Festuca contracta

COMMON NAME

Subantarctic fescue

SYNONYMS

Festuca erecta dUrv.

FAMILY

Poaceae

AUTHORITY

Festuca contracta Kirk

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Νo

ENDEMIC GENUS

No

ENDEMIC FAMILY

INO

STRUCTURAL CLASS

Grasses

NVS CODE

FESCON

CHROMOSOME NUMBER

2n = 42

CURRENT CONSERVATION STATUS

2017 | Not Evaluated

PREVIOUS CONSERVATION STATUSES

2009 | At Risk - Naturally Uncommon | Qualifiers: RR

2004 | Range Restricted

DISTRIBUTION

Indigenous. In the New Zealand Botanical region known only from Macquarie Island. Also indigenous to Falkland, South Georgia, the Kerguelen Islands, and Tierra del Fuego.

HABITAT

Coastal to upland (20–400 m a.s.l.). In grassland and amongst rocks, sometimes on cliff faces.





Macquarie Island. Photographer: Jane Gosden, Date taken: 28/01/2016, Licence: CC BY-NC.



Macquarie Island. Photographer: Jane Gosden, Date taken: 28/01/2016, Licence: CC BY-NC.

DETAILED DESCRIPTION

Tufted tussock with pale, flabellate intravaginal branches of many smooth leaf-blades often exceeding the compact, short, stiffly erect, branched purple suffused inflorescences of many few-flowered, compact spikelets with shortly prickle-toothed lemmas. Shoots dimorphic, narrow if vegetative, swollen if reproductive. Prophyll 40–50 mm, stramineous, pointed, keels antrorsely ciliate, interkeel antrorsely hairy. Branching intravaginal. **Leaf**sheath 50-100 mm, glabrous, stramineous, strongly nerved, margins membranous; apical auricles 0.4-0.5 mm, ciliate, symmetrical. Ligule as for auricles. Leaf-blade 120-250 × 0.8-1.0 mm, glaucous, glabrous, stiff, acute, terete or shallowly compressed-terete, adaxially and on margins bearing numerous short, white, antrorse hairs. Culm 120-400 mm long, nodes hidden, internodes finely antrorsely prickle-toothed and very shortly hairy, almost always hidden. Panicle 50-130 mm, narrow, compact, spiciform, with 13-15 nodes obscured by 20-50 spikelets; branches mostly binate, erect, stiff, very close-set, overlapping, > nearest internode, not naked below, basal branch appressed, 20-40 mm, of 5-7 spikelets, uppermost 5-7 solitary, on 1 mm pedicels; rachis, branches and pedicels margins shortly, densely prickle-toothed, elsewhere frequently bearing antrorse, fine hairs. Spikelets 9–12 × 1.5-1.8 mm, narrow, of 3 florets; glumes, lemmas, paleas purple suffused above; lemma included, awns exserted. Glumes ± equal, 8-11 mm, 3-nerved, upper prominently so, centrally green, prickle-teeth on keel and above, margin hyaline, finely ciliate. Lemma 7 mm, lobes small (0.25 mm), 5-nerved sometimes evident, abundant small uniform prickle-teeth present throughout; awn 1.5-2.5 mm. Palea 6.5-7.0 mm, much less than lemma, apex bifid (0.2-0.4 mm), ciliate; keels toothed ± to base, interkeel hairs to base, flanks shortly prickle-toothed in upper ½. Callus 0.1–0.2 mm long, shortly bearded near rachilla; articulation flat. Rachilla 1.00–1.25 mm, shortly, stiffly hairy. Anthers 0.6-0.8 mm, purple. Ovary 1.00-1.25 mm, triangular turbinate, cap thickened, apex glabrous; stigma-styles 2-3 mm; stigmas sparingly branched. **Seed** 2.7-3.0 mm. Flowers cleistogamous.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

SIMILAR TAXA

Perhaps closest to <u>Festuca coxii</u> (Petrie) <u>Hack.</u> from which it differs by its taller, erect growth habit, flabellate rather than elongate intravaginal branching; awns 1.5–2.5 mm and much less in length than lemma, rather than 6–13 mm and much greater in length than lemma,; anthers 0.6–0.8 mm rather than 3.75–4.25 mm long, and cleistogamous rather than chasmogamous (open) flowering habit.

FLOWERING

December-January

FRUITING

January-March

LIFE CYCLE

Florets are dispersed by wind, water and attachment (Thorsen et al. 2009).

PROPAGATION TECHNIQUE

Unknown in cultivation in New Zealand.

THREATS

This is a Macquarie Island endemic and occurs in the New Zealand Botanical Region but it is not encompassed by the New Zealand threat classification process as Macquarie is under the management of Australia. Cats, rats, mice and rabbits introduced by sealers in the early 1800s posed a significant threat to sepcies endemic to Maquarie Island an when cats were initially erdaticated nearly a century later there was an explosion rabbits numbers. Further efforts were made to remove rodent perst by the Australian Government and in 2014 Macqurie was declared pest free.

ETYMOLOGY

festuca: From the Latin festuca 'stem' or 'blade of grass'

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. 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.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/festuca-contracta/