

# Achnatherum petriei

## BIOSTATUS

Native – Endemic taxon

## CURRENT CONSERVATION STATUS

2023 | Threatened – Nationally Vulnerable | Qualifiers: Sp, DPR, DPS, DPT, RR

[Jump to previous conservation statuses](#)

## CATEGORY

Vascular

## STRUCTURAL CLASS

Grasses

## DETAILED DESCRIPTION

Erect, wiry, yellow-green to brownish-grey perennial frequently branching at nodes. **Branching** extravaginal; cataphylls short. **Leaf-sheath** to 30 mm, usually glabrous, sometimes retrorsely pubescent. **Ligule** to 0.5 mm, auriculate, auricular lobes to 1 mm long, symmetrical or asymmetrical, usually finely pubescent. **Collar** thickened, occasionally with a very small tuft of hairs. **Leaf-blade** to 300 × 0.8 mm, narrow, involute, rigid, acicular, undersides glabrous, upper surface bearing short, stiff, white hairs. **Culm** to 600 mm long, wiry, internodes smooth, nodes purple, glabrescent. **Panicle** to 250 mm long, narrow; rachis smooth below, scabrid above, branches and pedicels scabrid. **Glumes** ± equal, to 7 mm long, hyaline, glossy, pink-suffused, produced into an awn-like process up to 0.5 mm long, or split at apex, < awn column; lower 1-nerved, upper 3-nerved. **Lemma** to 5.0 mm long, cylindrical, 3–5-nerved, margins contiguous, fulvous, clothed in white, ± appressed hairs; coma to 0.5 mm long, lobes short and inconspicuous; awn to 40 mm long, ± straight or weakly 1-geniculate, short and stiffly hairy, column loose twisted to 10 mm in length, arista to 30 mm long. **Palea** = lemma, clothed in long white hairs, apex ciliate, 2-nerved. **Callus** short (to 0.3 mm long), oblique, hairs white, to 1 mm long. **Lodicules** 3, one usually emarginate, or entire, 1-nerved, to 1 mm. **Anthers** to 2.7 mm long, weakly penicillate and shortly caudate. **Seed** 2.5–3.5 mm; hilum linear.

## SIMILAR TAXA

One of the five stipoid grass genera known in New Zealand. From the other four genera it is distinguished by the margins of the 3-nerved lemma contiguous, by the persistent awn, and long hairs on the palea. From *Achnatherum caudatum* (Trin.) S.W.L.Jacobs et J.Everett it is distinguished by the extravaginal rather than intravaginal branching; by the upper surface of the leaf-blade clothed in hairs rather than finely prickly-toothed; by the glume nerves being obscure rather than conspicuous; by the completely hairy lemma (in *A. caudatum* the hairs are confined to the lemma keel and outer margin); by the minute, obscure rather than conspicuous coma; prominent long awn (40 cf. 20 mm long), and free flowering rather than mostly cleistogamous flowering habit.

## DISTRIBUTION

Endemic. New Zealand: South Island (South Canterbury to Central Otago).

## HABITAT

Montane to subalpine (up to 1000 m a.s.l.). On dry stony ground and on rock outcrops (especially limestone and schist).

## THREATS

Rather widespread but localised in its occurrences. Probably better qualifies as Sparse because this is a naturally biologically sparse species. However, its survival now also depends on effective weed control. In some parts of its range it might be at risk from the spread of wild thyme (*Thymus vulgaris* L.) and stonecrop (*Sedum acre* L.).



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## GENUS

Achnatherum

## FAMILY

Poaceae

## AUTHORITY

Achnatherum petriei (Buchanan) S.W.L.Jacobs et J.Everett

## SYNONYMS

Stipa petriei Buchanan

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## FLOWERING

November–February

## FRUITING

January–May

## LIFE CYCLE AND DISPERSAL

Floret dispersed by wind (Thorsen *et al.*, 2009).

## PROPAGATION TECHNIQUE

Easy from fresh seed and the division of whole plants. Requires full sun, and excellent drainage, on a fertile soil to grow well. Will not tolerate humidity or damp conditions.

## ETYMOLOGY

**petriei**: Named after Donald Petrie (1846 -1925), Scottish born Otago botanist

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

## NVS CODE

ACHPET

## CHROMOSOME NUMBER

2n = 42

## PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Declining | Qualifiers: DP, EF, Sp

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

2009 | At Risk – Naturally Uncommon | Qualifiers: CD

2004 | Range Restricted

[Jump to current conservation status](#)

## REGIONAL CONSERVATION STATUSES

Otago: 2025 | Regionally Threatened – Regionally Endangered | Qualifiers: DPR, DPS, DPT, NR, NStr, RR Help

The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "[Conservation Status of Indigenous Vascular Plants in Otago, 2025](#)" Jarvie S et al. (2025) report.

## 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. <https://doi.org/10.1016/j.ppees.2009.06.001>.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange June 2005. Description modified from Edgar and Connor (2000). Some of this factsheet information is derived from [Flora of New Zealand Online](#) and is used under a [Creative Commons Attribution 3.0 New Zealand](#) licence.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/achnatherum-petriei/>

## PDF DATE

25 May 2026