Poa acicularifolia subsp. acicularifolia

COMMON NAME limestone cushion poa

SYNONYMS Poa acicularifolia Buchanan

FAMILY Poaceae

AUTHORITY Poa acicularifolia Buchanan subsp. acicularifolia

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Grasses

NVS CODE POAASA

CHROMOSOME NUMBER 2n = 28

CURRENT CONSERVATION STATUS 2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR 2009 | At Risk – Naturally Uncommon 2004 | Range Restricted

DISTRIBUTION

Endemic. New Zealand: Marlborough, North and Central Canterbury.

HABITAT

Montane to subalpine grassland overlying calcareous rocks and soils. Also on limestone bluffs and screes.





Castlehill, December 1994. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.

DETAILED DESCRIPTION

Small, blue-green perennial grass forming diminutive, compact, tight, interlacing mats, 100–150 mm at flowering. **Culms** far overtopping leaves, arising from a woody, much-branched rhizome, with wiry, very long-creeping roots at nodes and numerous fine rootlets; branching intravaginal; leaf-blades disarticulating at ligule. **Leaf-sheath** light cream to later greyish brown, much wider than leaf-blade, glabrous, membranous, sparsely ribbed; margins very wide hyaline. **Ligule** 1–5 mm, apically glabrous, tapered, entire, abaxially scabrid near base or smooth, occasionally extending as a rim-like membranous contra-ligule. **Leaf-blade** stiff, rigidly cartilaginous, falcate, 5.0–25.0 × c.0.5 mm diameter, involute, glabrous; margins sparsely prickle-toothed, slightly narrowed to firm abruptly shortly curved, sometimes pungent tip. **Culm** 30–100 mm, with 1–2 small cauline leaves, internodes glabrous. **Panicle** 15–35 mm, lax; rachis glabrous, branches capillary, smooth or very finely scabrid, with 1–2 spikelets at branchlet tips. **Spikelets** 4–8 mm, 2–5-flowered, light grey-green. **Glumes** subequal, 2.0–3.5 mm, 3-nerved, elliptic-ovate, midnerve scabrid near subobtuse tip, margins often finely scabrid. **Lemma** 3–4 mm, 5-nerved, oblong-elliptic, obtuse, short-pubescent throughout lower 1/₃ to 1/₂ but central internerves sometimes glabrous, scabrid above on midnerve and occasionally towards tip; margins scabrid above. **Palea** 2.5–3.5 mm, keels ciliate-scabrid, interkeel minutely hairy on lower 1/₂. **Callus** ringed by short soft hairs. **Rachilla** 0.5–1 mm, usually ciliate; prolongation twice as long. **Lodicules** 0.5 mm. **Anthers** 1.8–3 mm. **Seeds** c. 1.5–2.0 × 0.5 mm.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

SIMILAR TAXA

Most likely to be confused with <u>Poa colensoi Hook.f.</u>, which is a highly variable species. The most common form of *P. colensoi* present in the north-eastern South Island differs from *P. acicularifolia* subsp. *acicularifolia* by the longer, erect, firm rather than rigidly cartilaginous falcate leaves, scabrid rather than smooth upper leaf-blades, and shorthairy rather than almost glabrous or shortly scabrid lemmas. <u>Poa acicularifolia</u> subsp. *ophitalis* Edgar is confined to ultramafic substrates in eastern Nelson and differs by its more open, rather loosely interconnected rather than tightly compact mat-forming growth habit, and longer, less rigid, erect rather than falcate leaves.

FLOWERING

October-December

FRUITING November-April

PROPAGATION TECHNIQUE

Easily grown in a small pot in an alpine house. Resents humidity and does best in free draining, base-rich soils.

THREATS

Potentially threatened by the spread of hawkweeds (*Hieraceum* spp.) and grasses (such as cocksfoot (*Dactylis glomeratus* L.) onto the limestone habitats it favours. At present there is no documented evidence of decline but careful monitoring is needed at key sites to be sure this grass remains secure. Current observations (which lack hard data) suggest it still exists as stable populations within its main known habitats.

ETYMOLOGY

poa: Meadow grass

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. Manaaki Whenua Press, Christchurch, NZ. 650 p.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/poa-acicularifolia-subsp-acicularifolia/