Australopyrum calcis subsp. calcis

Common Name(s):

limestone wheatgrass

Current Threat Status (2012):

Threatened - Nationally Endangered

Distribution:

Endemic. New Zealand, South Island, Marlborough. Known only from two sites in the Leatham Valley.

Habitat:

Apparently a limestone endemic. The only known population grows mainly near a limestone outcrop in shaded sites under trees on lime-rich soils and limestone debris. However a very few plants grow directly on the limestone outcrop under shaded rock overhangs and ledges.

Features*:

Stout, stoloniferous red-green to dark green perennial grass. Leaf-sheath 25-50 mm, with retrorse short hairs, reddish green. Auricles 0.1-0.5 mm. Ligule 0.6-1.25 mm, lacerate. Collar dark brown to purple. Leaf-blade 60-250 x 0.5-3.5 mm, flat, thin, upper surface with minute prickle-teeth on ribs; underside with conspicuous white midrib and 2 lateral ribs. Culm 170-600 mm, slender, reddish, nodes swollen, dark-brown to black. Inflorescence a spicate raceme 30-130 mm; spikelets 4-13, overlapping; rachis



Photographer: Shannel Courtney



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internodes glabrous, margins toothed. Spikelets 10-14 mm. Glumes unequal, lower 2.5-4 mm, upper 3.7-5.5 mm, narrowly to broadly-triangular, 3-5-nerved, undersides prickle toothed, upper invested with short white hairs. Lemma 9-11 m; undersides with stiff 0.1 mm long teeth, awn 1.5-4 mm. Palea 5.3-7 mm, apex bidid. Callus 0.25-0.4 mm upperside with short stiff hairs. Anthers 2.4-2.8 mm. Ovary 0.8-1 mm, stigma-styles 1.8-2 mm. Seed 3.5-4 mm, linear.

Flowering: Fruiting:

December - January December - May

Threats:

Known from two extremely restricted sites in the Leatham Valley, South Marlborough. It is estimated that less than 200 plants are known from two sites in close proximity. The main population occurs at the base of a limestone bluff, while the other occurs along an old vehicle track at an adjacent limestone quarry. These populations are protected but are very vulnerable summer drought which can stress and even kill the overlying trees, thereby opening up the habitat to weeds. Although the grass is not especially palatable it is occasionally browsed by rabbits and hares.

*Attribution:

Description modified from Edgar and Connor (2000)

References and further reading:

Edgar, E.; Connor, H.E. 2000: Flora of New Zealand. Vol. V. Grasses. Christchurch, Manaaki Whenua Press. 650 pp.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=50