# Carex calcis

### Common Name(s):

sedge

#### **Current Threat Status (2012):**

At Risk - Naturally Uncommon

#### **Distribution:**

Endemic. New Zealand: South Island. North-West Nelson from about the Garibaldi Ridge south to the Matiri Plateau

### **Habitat:**

Upper montane to alpine. Exclusive to on soils derived from weathered limestone and calcareous mudstone/siltstone Carex calcis is a plant of open shrubland and Chionochloa tussock grassland. It is also common in the grasslands and shrublands developed on colluvial deposits at the base and lower slopes of the escarpments and slips scars.

#### Features\*:

Perennial herb, tufts stout, rigid, spreading; occasionally shortly rhizomatous. Culms (40–)150–300(–575) × 1.5-2.0 mm, stout, ascending to spreading, trigonous, striated, smooth, rarely scabrid above, longer than, similar to, or shorter than leaves when mature. Leaves  $(115-)150-300(-380) \times 2.5-6.0$  mm; leaf sheaths loose, dull brown, becoming stringy with age, nerves distinct; leaf blades channelled, occasionally double-folded, stiff, green; leaf margins and keel thickened, scabrid; apex trigonous, scabrid, acuminate. Inflorescence of 4-6(-7) densely flowered separate male and female spikes, brown, erect, borne singly at nodes, mostly sessile, closely contiguous towards the top of the culm, often lower spike remote and sometimes on a short peduncle; terminal spike male, 7.0–30 × 2.0–3.7 mm, clavate, cylindrical, brown, occasionally distal part female; remaining spikes female  $6.0-35 \times 5.0-7.0$  mm, stout, oblong, cylindrical, brown, sometimes with a few terminal male flowers above, particularly on upper female spike. Lowermost inflorescence bract leaflike, (60–)100–200(–350) × 2.5– 5.5 mm, longer than inflorescence. Male glumes 4.0–6.4 × 1.6–2.0 mm long, speckled brown, obovate, concavoconvex, subcoriaceous, mid-region 3-veined, green fading to white at maturity; margins membranous, entire, scabrid towards apex; apex emarginate, midvein often failing, sometimes mid-vein excurrent then apex acute or shortly awned, awn scabrid. Female glumes 2.1–4.0 × 1.6–2.2 mm, shorter or similar length to utricles, speckled brown, ovate, concavo-convex, subcoriaceous, mid-region green fading to white; margins membranous, fimbriate towards apex; apex acute sometimes shortly awned. Stamens 3, anthers 1.5–2.5 mm long. Utricles  $2.5-3.7 \times 1.2-2.3$  mm, spreading at maturity, trigonous to subtrigonous, obovate to elliptic, sometimes slightly winged, abruptly narrowed to a distinct white beak, speckled brown to dark brown above (except for beak), usually with distinct broad, pale nerves; beak 0.4-0.5(-0.7) mm long, bidentate, white, margins occasionally scabrid; orifice slightly oblique, scabrid. Stigmas 3, 0.8-1.2 mm long. Nut  $1.3-1.6 \times 0.9-$ 1.2 mm, trigonous, brown.

## Flowering: Fruiting:

November January - March

### **Threats:**

Not Threatened - but biologically sparse over its entire range. Previously regarded (as Carex (b) (AK 232856; Matiri)) as Sparse in de Lange et al. (2004)

## \*Attribution:

Fact Sheet by P.J. de Lange (1 January 2008). Description from Ford (2007)

## References and further reading:

de Lange et al., 2004, Threatened and uncommon plants of New Zealand, New Zealand Journal of Botany 42: 45-76.

Ford, K.A. 2007: Carex (Cyperaceae) - two new species from the calcareous mountains of North-West Nelson, New Zealand. New Zealand Journal of Botany 45: 721-730.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 2009 Vol. 11 No. 4 pp. 285-309

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