Carex ophiolithica

COMMON NAME
North Cape sedge

SYNONYMS
None

FAMILY
Cyperaceae

AUTHORITY
Carex ophiolithica de Lange et Heenan

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Sedges

NVS CODE
CAROPH

CHROMOSOME NUMBER
2n = c.63

CURRENT CONSERVATION STATUS
2017 | At Risk – Naturally Uncommon | Qualifiers: OL

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Naturally Uncommon | Qualifiers: OL
2009 | At Risk – Naturally Uncommon | Qualifiers: CD, ST, OL
2004 | Range Restricted

DISTRIBUTION
Endemic. North Island, Te Paki, North Cape Scientific Reserve (serpentines zone only).

HABITAT
A coastal species endemic to the 120 ha serpentinised zone of the North Cape Peninsule. Within this area it is a common species of open ultramafic scree, boulderfield, cliff faces and also under light scrub. It is also present on the plateau where it grows within the thick clay soils that have developed over the serpentinite.

Surville Cliffs. Photographer: Peter J. de Lange, Licence: CC BY-NC.

Surville Cliffs. Photographer: Peter J. de Lange, Date taken: 01/10/1996, Licence: CC BY-NC.

DETAILED DESCRIPTION

Stoutly erect, tufted bright green to green sedge of ultramafic substrates. **Rhizomes** short, ascending, slender, culms distinctly bulbous at base. **Leaves** 200–600–(800) × 1.8–3.2 mm, soft, ascending, double-folded, green to verdant-green; margins scabrid, weakly rasping (not harsh); keel on undersides weakly scabrid. **Culms** 150–920 × 0.5–1.2 mm, erect, glabrous in lower third, glabrous to weakly scabrid in upper , trigonous, shorter or longer than leaves when mature; basal sheaths to 20 mm long, pale brown to straw-coloured, nerves distinct. **Inflorescence** spikes 3–5, 10–40 × 3–4 mm, erect; upper spikes more or less approximate, lower 1–(2) spikes distant; peduncles 2–25 mm long; spikes subtended by narrow leaf-like bracts; these much longer than spike; terminal spike male, often with a few female florets in proximal part, female spikes slender, bearing 10–60 florets, florets overlapping but not crowded. **Glumes** 1.5–2 × 1.4–2 mm, shorter than utricles, glumes ovate, oblong, light green to pale brown, membranous, deciduous, with two lobes at apex, midrib light green to pale brown; awn 0.5–1.5 mm long, scabrid. **Utricles** 3–4 × 1.4–1.5 mm, narrow ovoid, elliptic, plano-convex or subtrigonous, pale green to live green when immature, usually pale brown or purple brown when mature, surface distinctly reticulate when dry, nerves pale and distinct, margins smooth; beak 0.5–0.7 mm long, pale, margin entire, crura 0.2–0.3 mm long; stipe 0.3–0.4 mm long. **Stigmas** 3. **Nut** 2.4–2.5 × 1.1–1.3 mm, dark brown to grey-brown, trigonous, ovoid, crowned with persistent style base.

SIMILAR TAXA

Most closely allied to *Carex spinirostris* Colenso from which it differs by its restriction to ultramafic substrates in exposed situations or under low scrub, small weakly caespitose to caespitose growth habit, basal sheaths pale brown to straw-coloured, erect culms with a bulbous base, erect spikes borne on short peduncles (2–5 mm, up to 25 mm in shade specimens), bright green leaves which are 1.8–3.2 mm wide, light green to pale brown glumes, pale brown to purple brown glumes, and an ovoid, trigonous, dark brown to grey brown nut. *Carex spinirostris* is a species of high fertility shaded sites usually in coastal or lowland forest, and well forested offshore islands. It is a densely caespitose (tussock-like) sedge with dark red-brown to purple basal sheaths. The culm bases are not bulbous and are loosely covered in sheaths, while the culms are distinctly drooping. The spikes of *C. spinirostris* are pendulous, and borne on long peduncles (20–85–100 mm). In this species the leaves are dark green and 2.5–8 mm wide. The glumes are bright red-purple, the mature utricles are red or red-brown and the nut is oblong, triquetrous, yellow, yellow-brown or rarely light brown. Both species have distinctly different chromosome numbers.

FLOWERING

July–June

FRUITING

July–June

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Fickle. Best grown in a pot. Seed germinates readily and plants can be grown by division of whole plants. However, in cultivation results are variable and mostly plants die within a few years. Seems to respond well to regular dustings with a magnesium rich fertiliser.

THREATS

Not threatened—a naturally uncommon, range restricted species, abundant within its sole known habitat at North Cape.

ETYMOLOGY

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

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (30 August 2005). Description based on de Lange & Heenan (1997).

REFERENCES AND FURTHER READING

de Lange PJ, Heenan PB. 1997. *Carex ophiolithica* (Cyperaceae): a new ultramafic endemic from the Surville Cliffs, North Cape, New zealand. *New Zealand Journal of Botany 35*: 429–436. https://doi.org/10.1080/0028825X.1987.10410167.

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-ophiolithica/