

Australopyrum calcis subsp. calcis

COMMON NAMES

limestone wheatgrass

BIOSTATUS

Native – Endemic taxon

CURRENT CONSERVATION STATUS

2023 | Threatened – Nationally Endangered | Qualifiers: CD, OL

[Jump to previous conservation statuses](#)

CATEGORY

Vascular

STRUCTURAL CLASS

Grasses

DETAILED DESCRIPTION

Stout, stoloniferous red-green to dark green perennial grass. **Leaf-sheath** 25–50 mm, with retrorse short hairs, reddish green. **Auricles** 0.1–0.5 mm.

Ligule 0.6–1.25 mm, lacerate. **Collar** dark brown to purple. **Leaf-blade** 60–250 × 0.5–3.5 mm, flat, thin, upper surface with minute prickle-teeth on ribs; underside with conspicuous white midrib and 2 lateral ribs. **Culm** 170–600 mm, slender, reddish, nodes swollen, dark-brown to black.

Inflorescence a spicate raceme 30–130 mm; spikelets 4–13, overlapping; rachis internodes glabrous, margins toothed. **Spikelets** 10–14 mm.

Glumes unequal, lower 2.5–4 mm, upper 3.7–5.5 mm, narrowly to broadly-triangular, 3–5-nerved, undersides prickle toothed, upper invested with short white hairs. **Lemma** 9–11 mm; undersides with stiff 0.1 mm long teeth, awn 1.5–4 mm. **Palea** 5.3–7 mm, apex bidid. **Callus** 0.25–0.4 mm upperside with short stiff hairs. **Anthers** 2.4–2.8 mm. **Ovary** 0.8–1 mm, stigma-styles 1.8–2 mm. **Seed** 3.5–4 mm, linear.

SIMILAR TAXA

Australopyrum calcis subsp. *optatum* Connor et Molloy is a smaller and more slender grass. The upper surfaces of the leaves of this subspecies are distinctly, though finely, hairy (glabrous in *Australopyrum calcis* subsp. *calcis*), while the culm internodes are glabrous except for the last internodes below the inflorescence which is finely hairy (glabrous in *Australopyrum calcis* subsp. *calcis*). In this subspecies the inflorescence rachis is finely hairy while that of subsp. *calcis* is glabrous.

DISTRIBUTION

Endemic. New Zealand, South Island, Marlborough. Known only from two sites in the Leatham Valley.

HABITAT

Apparently a limestone endemic. The only known population grows mainly near a limestone outcrop in shaded sites under trees on lime-rich soils and limestone debris. However a very few plants grow directly on the limestone outcrop under shaded rock overhangs and ledges.

THREATS

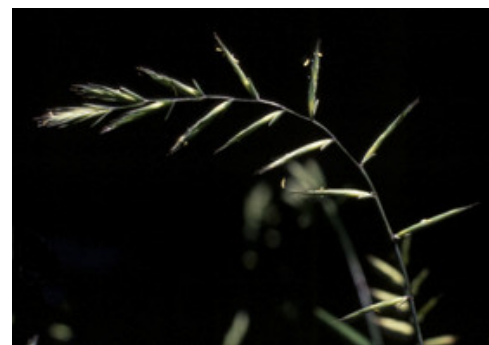
Known from two extremely restricted sites in the Leatham Valley, South Marlborough. It is estimated that less than 200 plants are known from two sites in close proximity. The main population occurs at the base of a limestone bluff, while the other occurs along an old vehicle track at an adjacent limestone quarry. These populations are protected but are very vulnerable summer drought which can stress and even kill the overlying trees, thereby opening up the habitat to weeds. Although the grass is not especially palatable it is occasionally browsed by rabbits and hares.

GENUS

Australopyrum



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FAMILY

Poaceae

AUTHORITY

Australopyrum calcis Connor et Molloy subsp. *calcis*

SYNONYMS

None

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

FLOWERING

December–January

FRUITING

December–May

PROPAGATION TECHNIQUE

Very easy from fresh seed. Does best in a pot. Can be grown in full sun or shade. Dislikes high humidity. Plants respond well to regular applications of lime.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

NVS CODE

AUSCSC

CHROMOSOME NUMBER

$2n = 14$

PREVIOUS CONSERVATION STATUSES

2017 | Threatened – Nationally Endangered | Qualifiers: CD, OL, St

2012 | Threatened – Nationally Endangered | Qualifiers: CD, OL, St

2009 | Threatened – Nationally Endangered | Qualifiers: CD, St, OL

2004 | Threatened – Nationally Endangered

[Jump to current conservation status](#)

REFERENCES AND FURTHER READING

Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Christchurch, Manaaki Whenua Press. 650 p.

ATTRIBUTION

Description modified from Edgar and Connor (2000).

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/australopyrum-calcis-subsp-calcis/>

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