

# Rytidosperma petrosum

## COMMON NAME

Cook Strait bristle grass

## SYNONYMS

None

## FAMILY

Poaceae

## AUTHORITY

Rytidosperma petrosum Connor et Edgar

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Grasses

## NVS CODE

RYTPET

## CHROMOSOME NUMBER

2n = 48

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

## PREVIOUS CONSERVATION STATUSES

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

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

## DISTRIBUTION

Endemic. Cook Strait Region, Kapiti, Stephens and DUrville Islands, South Wellington and Wairarapa Coast to Cape Palliser.

## HABITAT

Predominantly a coastal species, favouring very exposed, dry, sunny, lichen encrusted cliff faces. It dislikes growing in deep soil. Also grows on serpentinite rock near the summit of DUrville Island.



Cape Palliser. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Kapiti Island. Photographer: Gillian M. Crowcroft, Date taken: 01/06/1993, Licence: All rights reserved.

## DETAILED DESCRIPTION

Stiff, wiry and rather dense tufted grass forming small tussocks in rock cracks and amongst saxicolous lichens in sunny sites. Tufts forming at ends of elongating shoots, rooting at nodes; leaves less than or equal to culms, more or less pungent, disarticulating at ligule; branching intravaginal. **Leaf-sheath** glabrous, light grey to dark brown drying straw-yellow to white; apical tuft of hairs 1–1.5 mm. **Ligule** c. 0.5 mm. **Leaf-blade** to 150 mm, glabrous, stiff, inrolled margins glabrous. **Culms** to 400 mm internodes glabrous. **Inflorescence** a raceme or racemose panicle small, erect, to 40 mm, of very few large spikelets on short pedicels; rachis and pedicels almost glabrous with only a few scattered teeth and usually small tufts of long hairs at branch axils. **Spikelets** 4–6-flowered, awns and sometimes lemma lobes exerted from glumes. **Glumes** green, lanceolate, acute, 8.5–15 mm more or less equal; lower 5–(7)-nerved, upper 3-nerved. **Lemma** 2.5–3.5 mm, 9-nerved, upper row of hairs interrupted, dense marginal tufts with few additional hairs adjacent, hairs very much less than lemma lobes, lower row more or less continuous, with dense strong marginal tufts and less dense tufts between, overlapping upper, glabrous elsewhere; lobes 4.5–8 mm, narrowing to strong awn and often shortly lobed at awn base; central awn 7.5–14 mm, column 2.5–4 mm, less than upper lemma hairs. **Callus** 0.7–1 mm, strong marginal hair tufts overlapping lower lemma hairs. **Rachilla** 0.5–0.6 mm. **Anthers** 0.7–1.5 mm, yellow. **Seed** 2.5 × 1.0 mm.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

## SIMILAR TAXA

The coastal, exposed, sunny rock habitat of *R. petrosum* is very distinctive. The only other bristle grass to exclusively frequent such dry, exposed rock outcrops is *R. corinum* Connor et Edgar. *Rytidosperma corinum* is only found well inland in montane to subalpine habitats. It is a mainly South Island species known from one inland North Island site (Kaweka Range). It differs from *R. petrosum* by the rachis and pedicels which are closely short-scabrid (virtually glabrous in *R. petrosum*), with hairs at branch axils only slightly longer than the preceeding scabridity (contrasting with the obvious small tufts of long hairs present in *R. petrosum*) and with the upper lemma hairs more or less continuous (sparse and irregular in *R. petrosum*).

## FLOWERING

(September)–October–(February)

## FLOWER COLOURS

Yellow

## FRUITING

(November)–January–(July)

## PROPAGATION TECHNIQUE

Easy from fresh seed and rooted pieces. Does best in a very dry, sunny spot with excellent drainage. Good in pots. Dislikes humidity.

## THREATS

A local endemic, threatened at some mainland sites on the South Wellington coastline by weeds and quarrying. Locally abundant on some offshore islands (e.g., Kapiti), but as a rule very uncommon.

## ETYMOLOGY

**rytidosperma**: Wrinkled seed

## WHERE TO BUY

Not commercially available

## ATTRIBUTION

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/rytidosperma-petrosum/>