Carex cremnicola

COMMON NAME
sedge

SYNONYMS
None (first described in 2007)

FAMILY
Cyperaceae

AUTHORITY
Carex cremnicola K.A.Ford

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Sedges

NVS CODE
CARCRE

CHROMOSOME NUMBER
2n = c.60

CURRENT CONSERVATION STATUS
2017 | Threatened – Nationally Vulnerable | Qualifiers: DP, RR, Sp

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp
2008 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp
2004 | Sparse

DISTRIBUTION
.Endemic. New Zealand: South Island. North-West Nelson from Takaka Hill southward to the northern slopes of Mt Arthur.

HABITAT
Lowland to alpine on marble and derived substrates. *Carex cremnicola* is commonly found in open forest and shrubland growing in cracks, clefts, and hollows in karst terrain, at the bases of cliffs, on ledges, and in cracks of sinkhole walls. On Mt Arthur *C. cremnicola* reaches the penalpine zone and can be found in low shrubland in karst terrain and occasionally in rubble in tussock grassland.

DETAILED DESCRIPTION

Perennial herb, caespitose, tufts rigid, erect to spreading, often surrounded by persistent dead leaves. **Culms** 130–1280 × 1.0–2.5 mm, spreading, trigonous, edges smooth, sometimes faintly scabrid on one edge becoming harsher distally, longer than leaves when mature. **Leaves** 145–795 × 2.0–6.0 mm; leaf sheaths brown, nerves distinct; leaf blades weakly double-folded or channelled, yellow-green to green; leaf margins harshly scabrid; keel and adaxial secondary veins scabrid towards apex; apex trigonous, scabrid, acuminate. **Inflorescence** of (3)–4–7–(8) male, androgynous, and female spikes; spikes usually borne singly at nodes, occasionally female and male spikes compound; spikes terminally congested, sessile and erect, becoming more distant, peduncled and drooping below (in high altitude plants sometimes all sessile and erect); male spikes 12–86 × 1.0–3.0 mm, linear or clavate, cylindrical, brown, forming a congested terminal cluster of 2–5 spikes, including often small male spikes subtending larger male spikes; usually 1 or 2 androgynous spikes below the terminal male cluster; remaining lower spikes female 8.0–70 × 1.5–6.0 mm, oblong, occasionally clavate, cylindrical, red-brown. **Lowermost inflorescence bract** leaf-like (62)–200–450–(530) × 1.5–5.0 mm, longer than inflorescence. **Male glumes** 3.12–5.12 × 1.08–2.2 mm, red to red-brown, obovate-oblong, concavo-convex, subcoriaceous, mid-region 3-veined, green fading to white at maturity; margins membranous, but scabrid towards apex; apex entire or emarginate with a scabrid awn. **Female glumes** 2.0–4.3 × 0.9–1.8 mm, those with awns longer than or subequal to utricles (those without awns usually shorter than utricles), red-brown (flecked), ovate, concavo-convex, subcoriaceous, mid-region 3-veined, green fading to white; margins membranous but scabrid near apex; apex entire or emarginate with a prominent scabrid awn up to 1.2 mm long. **Stamens** 3, anthers 2.2–3.5 mm long. **Utricles** 2.0–3.5 × 0.8–2.0 mm, spreading at maturity, ovoid, elliptic or sometimes fusiform, trigonous, red to black above and white to yellow below, nerved on both abaxial and adaxial surfaces; stipe pale, tapered; beak prominent 0.3–1.0 mm long, narrowing to a bidentate apex with long scabrid crura; orifice scabrid and weakly oblique. **Stigmas** 3, 1.8–3.6 mm long. **Achenes** 1.0–2.0 × 0.8–1.3 mm, obovate or angled-obovate, trigonous, brown.

SIMILAR TAXA

Carex cremnicola is similar to *C. spinirostris* Colenso but differs in a number of inflorescence and vegetative characters, especially features of the utricle The sheaths of *C. cremnicola* are brown rather than red, and the utricles are 2.0–3.5 × 0.8–2.0 mm, oblong or club-shaped, dark red, trigonous, elliptic sometimes fusiform, abruptly narrowed to a beak rather than 3.2–4.2 × 1.0–1.2 mm, linear, green to brown, sometimes red, triquetrous, fusiform, with a long tapering beak. Both species are allopatric.

FLOWERING

November

FRUITING

January–March

LIFE CYCLE

Nuts surrounded by inflated utricles are dispersed by granivory and wind (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from fresh seed and by the division of established plants. Does best in a permanently damp, lime enriched soil in partial shade.

THREATS

Carex cremnicola is biologically sparse over its entire range and its habitat has been degraded by goats.

ETYMOLOGY

carex: Latin name for a species of sedge, now applied to the whole group.

WHERE TO BUY

Not Commercially Available

ATTRIBUTION

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

REFERENCES AND FURTHER READING

Ford KA. 2007. *Carex* (Cyperaceae) – two new species from the calcareous mountains of North-West Nelson, New Zealand. *New Zealand Journal of Botany 45(4)*: 721–730. https://doi.org/10.1080/00288250709509747

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.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/carex-cremnicola/