# Festuca coxii

# **COMMON NAME**

Cox's fescue

#### **SYNONYMS**

Agropyrum coxii Petrie

# **FAMILY**

Poaceae

# **AUTHORITY**

Festuca coxii (Petrie) Hack.

# **FLORA CATEGORY**

Vascular - Native

# **ENDEMIC TAXON**

Yes

# **ENDEMIC GENUS**

No

# **ENDEMIC FAMILY**

No

# STRUCTURAL CLASS

Grasses

# **NVS CODE**

**FESCOX** 

# **CHROMOSOME NUMBER**

2n = 56

# **CURRENT CONSERVATION STATUS**

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

# **PREVIOUS CONSERVATION STATUSES**

2012 | At Risk – Naturally Uncommon | Qualifiers: IE, RR 2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

# **DISTRIBUTION**

.Endemic. Chatham Islands only where it has been recorded from the islands, islets and rock stacks except the Pyramid and Western Reef

# HABITAT

Strictly coastal where it grow son rock ledges, cliff faces, rock stacks, peaty turf, amongst petrel burrows and on exposed, wind blasted ridge lines.





An image of Festuca coxii in full flower, Otauwae Point, Chatham Island, January 2006. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Festuca coxii close up of flowering plant, Te Koparuparu Bay, Chatham Island, January 2006. Photographer: Peter J. de Lange, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Glaucous to dark green tufted tussock. Branching intravaginal, sometimes with internodes elongating below and rooting at nodes; inflorescence short, compact, usually shorter than tall leaf-blades, nodding, with numerous long awned abundantly prickle-toothed florets borne on shortly pedicelled spikelets. Leaf-sheath 80-200 mm long, thin, pale much broader than leaf-blades, minutely retrorsely or antrorsely hairy between nerves becoming glabrous above, margins dark brown membranous below; apical auricles 0-0.5 mm, ciliate. Collar conspicuously thickened and curved. Ligule 0.3-0.5 mm, ciliate. Leaf-blade 110-400 × 0.5-0.9 mm, glaucous to dark green, softly sharppointed, terete to somewhat compressed, glabrous, upper surface and margin bearing numerous short (0.15 mm) antrorse or erect prickle-teeth, these diminishing in size above. **Culm** 250–450 mm, almost always included by leafblades; nodes 2-3 dark, glabrous, sometimes ± geniculate; internodes glabrous or densely antrorsely short hairy sometimes becoming less so below. Panicle 60-150 mm, narrow, compact, nodding, with 8-11 nodes of 12-18 close set, usually overlapping, spikelets; branches short, erect-appressed, basal branch 10-20 mm of 3-5 spikelets, not naked below, uppermost 6-10 spikelets solitary on short pedicels; rachis branches and pedicels prickle-toothed on margins, and frequently also densely antrorsely short hairy becoming less so above, or ± glabrous. Spikelets 15–30 × 5-6 mm, of 5-7 florets. **Glumes** unequal, green centrally, broad, narrowing, becoming awned, prominently keeled, glabrous except for prickle-teeth on keel above and below awn, margin hyaline sometimes short hairy and finely ciliate; usually equating with lowermost lemma, twice as long as nearest proximate internodes or in upper panicle twice proximate internodes of solitary spikelets; lower 4-10 mm, 1-nerved, upper 6-12 mm, 3-nerved. Lemma 6–10 mm, lobes 0 or minute, 5-nerved, slightly keeled, abundantly prickle-toothed throughout, longer teeth and/or hairs below, and on keel and at margins below; awn 6-13 mm, usually < lemma, apex deeply bifid, keels toothed to base, interkeel hairs above, margins of flanks shortly toothed; sometimes folded. Callus 0.3-0.6 mm, long hairy on upper margin, shorter centrally; articulation acute. Rachilla 1.0-1.6 mm, densely antrorsely long hairy. Anthers 3.7-4.2 mm. orange. **Ovary** 1.0-1.4 mm, triangular turbinate, apex with narrow rim enclosing base of styles and central tuft of hispid hairs (0.2 mm long); stigma-styles 2.5-3.0 mm. Seed 3.7-4.6 mm long. Flowers opening (not cleistogamous).

#### MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the grasses of New Zealand

# **SIMILAR TAXA**

Similar to <u>F. contracta Kirk</u> from which it differs by its more widely spreading, rather than erect growth habit, elongate rather than flabellate intravaginal branching; awns 6–13 mm and » than lemma, rather than 1.5–2.5 mm.

# **FLOWERING**

November-February

# **FLOWER COLOURS**

Orange

#### **FRUITING**

January-April

# LIFE CYCLE

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

# PROPAGATION TECHNIQUE

Easy from fresh seed and division of whole plants. Often short-lived and dislikes humidity.

#### **THREATS**

Widespread and common in sites inaccessible to stock. Not seriously threatened though in common with the majority of Chatham Islands endemics its range has contracted following human settlement.

#### **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-coxii/