segments, margin hairy above, apical tuft to 3 mm. **Ligule** to 1 mm. **Lamina** to 500 × 1 mm, acicular junceous, veins few, falling with part of sheath, abaxially with occasional long (2 mm) hairs below, adaxially with dense weft of long (3 mm) hairs at base projecting over smooth margin, scattered prickle teeth above. **Culm** to 650 mm, internodes glabrous. **Inflorescence** to 120 mm, narrow, glabrous except for occasional long hairs at axils. **Spikelets** of up to 7 florets. **Glumes** glabrous, > adjacent lemma lobes, acute or shortly awned; lower to 12 mm, 3-nerved, upper to 13 mm, 3–5-nerved. **Lemma** to 5 mm; hairs dense on margin fewer aside central nerve, glabrous or sparsely hairy elsewhere, < sinus; lateral lobes up to 4.5 mm, long triangular-acute; central awn up to 13 mm divergent from 2.5 mm flat column. **Palea** to 6 mm. **Callus** 0.5 mm, hairs to 3 mm. **Rachilla** to 0.8 mm. **Lodicules** to 0.75 mm. **Anthers** to 4 mm. **Ovary** to 0.75 mm, stigma-styles to 4.5 mm. **Seeds** not described.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

FLOWERING

November–January

FRUITING

January–May

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown from fresh seed and from rooted pieces but very slow to establish. Prefers a damp soil, and is best grown in semi-shaded conditions. In the northern part of its New Zealand this species rarely flowers.

THREATS

Naturally Uncommon. A narrow range endemic of limestone substrates within Fiordland National Park. Known populations are small and some are being impacted upon by deer. However, there is insufficient evidence to satisfactorily assess this species as being threatened. Further field work and monitoring to resolve this uncertainty is much desired.

ETYMOLOGY

chionochloa: Snow grass

spiralis: From the Latin spira 'coil' or 'twist' and -alis 'resembling', resembling a twist or corkscrew, spiral-shaped

WHERE TO BUY

Not Commercially Available

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (June 2005). 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/chionochloa-spiralis/>