

Carex perplexa

COMMON NAME

Surville Cliffs bastard grass

SYNONYMS

Uncinia perplexa Heenan et de Lange

FAMILY

Cyperaceae

AUTHORITY

Carex perplexa (Heenan et de Lange) K.A.Ford

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

CHROMOSOME NUMBER

2n = 132

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: OL

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: OL

2009 | Threatened – Nationally Critical | Qualifiers: CD, OL

2004 | Threatened – Nationally Critical

DISTRIBUTION

Endemic. North Island, North Cape, Surville Cliffs, where it is only known from one small area of the 120 ha exposure of ultramafic rock.

HABITAT

Ultramafic rock and talus in shaded sites under pohutukawa (*Metrosideros excelsa* Sol. ex Gaertn.) trees. Usually found growing with *Carex ophiolithica* de Lange et Heenan.



In cultivation ex Surville Cliffs. Photographer: Jeremy R. Rolfe, Date taken: 26/10/2007, Licence: CC BY.



In cultivation ex Surville Cliffs. Photographer: Jeremy R. Rolfe, Date taken: 26/10/2007, Licence: CC BY.

DETAILED DESCRIPTION

Tufted sedge of ultramafic habitats forming large, spreading clumps. **Culms** 400–500 × 0.7–0.9 mm, glabrous, trigonous, > leaves; leaf-sheaths 30 mm or less, yellow-brown, nerves light brown. **Leaves** 6–11 per culm, 200–550 × 2–5 mm, weakly channelled, green; upper surface keeled, keel scabrid, margin scabrid, apex acute, trigonous, scabrid. **Spikes** linear, up to 55 mm long, 2–3 mm wide, usually subtended by 1 leaf-like bract 15–95 × 0.2–1.2 mm; female florets proximal, 15–24, internodes 3.5 mm long at spike base decreasing to 0.6 mm above; male florets distal, 15–20, overlapping. **Glumes**: male glumes 3.5–4 × 1 mm, narrow elliptic-lanceolate, light brown; female glumes 3.5–4 × 1–1.2 mm, elliptic lanceolate to narrow elliptic, deciduous, light brown. **Utricles** 4.2–4.3 × 1.2–1.3 mm, planoconvex, ovate to elliptic, glabrous, light brown. **Nuts** 2.2–2.4 × 1–1.2 mm, oblong, light green to silver-green.

SIMILAR TAXA

Carex perplexa appears to be most closely related to *C. uncinata* L.f.. This is a larger plant with longer spikes (up to 200 mm long), more female flowers per spike (60–120), and with larger fruits (utricle) and glumes. *Carex uncinata*, in common with all other New Zealand hook sedges except *C. subtilis* K.A.Ford and *C. parvispica* K.A.Ford (which have 2n = 94, 96 chromosomes respectively), has 2n = 88 chromosomes.

FLOWERING

December

FRUITING

January–April

PROPAGATION TECHNIQUE

Very easy from divisions of whole plants and from seed. However plants are slow growing and inclined to die unless fertilised frequently with a magnesium rich fertiliser.

THREATS

Currently this species is confined to a single remnant stand of forest on the Surville Cliffs. This forest remnant is a survivor from past fires which all but destroyed the forest of the ultramafic zone at North Cape. *Uncinia perplexa* dislikes strong sun and so is vulnerable to the loss of the associated pohutukawa forest. The main threat to this forest is continuing browse from possums but fire is also a serious risk. Some weeds such as pampas grass (*Cortaderia selloana* (Schult. et Schult.f.) Asch. et Graebn.) and prickly hakea (*Hakea sericea* Schrad. et J.C.Wendl.) also pose a risk through potential competition should they become better established at North Cape.

ETYMOLOGY

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

perplexa: From the Latin per (completely) and plectare (to entwine), referring to the entangled nature of the relationship among the species

WHERE TO BUY

Not commercially available. However plants are held by one University and by Landcare Research.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange & March 2004. Description modified from Heenan & de Lange (2001).

REFERENCES AND FURTHER READING

Heenan PB, de Lange PJ. 2001. A new, dodecaploid species of *Uncinia* (Cyperaceae) from ultramafic rocks, Surville Cliffs, Northland, New Zealand. *New Zealand Journal of Botany* 39(3): 373–380.

<https://doi.org/10.1080/0028825X.2001.9512743>.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/carex-perplexa/>