

Rytidosperma telmaticum

COMMON NAME

tarn bristle grass

SYNONYMS

None

FAMILY

Poaceae

AUTHORITY

Rytidosperma telmaticum Connor et Molloy

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

CHROMOSOME NUMBER

2n = 24

CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: DP, RR

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP, RR

2009 | Threatened – Nationally Vulnerable | Qualifiers: DP, EF, RR

2004 | Not Threatened

DISTRIBUTION

Endemic. South Island only, inland from mid Canterbury, the MacKenzie Country and from one site at Conroys Road, Alexandra, Central Otago.

HABITAT

A species of intermontane basins, where it grows on the margin of kettleholes, tarns and small ponds.



Ephemeral tarn. Photographer: Melissa Hutchison, Date taken: 30/03/2023, Licence: CC BY-NC.



Ephemeral tarn. Photographer: Melissa Hutchison, Date taken: 30/03/2023, Licence: CC BY-NC.

DETAILED DESCRIPTION

Small low-growing olive-green tufted tussock-forming, self-compatible grass becoming pallid with many old small straw-coloured bladeless ligule-tipped sheaths below compact intravaginal innovations of 3–4 semi-pungent leaves much less than culms; sometimes open and evidently stoloniferous, rooting and shooting at nodes. **Leaf-sheath** 5–10 mm, usually glabrous but often long hairy, pale straw-coloured, shining, ridged, broader than leaf blade; upper surface with many fine hairs; apical tuft 0.50–0.75 mm, sparse, spreading. **Ligule** 0.2–0.3 mm, of fine hairs. **Leaf-blade** 10–25 × 2 mm, inrolled, glabrous, apex thickened and pointed, ciliate; disarticulating at ligule; undersides very finely prickly-toothed on nerves; margins very finely antrorsely prickly-toothed. **Culm** 20–200 mm, internodes smooth, shining; nodes 3–5, constricted, often geniculate below; inflorescence internodes 30–70 mm long, sheath sometimes with regular horizontal bands. **Inflorescences** racemose or a racemose-panicle 5–35 mm, bearing 2–7 spikelets on very short branches or solitary; margins of rachis and branches very finely toothed; pedicels hairy, hairs denser and longer below spikelets. **Spikelets** 4–5 mm, of 3–5 small closely compact florets usually included by glumes, occasionally upper florets exerted. **Glumes** c. 4–5 mm long, linear acute, faintly keeled, keels occasionally scabrid above, centrally purple or green, margins chartaceous, 3–5-nerves confluent above and central nerve excurrent; upper surface bearing abundant small white hairs. **Lemma** 1.50–1.75–2.25 mm, ovate, straw-coloured, sometimes purpled above, 5–7 nerves anastomosing below sinus; dense long hairs in two rows less than or equal to lemma apex, upper row of irregular tufts, lower row of denser longer tufts reaching upper row, glabrous below lower row, single pair of marginal tufts at level of rhacilla apex often extending below, upper surface finely hairy; apex tridentate with two 0.2 mm long lateral lobes and finely ciliate mucro in sinus, 0.2–0.5 mm or absent, usually > lobes. **Callus** 0.10–0.25 mm, rounded-obtuse, disarticulation oblique, marginal hair tufts 0.3–0.5 mm overlapping lower lemma hairs. **Rachilla** 0.3–0.7 mm, glabrous. **Anthers** 0.30–0.75 mm, purple. **Ovary** 0.4–0.5 mm, stipitate; stigma-styles 0.75–1.00 mm. **Seed** 0.8–1.0 mm, stipitate, broadly ovate.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

SIMILAR TAXA

Allied to *Rytidosperma pumilum*, from which it differs by its two rows of conspicuous hairs on the lemma, and by its shorter, rounder callus covered in long hairs.

FLOWERING

November–February

FLOWER COLOURS

Violet/Purple

FRUITING

January–May

PROPAGATION TECHNIQUE

Easily grown from fresh seed and by division of whole plants. Best kept in a pot, that is partially submerged in water and placed in the full sun. Dislikes humid conditions.

THREATS

Changes to the hydrologic regime of the intermontane basins in which this species mostly occurs, caused by recent (2005+) changes in local agricultural practises, are resulting in increasingly longer periods of dry conditions. This is favouring the spread of weeds which in turn are outcompeting the indigenous turf vegetation in which this species grows. Ongoing deterioration of these habitats means that this species and many of its associates are probably under serious threat of extinction over large parts of their range.

ETYMOLOGY

rytidosperma: Wrinkled seed

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Description modified from Molloy and Connor (2005).

REFERENCES AND FURTHER READING

Molloy BPJ, Connor HE. 2005. Species novae graminum Novae-Zelandiae III. Two diploid species of *Rytidosperma* (Danthoneae: Danthonioideae). *New Zealand Journal of Botany* 43: 721–734.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/rytidosperma-telmaticum/>