



Southland Carex species, Vol1



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Made on the New Zealand Plant Conservation Network website: www.nzpcn.org.nz

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INTRODUCTION

This book was compiled from information stored on the website of the New Zealand Plant Conservation Network (www.nzpcn.org.nz).

This website was established in 2003 as a repository for information about New Zealand's threatened vascular plants. Since then it has grown into a national database of information about all plants in the New Zealand botanic region including both native and naturalised vascular plants as well as non-vascular plants and fungi.

Funding to develop the website was provided by the New Zealand Government's Terrestrial and Freshwater Biodiversity Information System Programme (TFBIS). The website is run by a team of volunteers and is continually improving in both the richness of content and the range of functions it offers.

The species information used on the website has come from a variety of sources which are cited at the bottom of a species page.

Where no published treatment was available Peter used herbarium specimens and his own knowledge of the flora to prepare species pages. Various other contributors have provided text and additional information to many species pages including botanists such as John Barkla, Cathy Jones, Simon Walls, Nick Singers, Mike Thorsen and many others. The threatened fungi text was written by Eric Mackenzie and Peter Buchanan (Landcare Research) and aquatic plant information was supplied by Paul Champion from NIWA. Colin Ogle has contributed to the exotic species fact sheets.

More than 200 photographers have kindly provided images to illustrate the website and for use in this book especially John Smith-Dodsworth, Jeremy Rolfe, Peter de Lange, Wayne Bennett and Gillian Crowcroft, Mike Thorse, Colin Ogle and John Sawyer.

THE NEW ZEALAND BOTANIC REGION

The information on the Network website, from which this book was compiled, is for species that are indigenous to or naturalised within the New Zealand Botanic Region as defined by Allan (1961). The New Zealand botanic region encompasses the Kermadec, Manawatawhi/Three Kings, North, South, Stewart Island/Rakiura, Chatham, Antipodes, Bounties, Snares, Auckland Campbell island/Motu Ihupuku and Macquarie.

ABOUT THE NETWORK

The Network has more than 800 members worldwide and is New Zealand's largest non-governmental organisation solely devoted to the protection and restoration of New Zealand's indigenous plant life.

The vision of the New Zealand Plant Conservation Network is that *'no indigenous species of plant will become extinct nor be placed at risk of extinction as a result of human action or indifference, and that the rich, diverse and unique plant life of New Zealand will be recognised, cherished and restored'*.

Since it was founded in 2003 the Network has undertaken a range of conservation initiatives in order to achieve its vision.

That work has included:

- Training people in plant conservation
- Publishing plant books, reports and posters
- Raising money for the David Given Threatened Plant Research Trust to pay for plant conservation research scholarships
- Educating people about plant life through the Network website
- Connecting people through our website, the monthly newsletter, the Network conference and the annual general meeting

WHAT IS A THREATENED PLANT?

The NZ Threatened Plant Committee was formed in 1991 and ever since then it has met at regular intervals to review the status of indigenous vascular plants. It is made up of a team of botanists that between them have an extensive knowledge of the native plants of New Zealand.

This committee applies a set of criteria to each native plant to determine its conservation status. The resulting list of species classified as threatened is published in the NZ Journal of Botany (see for example [de Lange et al. 2018](#)). The main threat categories used are: Extinct, Nationally Critical, Nationally Endangered and Nationally Vulnerable, Declining. Other categories used are: Recovering, Relict, Naturally Uncommon, Coloniser, Vagrant and Data Deficient. For vascular plants the threat status used in this book is taken from the ['Conservation status of New Zealand indigenous vascular plants, 2017'](#) by [de Lange et al. \(2018\)](#).

Recently other committees have been established to review the status of non-vascular plants and have produced assessments for New Zealand mosses ([Rolfe et al., 2016](#)) as well as horworts and liverworts ([de Lange et al., 2015](#)).

Carex acicularis

COMMON NAME

Sedge

SYNONYMS

Carex inconspicua Col.

FAMILY

Cyperaceae

AUTHORITY

Carex acicularis Boott in Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARACI

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. North, South and Stewart Islands. In the North Island confined to the main axial Mountains from the Raukumara Range South including the Volcanic Plateau. In the South and Stewart Islands widespread.

HABITAT

A montane to subalpine (sometimes coastal in the southern part of its range) sedge of wet open stony ground, damp seepages in scrub or forest or within tussock grassland.

FEATURES

Diminutive, shortly rhizomatous, swarding yellow-green to dark green, sedge forming small tufts and mats amongst stones and in damp depressions within forest and tussock grassland. Culms 20–200 x 0.5 mm, terete, smooth; basal sheaths chestnut-brown or yellow-brown. Leaves slightly < culms (occasionally overtopping them), 0.5 mm wide, hair-like, plano-convex, canaliculated, strict, yellow-green to dark green, margins scabrid towards the obtuse apex. Inflorescence solitary. Spike 5 mm long, the lowermost glume bracteate, female flowers 2–6, equally or overtopping male flowers. Glumes longer than or of equal length to utricles, ovate, acute, brown with green midrib. Utricles 3–5 x 1 mm, lanceolate. Smooth; tapering to a dark beak 1–2 mm long with distinctly scabrid margins and oblique crura; stipe 1 mm long. Stigmas 3. Rhachilla enclosed within utricle, 2–2.3 mm long, linear, margins scabrid, apex surmounted by a minute, red appendage. Nut 2 mm long, oblong-trigonous, smooth.



Lake Sylvester. January. Photographer: John Smith-Dodsworth



Mount Ruapehu. Feb 2012. Photographer: Jeremy Rolfe

SIMILAR TAXA

Most closely allied to *C. allanii* Hamlin (which many regard as a form of *C. acicularis*) and *C. enysii* Petrie. From *C. enysii* it is best recognised by the distinctly scabrid rather than smoothly glabrous utricle beak, while it is chiefly distinguished from *C. allanii* by its shortly creeping, closely tufted habit, lanceolate rather than subtrigonus utricles, and longer (1-2 mm vs. 1 mm) beak. The nut of *C. allanii* is < 2 mm long, obovoid-trigonus while that of *C. acicularis* is 2 mm long and oblong-trigonus. Further study is needed to determine if *C. allanii* is truly distinct from *C. acicularis*.

FLOWERING

October - December

FRUITING

October - June

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown from rooted pieces and fresh seed. But fairly slow-growing and does better in cooler climates. Does not like humidity

ETYMOLOGY

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

acicularis: Needle-like, needle-shaped, stiff or pointed

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex acicularis* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-acicularis/> (Date website was queried)

MORE INFORMATION

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

Carex appressa

COMMON NAME

Southern cutty grass, tussock sedge

SYNONYMS

Carex appressa R.Br. var. *appressa*; *Carex paniculata* L. var. *appressa* (R.Br.) Cheeseman

FAMILY

Cyperaceae

AUTHORITY

Carex appressa R.Br.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARAPP

CHROMOSOME NUMBER

2n = 60-62

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. North Island (Cook Strait region only), South Island (scattered, more common in the southern regions), Stewart, Chatham, Antipodes, Auckland and Campbell Islands. Also New Caledonia, Australia and New Guinea. Naturalised around Auckland City.

HABITAT

Mostly coastal, extending to montane in the subantarctic islands. Preferring open situations, usually on the margins of peat bogs or peaty, slow-flowing streams.



Carex appressa. Photographer: Jeremy Rolfe



Enderby Island. Photographer: John Barkla

FEATURES

Stout, rhizomatous sedge, forming robust, harsh and rigid, dark green tussocks. Culms 0.2–1.4 m tall, 3.0–6.5 mm wide, acutely trigonous, angles prominently scabrid above; basal sheaths shining, light to dark grey-brown, rarely purple-brown. Leaves usually > culms, 3–7 mm wide, channelled, stiffly erect, immature leaves with pungent apices, margins and keel very scabrid. Inflorescence an erect, elongated, mostly compact, stiff panicle 60–250 x 10–30 mm, usually interrupted below, branchlets us. < 35 mm long, more crowded above, appressed to inflorescence axis. Spikes 5–6 mm long, red-brown, ovoid, androgynous, male flowers terminal. Glumes slightly < utricles, ovate, acute, often furnished with a short scabrid mucro, brown with lighter brown midrib. Utricles c.2.5–3.5 x 1.5 mm, plano-convex, conspicuously many-nerved, dark brown; tapered to a beak 1.0–1.5 mm long, margins distinctly toothed, orifice bifid; sharply constricted to a narrow stipe 2–4 mm. long. Stigmas 2. Nut c.1.5 mm. long, plano-convex, oblong-obovoid, light or dark brown.

SIMILAR TAXA

Carex appressa most closely resembles *C. virgata* Sol. ex Boott, especially as the inflorescence of both species is a stiffly erect contracted panicle, further, both species have similar distinctly nerved utricles. However, *C. virgata* has more slender culms, narrower leaves and paler brown, less dense-flowered panicles. In *C. appressa* the utricles are > 2.5 mm long while those of *C. virgata* are < 2.5 mm long.

FLOWERING

September - December

FRUITING

December - June

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 whole plants. Will tolerate most conditions but does best in full sun in a permanently damp soil. Rather variable and some horticultural selection is warranted. The typical form with stiffly erect, densely compacted inflorescences is perhaps the most attractive.

ETYMOLOGY

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

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (110 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington. On the Chatham Islands *C. appressa* appears to intergrade with, or hybridise with *C. virgata*.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex appressa* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-appressa/> (Date website was queried)

MORE INFORMATION

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

Carex astricta

COMMON NAME

Bastard Grass, Hook Sedge

SYNONYMS

Uncinia caespitosa Boott, *Uncinia caespitosa* Boott var. *collina* Petrie

FAMILY

Cyperaceae

AUTHORITY

Carex astricta K.A.Ford

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

UNCCAE

CHROMOSOME NUMBER

2n = 88

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

New Zealand: North, South and Stewart Islands from about the Hauhangaroa and Raukumara Range south

HABITAT

Montane forest, forest margins and damp sites within grassland. Descending to sea level in southern part of its range

FEATURES

Weakly tufted, dark green to yellow-green plants. Culms 40.0-400.0 × 0.5-1.0 mm, glabrous; basal bracts dull dark brown or chestnut-brown. Leaves 6-11 per culm, < or = culms, 2-4 mm wide, rather stiff, often curved, dark green to yellow-green, rather flat but with midrib evident on abaxial surface, scabrid on margins and adaxial surface. Spikes 25-90 mm long, often bracteate, subclavate, 4-5 mm diameter in the female portion of spike, male portion more slender, usually conspicuous, c.2 mm diameter and 1/3-1/4 the length of the whole spike; female flowers 10-35, almost all closely crowded, internodes 1-5 mm long. Glumes > utricles in lower part of spike, = utricles above, deciduous, ovate or subulate, acute or acuminate, membranous, greenish brown or light brown, usually striated, midrib green with 3 distinct nerves, later becoming dark brown. Utricles 5.0-7.0 × 1.5-2.0 mm, trigonous, broadly ovoid, 1.0-1.5 mm long, beak 1-2 mm long.

SIMILAR TAXA

Carex astricta shares with C. crispa K.A.Ford and C. horizontalis (Colenso) K.A.Ford brownish glumes which in the lower part of the spike are longer than the utricles. It differs from Carex crispa by its virtual restriction to forested habitats, by the leaf apices which are flat rather than curled/twisted (cirrhose) and by the dull rather than shiny utricles. From Carex horizontalis it differs by its preference for forested rather than tussock grassland and herbfield habitats, yellow-green to dark-green rather than bright green leaves with flat, rather than v-shaped leaf apices, and spikes which are greater than 40 mm long rather than 30 mm or less.

FLOWERING

October - November

FRUITING

November - April

PROPAGATION TECHNIQUE

Easily grown from fresh seed and by division of established plants - though these may take a while to settle. Prefers moist soil in a semi-shaded site. However, once established will tolerate a wide range of conditions except waterlogging.

ETYMOLOGY

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

WHERE TO BUY

Not Commercially Available.

ATTRIBUTION

Description adapted from Moore and Edgar (1970). Fact sheet prepared by Peter J. de Lange 17 August 2006.

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

CITATION

Please cite as: de Lange, P.J. (Year at time of access): Carex astricta Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-astrecta/> (Date website was queried)

MORE INFORMATION

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

Carex berggrenii

COMMON NAME

Berggren's Sedge

SYNONYMS

None

FAMILY

Cyperaceae

AUTHORITY

Carex berggrenii Petrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARBER

CHROMOSOME NUMBER

2n = 60

CURRENT CONSERVATION STATUS

2018 | At Risk – Declining

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

DISTRIBUTION

Endemic. North and South Islands. In the North Island restricted to the Central Ranges where it is known from one site in the Moawhango. In the South Island mainly easterly from Lake Tennyson south. Apparently not known from Marlborough or Westland

HABITAT

A montane to subalpine (rarely lowland in the southern part of its range) wetland species inhabiting lake, tarn, pond, and stream side margins. It has also been collected from turfs bordering ephemeral wetlands.



Photographer: John Barkla



Caples Valley. Photographer: John Barkla

FEATURES

Shortly rhizomatous, tufted dark purple red, wine-red, or orange red, tufted, small sedge. Culms 15-30 mm long, glabrous, terete, distinctly flattened above, almost completely enclosed by light brown leaf-sheaths. Leaves 30-60 x 1-2.5-3 mm, linear, concavo-convex, almost flat, nerves very distinct, margins not usually scabrid except towards the rather bluntly obtuse apex. Spikes 3-4(-6); terminal spike male, distinctly pedunculate; remaining spikes female, 5-8 mm long, ovate, sessile or shortly pedunculate, crowded at same level round base of male spike; leaf-like subtending bracts > inflorescence. Glumes rather < utricles, ovate, cuspidate, or entire and obtuse, membranous, red-brown with a paler brown midrib. Utricles 2-3 x 1.5 mm, biconvex or rarely subtrigonus, elliptic-oblong, turgid, red-brown to dark red-purple above, yellow below. Distinctly nerved at first, smooth at maturity, margins glabrous; beak minute with the scabrid crura very shortly bifid to almost truncate; stipe 0.2 mm long, stout. Stigmas 2-3. Nut 1.5 mm long, trigonus.

SIMILAR TAXA

The remarkable broadly concavo-convex almost flat leaves with the distinctively bluntly obtuse leaf tips are unique to this species in New Zealand. Its nearest relatives would seem to be *C. decurtata* Cheeseman and *C. hectorii* Petrie. From *C. decurtata*, *C. berggrenii* differs by broadly concavo-convex flat leaves which taper little (if at all) toward the obtuse tip and from *C. hectorii* by its purple red, wine-red, or orange red, broad obtuse tipped leaves. From both *C. decurtata* and *C. hectorii*, *C. berggrenii* further differs by its utricle colour which is characteristically red-brown to dark red-purple above, yellow below, rather than light brown (*C. decurtata*) or dark brown (*C. hectorii*).

FLOWERING

October - February

FRUITING

October - June

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown in small pots doing best in pots that are partially submerged in water. Can be grown in a rockery, provided it is kept damp and free from competition. An attractive sedge which deserves to be more widely cultivated than it currently is.

THREATS

A biologically sparse species which is not so much threatened as nationally uncommon. However, some populations are now at risk through competition from taller and faster growing wetland weed species.

ETYMOLOGY

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

ATTRIBUTION

Description adapted from Moore and Edgar (1970).

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.
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

MORE INFORMATION

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

Carex breviculmis

COMMON NAME

Grassland sedge

SYNONYMS

None

FAMILY

Cyperaceae

AUTHORITY

Carex breviculmis R.Br.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARBRE

CHROMOSOME NUMBER

2n = c.64

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous, North and South Islands. Also Australia, New Guinea, Lord Howe and Norfolk Islands

HABITAT

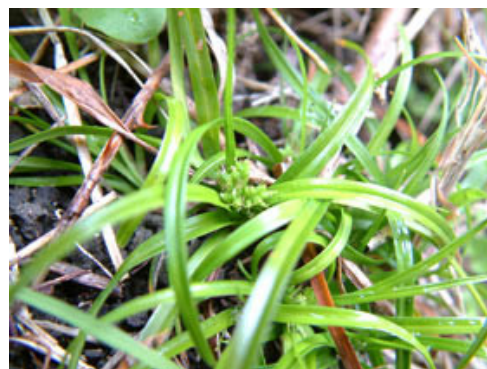
Coastal to montane. Usually in open grassland, gum land scrub, clay pans, on rock stacks, and talus slopes and other similar sparsely vegetated sites.

FEATURES

Shortly rhizomatous; tufted sedge usually forming low-growing, close-packed, bright green patches. Culms hidden among leaves, usually 10-20 mm long; basal sheaths dull brown. Leaves much > culms, 1.5-3.0 mm wide, grass-like, recurved, channelled, margins exceedingly finely and closely scabrid almost throughout. Spikes 2-5, approximate, pale green; terminal spike male, usually sessile; remaining spikes female, occasionally with a few male flowers at the top, 6-9 mm long, ± pedunculate, clustered round base of male spike; subtending bracts leaf-like, very narrow-linear, the uppermost almost filiform, margins finely scabrid. Glumes > utricles, ovate, pale green, almost white, membranous, midrib green, stiff, thickened, produced to a stout, finely hispid awn. Utricles c.2.5 × 1.0 mm, biconvex or subtrigonal, fusiform, pale yellow-green, faintly many-nerved, pubescent all over; beak slightly narrowed, pale green, c.0.5 mm long, orifice ± truncate; stipe c.0.3 mm long, often much contracted. Stigmas 3. Nut c.1.5 mm long, obtusely trigonal, oblong, obovoid, light brown, surmounted by a minute, persistent, dilated style-base.



Whitianga, March. Photographer: John Smith-Dodsworth



Long Bay, Coromandel. Sept. Photographer: John Smith-Dodsworth

SIMILAR TAXA

Carex breviculmis is one of the earliest flowering New Zealand species and is immediately recognised by its palen-green, faintly nerved, pubescent utricles.

FLOWERING

August - December

FRUITING

October - May

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 division of established plants. In ideal conditions this species sometimes naturalises in urban areas but it is never invasive. Tolerant of a wide range of conditions except permanently waterlogged soils. However does best in full sun in a free draining soil.

ETYMOLOGY

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

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (110 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex breviculmis* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-breviculmis/> (Date website was queried)

MORE INFORMATION

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

Carex buchananii

COMMON NAME

Buchanans sedge, cutty grass

SYNONYMS

Carex tenax Bergg.; *Carex lucida* Boott var. *buchanani* (Bergg.) Kük.

FAMILY

Cyperaceae

AUTHORITY

Carex buchananii Bergg.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARBUC

CHROMOSOME NUMBER

2n = 60

CURRENT CONSERVATION STATUS

2018 | At Risk – Declining

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North and South Islands. In the North Island uncommon. Known there only from scattered sites south of the Manawatu. In the South Island more widespread and at times locally common, though often sporadically distributed, and apparently absent from Westland and Fiordland. Scarce in Southland. Naturalised in Auckland City. Recorded as naturalised in the United Kingdom.

HABITAT

Coastal to montane (up to 1000 m a.s.l.). On beaches, lagoon, lake and stream margins, or in damp ground within open forest or short tussock grassland.



Carex buchananii. Photographer: John Barkla



Carex buchananii. Photographer: John Barkla

FEATURES

Densely tufted, strict, reddish brown, rarely yellow-green, sedge arising from an ascending rhizome c.3 mm diameter. Culms 70.0–900.0 × 0.5–1.5 mm. erect, rarely elongating to 1.2 m and becoming prostrate, semiterete, smooth and shining, basal sheaths dark red-purple, almost black. Leaves = or slightly > culms, c.1.0–1.5 mm wide, plano-convex, often semiterete, erect, wiry, linear, gradually narrowed and flattened towards the acute, occasionally cirrhose apices, smooth and shining, reddish or green on the back, upper surface matt, pale cream, margins scaberulous towards the base, more strongly serrulate towards the tip, sheath not much broader than lamina and of similar texture, with finely membranous margins. Spikes 5–6, silvery, distant, or the upper spikes approximate, sessile or the lowest slightly pedunculate; uppermost 1(–2) spikes male, cylindrical; lower spikes female, 5–30 × 3–4 mm., oblong, occasionally with a few male flowers at the base; bracts subtending lower spikes lf-like, much > inflorescence. Glumes (excluding awn) < or = utricles, ovate, acute, white and membranous, with a stronger midrib and long scabrid awn. Utricles 2.5–3.0 mm long, slightly > 1 mm wide, plano-convex, elliptic-ovoid, pale cream at the base with dark brown to purple-black splotches above or occasionally entirely pale green, faintly nerved, margins scabrid above, abruptly narrowed to a pale slender, recurved, deeply bifid beak, 0.5–1.0 mm long, margins ciliate-serrate, orifice scabrid, stipe minute. Stigmas 2. Nut c.1.5 mm, long, plano-convex to almost biconvex, obovoid, tapering towards the base, brown.

SIMILAR TAXA

A very distinct and singular species easily recognised by the mostly reddish brown culms and leaves, rather tall, stiffly erect tufted habit, plano-convex often semiterete leaves, membranous, colourless glumes and usually dark-coloured utricles. The scabrid-beaked utricles resemble those of *Carex albula* Allan and *C. comans* Bergg., much smaller species from which *C. buchananii* differs by its taller, stiffly erect culms and leaves, and two rather than three stigmas.

FLOWERING

October - December

FRUITING

November - June

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 whole plants. Will tolerate most conditions, but does best in full sun in a permanently damp soil. In ideal conditions this species often naturalises, and it can at times become invasive. Next to *C. comans* this is one of the most commonly cultivated indigenous sedges.

ETYMOLOGY

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

buchananii: Named after John Buchanan (13 October 1819–1898) who was a New Zealand botanist and scientific artist and fellow of the Linnean Society.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex buchananii* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-buchananii/> (Date website was queried)

MORE INFORMATION

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

Carex capillacea

COMMON NAME

Sedge

SYNONYMS

Carex rara subsp. *capillacea* (Boott) Kük., *C. wallii* Petrie

FAMILY

Cyperaceae

AUTHORITY

Carex capillacea Boott

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARCAP

CHROMOSOME NUMBER

2n = c.60

CURRENT CONSERVATION STATUS

2018 | Threatened – Nationally Vulnerable

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: SO, Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

DISTRIBUTION

Indigenous. North and South Islands. In the North confined to the Volcanic Plateau (the Waimarino Plain), and the Moawhango. In the South Island more widespread from Nelson and western Marlborough south to Lakes Te Anau, Manapouri, Hauroko and east to Lumsden. Probably more widespread as it is easily overlooked. Also known from Australia, New Guinea, Malesia, China, Japan and India.

HABITAT

Favouring cushion bog, sphagnum bog, seepages, flushes and the margins of ponds, pools, tarns and on seasonally flooded river terraces within montane forest, scrub, and tussock grassland.



In cultivation. Oct 2007. Photographer: Jeremy Rolfe



In cultivation. Oct 2007. Photographer: Jeremy Rolfe

FEATURES

Diminutive, shortly rhizomatous, somewhat flaccid, tufted, matted bright green to yellow-green sedge of damp forest hollows, river terrace wetlands and cushion bogs. Culms 4-10-30 x 0.5-0.7 mm, usually curved (sickle-shaped), plano-convex to terete, smooth; basal sheaths light brown or grey-brown. Leaves < culms, up to 0.5 mm wide, plano-convex to involute, yellow-green, glossy, margins finely scabrid near the acute apex. Inflorescence solitary, terminal spike 5-8 x 3-4 mm, ovate, usually ebracteate, sometimes with the lowermost glume bractiform; female flowers 6-10(-12), male flowers in a terminal spikelet 3 mm long. Glumes < utricles, ovate, obtuse, pale brown, midrib green. Utricles 2 x 1 mm, plano-convex or biconvex, ovoid, green, membranous, nerved, margins glabrous, beak c.0.5 mm long, crura truncate or notched, glabrous, stipe absent or wanting. Stigmas 3. Nut 1.5 mm long, pale cream, bluntly trigonous, ovoid, surface distinctly reticulate pitted; style-base persistent.

SIMILAR TAXA

Within the New Zealand species *C. capillacea* is the only species placed within Section Capitellatae of Subgenus *Carex* and of all the New Zealand carices it is most likely to be confused with the four species of Subgenus *Primocarex* (*C. acicularis* Boott in Hook.f., *C. enysii* Petrie, *C. allanii* Hamlin and *C. pyrenaica* var. *cephalotes* (F.Muell.) Kük.) all of which possess a unispicate inflorescence. From these carices *C. capillacea* is readily distinguished by its bright-green to yellow-green, somewhat flaccid, matted habit, and by the sessile, membranous utricles which are rarely longer than 2 mm. As the spikelet is usually ebracteate it could be confused with *C. pyrenaica* var. *cephalotes* but that species has distinctly coriaceous, stipitate utricles 2.5-5 mm long.

FLOWERING

October - December

FRUITING

October - July

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown from rooted pieces, divisions of whole plants, and fresh seed. An attractive small sedge with rather unusual solitary spikes. Does best in a small pot kept permanently moist. Dislikes prolonged dry conditions and humidity.

THREATS

Biologically sparse and naturally uncommon. This species has a somewhat disjunct distribution. It does not appear to be threatened at the majority of the known sites but it is vulnerable to competition from weeds.

ETYMOLOGY

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

capillacea: From the Latin *capillus* 'hair' or 'thread', meaning hair-like or thread-like

ATTRIBUTION

Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

MORE INFORMATION

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

Carex carsei

COMMON NAME

Carse's sedge

SYNONYMS

None

FAMILY

Cyperaceae

AUTHORITY

Carex carsei Petrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CRXCAR

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2018 | At Risk – Declining

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: DP

2009 | At Risk – Declining | Qualifiers: DP

2004 | Data Deficient

DISTRIBUTION

Endemic. In the North Island known from near Lake Taupo, and wetlands around Tongariro National Park. In the South Island throughout in suitable habitats, though scarce in Canterbury, Otago and Fiordland.

HABITAT

An sub alpine to alpine sedge of boggy ground, mires, and wet forest clearings.

FEATURES

Rhizomatous sedge, forming dense, grassy swards in swampy places. Rhizomes 1 mm diameter, light brown or grey. Culms 2.5-89.5(-25) cm × 0.5-1 mm, 3-angled (trigonous) or compressed below, stiff, erect, hairless, enclosed for much of length by grey or cream leaf-sheaths. Leaves culms, 1-2.5 mm wide, channelled, grass-like, yellow-green, linear, narrowed to a subobtuse tip, margins finely scabrid (toothed). Inflorescence of 3-5 spikes, clustered together in a compact head, terminal spike male, small, unstalked, remaining spikes female, stalked, overtopping male 1-1.5 cm long. Glumes much < than utricles, broadly ovate, acute, membraneous, faintly multi-nerved, pale yellow-brown with a green midrib. Utricles 7-8.5 × 2 mm, plano(flat)-convex to subtrigonous, narrowly lanceolate, multi-nerved, light green to greenish-brown, hairless, tapering to a 3-3.5 mm long beak. Beak bifid, with a finely scabrid orifice. Stigmas 3. Nut 2 mm long, obtusely 3-angled, obovoid, glossy, light yellow-green.



Photographer: Shannel Courtney



Photographer: Cathy Jones

SIMILAR TAXA

Carex carsei is a very distinctive species unlikely to be confused with any other indigenous or naturalised sedge.

FLOWERING

No information available

FRUITING

No information available

PROPAGATION TECHNIQUE

Easily grown by division and from fresh seed.

THREATS

Carex carsei has very few recent (>1980) collections

ETYMOLOGY

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

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): Carex carsei Fact Sheet (content continuously updated).

New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-carsei/> (Date website was queried)

MORE INFORMATION

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

Carex cheesemaniana

COMMON NAME

Hook Sedge, Bastard Grass

SYNONYMS

Uncinia compacta R.Br. var. *nervosa* (Boott) C.B.Clarke; *Uncinia cheesemanniana* Boeck; *Uncinia nervosa* Boott

FAMILY

Cyperaceae

AUTHORITY

Carex cheesemaniana (Boeckeler) K.A.Ford

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

UNCNER

CHROMOSOME NUMBER

2n = 88

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: South Island. Also Tasmania

HABITAT

A local to locally common species of wet ground and bogs in montane forest or in subalpine to alpine snow-tussock (*Chionochloa*) grassland.



Mount Roberts. Photographer: Jeremy Rolfe from a specimen collected by Graeme Jane.



Mount Roberts. Photographer: Jeremy Rolfe from a specimen collected by Graeme Jane.

FEATURES

Bright to dark green, lax or densely caespitose plants. Culms 100-300 mm long, usually slightly < but occasionally > 0.5 mm diameter, glabrous; basal bracts dull grey-brown. Leaves 4-6 per culm, slightly < flowering culms, much < mature culms, c.0.5 mm wide, plano-convex or concavo-convex, rigid, linear, scarcely narrowed to the obtuse tip, margins scabrid. Spikes 15-30 × 2-6 mm, oblong, female flowers 2-12, ± close-set, internodes 1.5-4.0 mm long. Glumes < or > utricles, deciduous, lanceolate, subacute, sides membranous, midrib green. Utricles 4-6 × c.1 mm, trigonous, elliptic-lanceolate, greenish brown to dark brown, lateral nerves prominent, shining, very slightly contracted to a broad stipe c.1 mm long, beak 1.0-1.5 mm long

FLOWERING

November - January

FRUITING

December - March

PROPAGATION TECHNIQUE

Easily grown from fresh seed and the division of whole plants. Prefers cool, damp ground but once established will tolerate drought. Excellent in semi-shade.

ETYMOLOGY

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

Taxonomic Notes

The epithet '*cheesemanniana*' (Global *Carex* Group 2015) based on *Uncinia cheesemanniana* Boeckeler is an orthographic error here corrected to '*cheesemania*' (see Art. 60, International Code of Nomenclature, Melbourne Code, 2011) - <http://www.iapt-taxon.org/nomen/main.php?page=art60>

ATTRIBUTION

Description adapted from Moore and Edgar (1970). Fact sheet prepared by Peter J. de Lange 17 August 2006.

REFERENCES AND FURTHER READING

Global *Carex* Group 2015: Making *Carex* monophyletic (Cyperaceae, tribe Cariceae): a new broader circumscription. *Botanical Journal of the Linnean Society* 179: 1-42
Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex cheesemania* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/carex-cheesemania/> (Date website was queried)

MORE INFORMATION

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

Carex cirrhosa

COMMON NAME

Curly Sedge

SYNONYMS

Carex cirrhosa var. *lutescens* Kük. in Cheeseman

FAMILY

Cyperaceae

AUTHORITY

Carex cirrhosa Bergg.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARCIR

CHROMOSOME NUMBER

2n = 68

CURRENT CONSERVATION STATUS

2018 | Threatened – Nationally Endangered

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: DP, RR

2009 | Threatened – Nationally Vulnerable

2004 | Gradual Decline

DISTRIBUTION

Endemic. North, South Island - mainly easterly. In North Island very local from Lake Whangape (near Huntly) to Lake Wairarapa. In the South Island in scattered sites from about North Canterbury to Southland.

HABITAT

Lake, pond and tarn margins - preferring low marginal turf in sites subjected to seasonal inundation.

FEATURES

Tufted sedge forming dense wine red, silvery-grey or yellow-green tussocks. Culms 100-400 mm long, enclosed by light brown leaf sheaths. Leaves 25-200 X 0.5-1.0 mm, basally wine-red, apically silvery-grey, narrow-linear, concavo-convex, margins incurved, scabrid, tip strongly curled and twisted. Inflorescence of 2-5 spikes buried within basal portion of plant; terminal 1-2 male, lower 1-3 female crowded round base of male spikes, 3-8 X 2 mm, lower most spikes often distant, pedunculate, bracts subtending female spikes leaf-like, > spikes. Glumes slightly < utricles, or = to urticule length if awned, ovate-lanceolate, acuminate, cuspidate, hyaline, white or pale pink, midrib often green. Utricles 2.0-3.0 X 1.0-1.5 mm, plano-convex, elliptic-ovoid, yellow-green in lower half and on beak, pinkish brown otherwise, nerved, sessile, margins smooth or minutely scabrid, abruptly narrowed to an acute bidentate beak 0.5 mm, crura scabrid. Stigmas 2. Nut 1.5 mm, biconvex, oblong-ovoid, brown. Flowering. October-January Fruiting. November-February.



Spikelet. In cultivation. Oct 2007. Photographer: Jeremy Rolfe



Showing spikelets, Lake Rerewhakaaitu. Photographer: John F. Hobbs

SIMILAR TAXA

Easily recognised by the tufted, non rhizomatous growth form and by the distinctly cirrhose (curled) which are wine-red for the lower third and then silvery white for the rest of their length. The spikelets are found hidden within the foliage toward the lower third of the culm. It is perhaps closest to *C. rubicunda* which differs by its much smaller size, wider blunt-ended leaves, and smooth or faintly nerved utricles which are < 2 mm long, and narrowed to a minute 0.3 mm long beak.

FLOWERING

No information available

FRUITING

No information available

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easy from fresh seed and the division of whole plants. Prefers moist soils, with a sunny aspect, free from weeds.

THREATS

Habitat loss as a consequence of taller and faster growing weeds encroaching on the lake side marginal turf communities this sedge evidently prefers. This species is also threatened by changes in lake levels and seasonal water regimes as a consequence of dams and water abstraction.

ETYMOLOGY

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

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex cirrhosa* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-cirrhosa/> (Date website was queried)

MORE INFORMATION

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

Carex comans

COMMON NAME

Sedge

SYNONYMS

Carex pulchella Bergg., *C. cheesemanii* Petrie, *C. comans* var. *pulchella* (Bergg.) C.B.Clarke in Cheeseman, *C. comans* var. *cheesemanii* (Petrie) Kük.

FAMILY

Cyperaceae

AUTHORITY

Carex comans Bergg.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARCOM

CHROMOSOME NUMBER

2n = 40

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North, South and Stewart Islands.

HABITAT

Coastal to subalpine. Usually in free draining soils either in the open or under scrub or tall forest in relatively open sparsely vegetated situations. It often naturalises in urban areas.



Female spike. In cultivation. Dec 2007.
Photographer: Jeremy Rolfe



In cultivation. Dec 2007. Photographer: Jeremy Rolfe

FEATURES

Tufts very dense, very leafy, red, yellow-green, or lime-green. Culms 60-400 mm long, < 1 mm diameter, terete, glabrous, flaccid, occasionally much elongating at maturation of fruit and drooping to the ground; basal sheaths dull brown to purple-black. Leaves usually > culms, 0.5-1.5 mm wide, drooping above, concavo-convex, adaxial surface matt, abaxial surface more deeply coloured and shining, margins scabrid, tips rarely curled. Spikes 4-8, linear-oblong; terminal 1(-2) spikes male, very slender; remaining spikes female occasionally with a few male flowers at the base, 5-25 × 3-4 mm, distant, the uppermost 1-2 sessile, the lower on filiform peduncles, often drooping. Glumes (excluding awn) often slightly < utricles, ovate-lanceolate, usually emarginate to more deeply bifid at the top with a rather short scabrid awn, light brown or reddish brown with a paler midrib, membranous. Utricles 2.5-3.5 × c.1.0 mm, unequally biconvex to ± plano-convex, lanceolate, elliptic-lanceolate or ovate-lanceolate, reddish brown, pale straw-coloured at the base, obscurely ribbed on both faces, becoming smooth when fully mature, lateral nerves usually prominent, margins of upper half sharply serrate, narrowed above to a bifid beak c.1 mm long, with slender scabrid crura. Stigmas 3. Nut 1.5-2 mm. long, trigonous, ovoid to oblong-ovoid, dark brown.

SIMILAR TAXA

Carex comans is a very distinct species easily recognised by its densely tufted growth habit, narrow, concavo-convex leaves, slender light brown pedunculate spikes and the sharply toothed utricle-beaks with long crura. It is most similar to, and most often confused with *C. albula* Allan and *C. fretailis* Hamlin (see under those species)

FLOWERING

Throughout the year

FRUITING

Throughout the year

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 division of established plants. Three colour forms exist, the red and green forms are the most widely cultivated. Often naturalises in urban areas and at times can become invasive. Tolerant of a wide range of conditions except permanently waterlogged soils. However does best in full sun in a free draining soil.

THREATS

Not Threatened - often naturalised in urban areas

ETYMOLOGY

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

comans: Like a luxurious head of hair

WHERE TO BUY

Commonly available from mainline and specialist native plant nurseries.

CULTURAL USE/IMPORTANCE

Carex comans is very variable, and red and green colour forms are known. Some confusion exists around the cultivar *C. comans* cv. Frosted Curls which, at least in the original form is actually *C. fretalis* Hamlin. However, many plants now sold as that cultivar are now the green-form of *C. comans*.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex comans* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-comans/> (Date website was queried)

MORE INFORMATION

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

Carex coriacea

COMMON NAME

Cutty grass, rautahi

SYNONYMS

Carex ternaria var. *pallida* Cheeseman, *C. ternaria* f. *pallida* (Cheeseman) Kük.

FAMILY

Cyperaceae

AUTHORITY

Carex coriacea Hamlin

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARCOR

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North, South and Stewart Islands from Pureora and the Kaingaroa Plain south. In the South Island widespread though more common on the eastern side.

HABITAT

Coastal to alpine (up to 1600 m a s.l.). Usually in damp seepages in grassland or on swampy river flats, sometimes a persistent weed in pasture.



Silica Springs. Photographer: Mike Wilcox



Silica springs track, Ruapehu. Photographer: John Smith-Dodsworth

FEATURES

Rhizomatous; summer-green perennial, in coarse yellow-green, glossy, distant tufts, 0.2-1.2 m high, borne on a hard, woody rhizome 5-12 mm diameter. Culms 1.5-3.0 mm diameter, trigonous, scabrid below inflorescence; basal sheaths membranous, grey-brown, yellow-brown or dull red-brown, margins shredding into fibres wrapped round the culm. Leaves much > culms, 4-9 mm wide, double-folded, stiff, coriaceous, hard, glossy, margins closely scabrid. Spikes 8-15, pendulous on filiform peduncles usually much > spike; 2-6 uppermost spikes male, 2-3 mm diameter, glumes hardly awned; remaining spikes female, occasionally male at the top, geminate or ternate, rarely quinate, lower spikes the longest, 20-100 × c.5 mm. Glumes (excluding awn) < utricles, narrow-ovate or obovate, with a short hispid awn, coriaceous, red-brown, margins narrow-hyaline; midrib broad, 3-nerved, light brown. Utricle 1.9-3.3 × 1.2-2.0 mm, unequally biconvex, orbicular or broadly ovoid, yellow-green or light grey-brown, green towards the tip, faintly nerved but with prominent lateral ridges, margins smooth, gradually narrowed to a short beak c.0.3 mm long, orifice entire; stipe c.0.5 mm long. Stigmas 2. Nut slightly < 1.5 mm long, c.¾ length of utricule, biconvex, orbicular or oblong-ovoid, dark brown to black.

SIMILAR TAXA

Carex coriacea is allied to *C. ternaria* Boott, *C. lessoniana* Steud. and *C. geminata* Schkuhr. From all these species it is best distinguished by the glossy, yellow-green leaves, smooth, yellow-green utricule and by the nut which is usually c.¾ the length of the utricule. Further *Carex ternaria* is confined to the Chatham and Subantarctic islands outside the range of *C. coriacea*, while ecologically *C. lessoniana* and *C. geminata* are more typical of lowland wetlands or damp sites within forest. Only rarely do the ranges of *C. lessoniana* and *C. geminata* overlap with *C. coriacea*.

FLOWERING

October - December

FRUITING

December - May

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. However, because of its extensively rhizomatous nature it needs plenty of room to spread. Although a wetland species *C. coriacea* will grow well in most soils and moisture regimes. Does best in full sun.

ETYMOLOGY

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

coriacea: Leathery

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex coriacea* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-coriacea/> (Date website was queried)

MORE INFORMATION

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

Carex corynoidea

COMMON NAME

Bastard Grass, Fish Hooks

SYNONYMS

Uncinia clavata (Kük.) Hamlin; *Uncinia australis* Pers. var. *clavata* Kük.;
Uncinia uncinata (Linn.f.) Kük. var. *clavata* (Kük.) Kük.

FAMILY

Cyperaceae

AUTHORITY

Carex corynoidea K.A.Ford

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

UNCCLA

CHROMOSOME NUMBER

2n = 88

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North and South Islands, from about the Hunua Ranges south

HABITAT

A species of montane forest, scrub and on river flats

FEATURES

Robust, dark green to yellow-green plants. Leaves 5–9 per culm, usually > culms, 4–6(–8) mm wide, strongly scabrid on the margins and on the adaxial surface towards tip. Spikes 50–140 mm long, usually bracteate, clavate, 7–10(–15) mm diameter at the top below the male spike, female flowers numerous, usually c. 65–100, very closely crowded throughout almost the whole spike, internodes 0.5–4.0mm long but up to 8 mm long at base of spike. Glumes =, > or rarely < utricles, deciduous, narrow-lanceolate, acute or acuminate, coriaceous or subcoriaceous, yellowish brown to dark brown, midrib green. Utricles 5.0–7.0 × 1.5–2.0 mm, plano-convex to subtrigonal, ovate, yellow-brown to dark brown when ripe, one to two lateral nerves prominent and lighter coloured, stipe 1.5–2.0 mm long, beak 1.5–2.0 mm long; spreading widely when ripe.



Hokonui Hills, Southland. Photographer: Pat Enright



Hokonui Hills, Southland. Photographer: Pat Enright

SIMILAR TAXA

Most closely allied to *Carex megalepis* K.A.Ford and *C. uncinata* L.f. Of both species it is most closely allied to *Carex megalepis* from which it differs by the yellow or dark brown rather than golden yellow or rust-coloured glumes which are equal to or only slightly greater in length (rather than twice as long) than the utricles, and by the widely rather than scarcely spreading utricles. *Carex uncinata* differs by the usually narrower spikes, early deciduous rather than longer lasting deciduous glumes, which are usually much shorter than the utricles

FLOWERING

October - December

FRUITING

November - April

PROPAGATION TECHNIQUE

Easily grown from fresh seed and by the division of established plants (though these may then take a while to settle). Prefers a shaded site, and should be planted within a deep, rich, free draining but permanently moist soil

ETYMOLOGY

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

WHERE TO BUY

Not Commercially Available

ATTRIBUTION

Description adapted from Moore and Edgar (1970). Fact sheet prepared by Peter J. de Lange 17 August 2006.

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex corynoidea* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-corynoidea/> (Date website was queried)

MORE INFORMATION

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

Carex demissa

COMMON NAME

Yellow sedge

FAMILY

Cyperaceae

AUTHORITY

Carex demissa Hornem.

FLORA CATEGORY

Vascular – Exotic

STRUCTURAL CLASS

Sedges

NVS CODE

CARDEM

CONSERVATION STATUS

Not assessed

BRIEF DESCRIPTION

Grass-like yellowish-green sward-forming plant, with small prickly catkins (spikes) produced along the stems in spring.

DISTRIBUTION

Scattered throughout, common in high rainfall areas such as Westland and Southland.

HABITAT

Water body margins, swamps, damp waste places and low-lying areas.

FEATURES

Tufts \pm dense. Stems variable, to 30 cm long and much $>$ leaves, but often $<$ leaves, erect or \pm flaccid, smooth, subterete. Leaves 1.5-3 mm wide, channelled, dull yellow-green; ligule notched; sheaths almost white, becoming grey. Inflorescence of one terminal pedunculate male spike and 1-4 \pm sessile, erect female spikes usually approximate at top of stem but often with a single female spike towards base of stem; subtending bracts $>$ inflorescence, flaccid. Male spike to 2 cm \times 2 mm; glumes light brown, \pm 4 mm long, obtuse, light brown. Female spikes \pm 1 cm \times 5 mm; glumes $<$ utricles, ovate, subacute, membranous, brown-tinged. Utricles \pm 3 \times 1 mm, glabrous, faintly nerved, inflated, yellow-green, obovoid, abruptly narrowed to a bifid beak to 1 mm long. Stigmas 3. Nut obovoid, trigonous.

SIMILAR TAXA

Superficially similar to many Carex species with distinct male and female spikes. Perhaps closest to the related native *C. flaviformis*, distinguished by the female spike crowded beneath the male spike, not distant as with *C. demissa*).

FLOWERING

Spring

FLOWER COLOURS

Green



Carex demissa. Photographer: Trevor James (AgResearch)



Carex demissa. Photographer: Nic Singers

FRUITING

Summer

LIFE CYCLE

Seed dispersed by contaminated machinery or waterfowl.

YEAR NATURALISED

1907

ORIGIN

Europe, eastern Canada

REASON FOR INTRODUCTION

Unknown, seed or soil contaminant.

CONTROL TECHNIQUES

Not controlled in New Zealand.

ETYMOLOGY

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

ATTRIBUTION

Factsheet prepared by Paul Champion and Deborah Hofstra (NIWA). Features description from Healy and Edgar (1980).

REFERENCES AND FURTHER READING

Champion et al (2012). Freshwater Pests of New Zealand. NIWA publication.

<http://www.niwa.co.nz/freshwater-and-estuaries/management-tools/identification-guides-and-fact-sheets/freshwater-pest-species>

Johnson PN, Brooke PA (1989). Wetland plants in New Zealand. DSIR Field Guide, DSIR Publishing, Wellington. 319pp.

MORE INFORMATION

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

Carex diandra

COMMON NAME

Sedge

SYNONYMS

None

FAMILY

Cyperaceae

AUTHORITY

Carex diandra Schrank

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARDIA

CHROMOSOME NUMBER

2n = c.60

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: North and South Islands. Uncommon in the North Island and mainly found south of the Central Volcanic Plateau. More widespread in the South Island. Also present throughout the North Hemisphere and most of the Southern Hemisphere.

HABITAT

Coastal to subalpine in open, moderately fertile to mid oligotrophic wetlands developed on river flats, within forest or in short or tall-tussock grasslands.



In cultivation ex Sedgemere Tarns. Oct 2007.
Photographer: Jeremy Rolfe



In cultivation ex Sedgemere Tarns. Oct 2007.
Photographer: Jeremy Rolfe

FEATURES

Rhizomatous; loosely tufted, non tussock-forming, pale or bright green (rarely glaucous green), sedge. Shoots arising singly from the rhizome. Rhizome c.2 mm diameter, loosely covered by dark brown sheaths, roots, fibrous, chestnut-brown; shoots approximate, 2-3 mm diameter at base including basal sheaths. Culms 150-550 × c.1 mm, wiry, trigonous, smooth below, angles scabrid above; basal sheaths dark grey-brown. Leaves < culms, 1.5-3.0 mm wide, channelled, scabrid on the edges, becoming triquetrous towards the tip. Inflorescence 15-50 mm long, a compound spike, with a few spikes distant below and ± spikes clustered above, greenish brown, rarely subtended by a leaf-like bract ± = inflorescence. Spikes c.5 mm long, androgynous, male flowers terminal. Glumes = or slightly < utricles, ovate, brown with wide membranous margins, midrib excurrent, finely scabrid in lower glumes. Utricles 3.0-3.5 × 1.5-2.0 mm, plano-convex, occasionally unequally biconvex, broadly ovoid, with short distinct nerves radiating from the base on the convex face, but smooth on the flat face, shining, dark brown; beak c.1 mm long, sub-pyramidal, light brown, margins scabrid, orifice bifid; stipe minute, c.0.2 mm long, very narrow. Stigmas 2. Nut 1.5 mm long, biconvex or subtrigonus, obovoid, very much narrowed towards the base, dull brown.

SIMILAR TAXA

Somewhat similar to *Carex secta* Boott, *C. appressa* R.Br. and *C. virgata* Sol. ex Boott but easily distinguished by the slender, wiry, loosely tufted growth habit, usually much denser spicate panicles with the males at the top, and by the ovoid, swollen long-beaked utricles that are smooth on one side but ribbed on the other.

FLOWERING

October - December

FRUITING

December - May

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. Although a wetland species *C. diandra* will grow well in most soils and moisture regimes. Does best in full sun. This species could benefit from some selection, for example, some wild forms have rather attractive glaucous foliage.

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 by P.J. de Lange (110 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex diandra* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-diandra/> (Date website was queried)

MORE INFORMATION

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

Carex dipsacea

COMMON NAME

Teasel Sedge

SYNONYMS

None

FAMILY

Cyperaceae

AUTHORITY

Carex dipsacea Bergg.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARDIP

CHROMOSOME NUMBER

2n = c.74

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North and South Islands. Widespread from about the northern Waikato South. Naturalised around Auckland City

HABITAT

Coastal to subalpine. Favours wetlands this species usually grows along rivers, lakes and ponds within sand dunes, tall forest, shrubland, and tussock grassland.



Lake Westmere, Whanganui. Feb 2013.
Photographer: Colin Ogle



Female and male (top of stem) heads. Lake Westmere, Whanganui. Feb 2013.
Photographer: Colin Ogle

FEATURES

Tufts dense, harsh, 0.25-1.00 m tall, light green, dark green, red-green or orange. Culms 0.5-2.0 mm diameter, trigonous or subtrigonous, smooth or occasionally slightly scabrid towards inflorescence; basal sheaths dark brown, red-, yellow-, or grey-brown, nerves \pm distinct. Leaves numerous, > culms, 1.5-2.5 mm wide, channelled, margins closely scabrid. Spikes 4-8, upper approximate, \pm sessile, lower 1-3 usually more distant, shortly pedunculate, erect; terminal spike male, occasionally with female flowers intermixed, remaining spikes female, often male at base; lower spikes 10-40 \times 4-6 mm, upper spikes progressively smaller. Glumes \pm = or slightly < utricles, orbicular-ovate, obtuse, membranous, creamy brown or darker flecked, midrib light brown, 3-nerved, not reaching margin or in some glumes produced to a very short mucro. Utricles 2.0-2.8 \times c. 1.5 mm, crowded on spike, spreading when ripe, unequally biconvex or almost plano-convex, elliptic-ovoid, yellow-brown at base, upper half with darker red-brown markings and us. scabrid margins, shining, smooth, abruptly narrowed to a small cream bifid beak c.0.2 mm. long, margins and orifice faintly scabrid. Stigmas 2. Nut slightly > 1 mm long, biconvex, ellipsoid, cream at first, later very dark brown

SIMILAR TAXA

Carex dipsacea superficially resembles an upright form of *C. flagellifera* Colenso or *C. testacea* Sol. ex Boott especially as three species possess channelled leaves. However the leaves of *C. dipsacea* are usually much wider, and the utricles are biconvex, only minutely beaked, and spreading widely when ripe (somewhat resembling a miniature teasel plant (*Dipsacus sylvestris* L.) – hence the specific epithet). The glumes of *C. dipsacea* are \pm orbicular, and are scarcely or not awned in contrast to the distinctly awned glumes of *C. flagellifera* and *C. testacea*.

FLOWERING

October - December

FRUITING

Throughout the year

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 whole plants. Will tolerate most conditions, but does best in full sun in a permanently damp soil. In ideal conditions this species often naturalises, and it can at times become invasive. Along with *C. buchananii* Bergg., *C. comans* Bergg. and *C. dissita* Sol. ex Boott this is one of the most commonly cultivated indigenous sedges. This species is often sold as *C. dissita* cv. Bronze Warrior.

ETYMOLOGY

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

dipsacea: Teasel-like (spikes)

WHERE TO BUY

Commonly available from general plant nurseries.

NOTES ON TAXONOMY

Carex tahoata Hamlin is regarded by many botanists as distinct from *C. dipsacea*. In the field it appears distinctive but as observed by Edgar in Moore & Edgar (1970) there does seem to be a gradation between it and *C. dipsacea*. As the key differences between both species are mostly size related, and no other differences seem stable, it is probably better to regard *C. tahoata* as a reduced phenotype of *C. dipsacea*. However, further research into the matter is needed. For further information and photographs, see a separate page for *C. tahoata* on this website.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex dipsacea* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-dipsacea/> (Date website was queried)

MORE INFORMATION

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

Carex dissita

COMMON NAME

Forest Sedge

SYNONYMS

Carex dissita Boott var. *monticola* Kük.

FAMILY

Cyperaceae

AUTHORITY

Carex dissita Sol. ex Boott

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARDIS

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North, South and Stewart Islands.

HABITAT

Lowland to montane. Usually in riparian forest, where it may be abundant along stream sides.

FEATURES

Shortly rhizomatous; green leafy tufts, drooping above, 0.15-1.00 m high. Culms 0.5–1.5(-1.7) mm diameter, trigonous, striated, edges smooth; basal sheaths light brown, grey-brown or often dark red-purple. Leaves > or < culms, 1.5-5.0 mm wide, double-folded, bright green or yellow-green, or red-green with red margins and midvein red abaxially, margins finely scabrid. Spikes 4-8; terminal spike male, rarely with a few female flowers at the top or with 1-2 very small male spikes at the base; remaining spikes female, usually with a few male flowers at the base, more rarely male at the top, 5-30 × 4-6 mm, uppermost spikes erect on very short peduncles, ± distant, lowest spike often quite remote and drooping from a slender peduncle. Glumes (excluding awn) slightly < utricles, ovate, emarginate to almost entire, pale reddish green or light brown, to dark red-brown with paler margins, membranous, midrib broad, pale brown, occasionally bright red-purple or straw-coloured, with 3 distinct, almost white, nerves produced to a usually short scabrid mucro. Utricles 2.0-3.0 × c. 1.5 mm, biconvex, turgid, ovoid, yellow-brown or cream at the base, red-purple to almost black above, abaxial face usually lighter coloured and more distinctly nerved than the other, margins occasionally very finely scabrid below the beak; beak c. 0.5 mm long, almost white, deeply bifid with divergent crura, orifice scabrid; stipe c. 0.3 mm. long. Stigmas 3. Nut c. 1.5 mm long, trigonous, ovoid, light brown.



Coromandel, February. Photographer: John Smith-Dodsworth



Coromandel, February. Photographer: John Smith-Dodsworth

SIMILAR TAXA

The distant, dark brown, rather short and stout, usually shortly pedunculate female spikes are a characteristic feature of this species. The utricles are also distinctly bicoloured basally cream to yellow brown and red-purple to black above. This feature helps distinguish this species from *C. solandri* Boott in Hook.f., a species with which it is most often confused, and which usually has uniformly dark coloured utricles (rarely light brown and pale yellow near the base). *Carex solandri* further differs from *C. dissita* by its long filiform peduncles. The two species often grow together.

FLOWERING

August - November

FRUITING

October - May

PROPAGATION TECHNIQUE

Easily grown from fresh seed and by the division of established plants. A popular species in cultivation, though many plants sold as this species are in fact *C. solandri*. Excellent for a permanently damp situation in a shaded site but will tolerate full sun and dry conditions once established.

ETYMOLOGY

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

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (10 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex dissita* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-dissita/> (Date website was queried)

MORE INFORMATION

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

Carex echinata

COMMON NAME

Star sedge

SYNONYMS

Carex stellulata Good.; *Carex stellulata* Good. var. *australis* Kük.

FAMILY

Cyperaceae

AUTHORITY

Carex echinata Murr.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

CARECH

CHROMOSOME NUMBER

2n = c.58

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: North, South and South Islands from about Te Moehau south. Apparently absent from Marlborough

HABITAT

Coastal to alpine (though mainly montane to alpine in northern part of range). Common in wetlands such as bogs and mires or on stream banks and around tarn margins. Descending to sea level in the south-west of the South Island and on Stewart Island



In cultivation ex Pureora. Oct 2007.
Photographer: Jeremy Rolfe



In cultivation ex Pureora. Oct 2007.
Photographer: Jeremy Rolfe

FEATURES

Loosely tufted from an ascending rhizome; tufts ± flaccid. Culms 35.0-350.0 × c. 0.5 mm, subtrigonal, glabrous; basal sheaths grey or light brown. Leaves usually < culms, 0.5–1.5 mm wide, channelled to flat, margins scabrid, tapering towards the subacute tip. Inflorescence a compound spike 15–40 mm long, green or pale brown, of 3-5 ± distant spikes, utricles widely spreading when ripe and individual spikes star-shaped; lowest spike usually subtended by a filiform scabrid bract c.½ length of inflorescence. Spikes androgynous, 3-7 mm long, male flowers at the base of each spike; plants occasionally almost dioecious. Glumes c. ½ length of utricle, membranous, light brown, with a pale cream or green well-marked midrib and hyaline margins. Utricles 2.5-4.0 × c.1.5 mm, plano-convex, usually distinctly nerved; contracted above to a narrow, dark brown beak with green, slightly or distinctly scabrid margins and slightly bifid orifice; puckered below to a rather indistinct stipe c.2 mm long. Stigmas 2. Nut slightly < 2 mm long, ± biconvex, oblong-ovoid, pale brown.

SIMILAR TAXA

A distinctive species that is easily recognised by the star-shaped arrangement of the mature spreading utricles. This is clearly seen when the plants are viewed from above. *Carex echinata* has no obvious close relatives in New Zealand and is unlikely to be confused with any of the introduced or indigenous species known from this country.

FLOWERING

October - December

FRUITING

November - July (often present throughout the year)

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easy from fresh seed and the division of whole plants. Prefers moist soils, with a sunny aspect, free from weeds.

ETYMOLOGY

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

echinata: From the Latin 'echinus' for hedgehog, meaning armed with spines.

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Fact Sheet prepared by P.J. de Lange (110 August 2006). Description adapted from Moore and Edgar (1970)

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

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

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex echinata* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-echinata/> (Date website was queried)

MORE INFORMATION

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

Carex edura

COMMON NAME

Bastard Grass, Hook Sedge

SYNONYMS

Uncinia divaricata Boott; *Uncinia compacta* R.Br. var. *divaricata* (Boott) Hook.f.; *Uncinia clarkii* Petrie; *Uncinia compacta* R.Br. var. *petriei* C.b. Clarke; *Uncinia compacta* R.Br. var. *clarkei* (Petrie) Kük.; *Uncinia divaricata* Boott var. *petriei* (C.B.Clarke) Hamlin

FAMILY

Cyperaceae

AUTHORITY

Carex edura K.A.Ford

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

UNCDIV

CHROMOSOME NUMBER

2n = 88

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

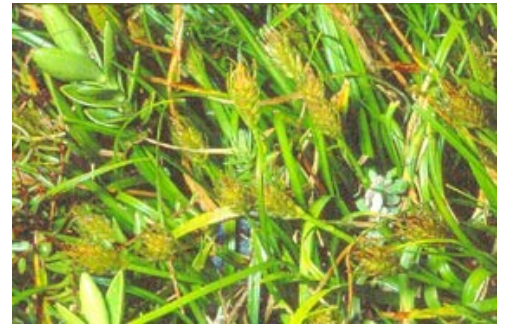
2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand, North (from the Raukumara Range south), South and Campbell Islands.

HABITAT

Montane to alpine. A species of open forest, scrub, tussock grassland, herbfield, mires, bogs and river beds. Also common on ultramafic soils.



Birch Hill stream, Mt Cook. February.
Photographer: John Smith-Dodsworth

FEATURES

Laxly tufted or shortly rhizomatous dark yellowish green or orange-green plants. Rhizome 1-2 mm. diameter. Culms 10.0-400.0 × 0.5-2.0 mm, erect or ascending, rigid, cartilaginous, subtrigonus, glabrous; basal bracts dull yellow-brown or darker brown. Lvs 4-12 per culm, usually < mature culms but occasionally = or > culms, 1.5-4.0 mm wide, rather soft to coriaceous, dark yellowish green, scabrid on margins. Spikes 10-45 × 4-10 mm, female fls numerous, densely crowded, internodes almost all equal, 0.5-1.0 mm long. Glumes occasionally > utricles in lower part of spike, = or < utricles above, deciduous, subulate or ovate, obtuse to subacute, membranous, hyaline, or light to dark brown and opaque, midrib green with the 3 nerves not very conspicuous, midrib of 1-3 lowest glumes often scabrid and occasionally prolonged in lowermost glume to a scabrid awn. Utricles 3.5-5.0 × 1.0-1.5 mm, trigonus or subtrigonus with conspicuous lateral nerves, greenish brown to dark brown, widely spreading when ripe, contracted below to a broad stipe c.1 mm long, beak 1.0-1.5 mm long

SIMILAR TAXA

Carex edura is a widespread and variable species, of the New Zealand species it is most likely to be confused with *C. drucei* (Hamlin) K.A.Ford, *Carex horizontalis* (Colenso) K.A.Ford and possibly *C. crispa* K.A.Ford. From *Carex edura*, *C. drucei* differs by the widely spreading, stoloniferous rather than tufted or shortly rhizomatous growth habit, usually more numerous, much narrower, grass-like, soft rather than harshly scabrid leaves, and by the shorter, oblong rather than broadly pyramidal spikes with smaller dark-brown rather than green-brown to dark brown glossy utricles. From *Carex edura*, *C. horizontalis* differs by the dark yellowish green to reddish green rather than bright green leaves and culms. It also differs by its fewer flowered spikelets and green to grey-brown, dull rather than green-brown to dark brown glossy utricles. *Carex crispa* is easily distinguished by its much narrower, stiffly erect grass-like involute leaves with twisted/curled (cirrhose) leaf rather than straight apices.

FLOWERING

October - November

FRUITING

November - May

PROPAGATION TECHNIQUE

Very easy from divisions of whole plants and from seed. Does best when planted in full sun in a fertile, free draining but moist soil. Excellent in pots.

ETYMOLOGY

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

WHERE TO BUY

Not commercially available.

TAXONOMIC NOTES

Carex edura is extremely variable and would repay further critical taxonomic study.

ATTRIBUTION

Description adapted from Moore and Edgar (1970). Fact sheet prepared by Peter J. de Lange 17 August 2006.

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex edura* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-edura/> (Date website was queried)

MORE INFORMATION

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

Carex egmontiana

COMMON NAME

Bastard Grass, Hook Sedge

SYNONYMS

Uncinia egmontiana Hamlin, *Uncinia sivestris* var. *squamata* Hamlin

FAMILY

Cyperaceae

AUTHORITY

Carex egmontiana (Hamlin) K.A.Ford

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

UNCEGM

CHROMOSOME NUMBER

2n = 88

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

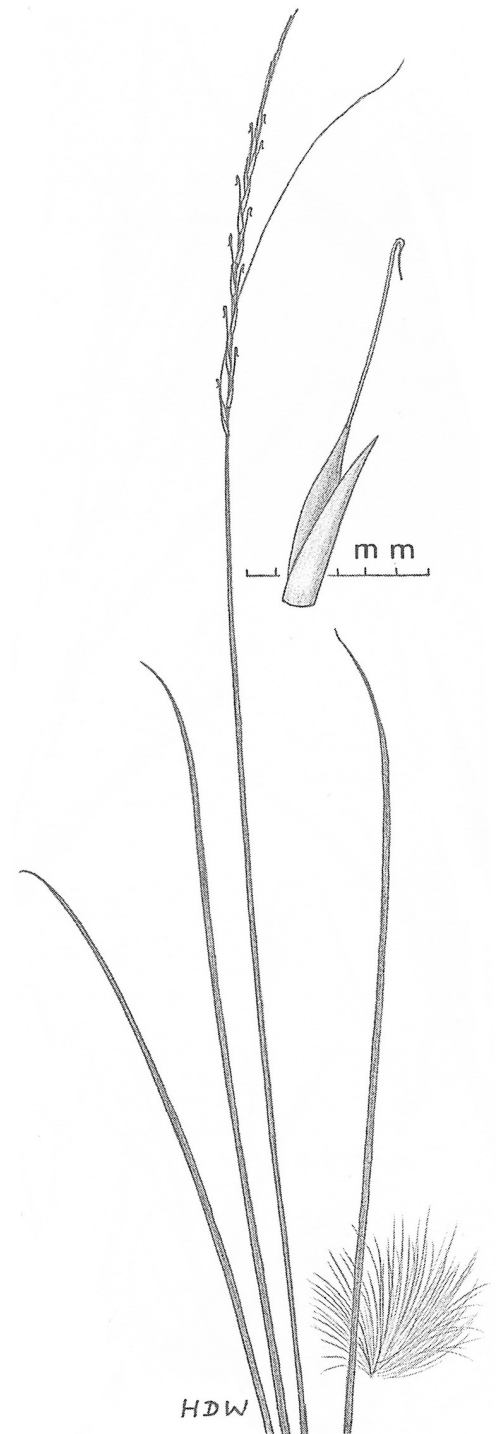
Endemic. New Zealand: North Island (Mt Egmont), South and Stewart Islands – apparently absent from Fiordland.

HABITAT

Coastal to alpine. In coastal turf, tussock grassland, alpine mires, bogs and shrubland overlying peat.

FEATURES

Densely caespitose, dull red or reddish-green (rarely green) plants, 250–400 mm tall. Culms c.300.0 × c. 0.5 mm, glabrous, subtrigonous or almost terete; basal sheaths straw-coloured or light brown. Leaves 4–6 per culm, culms, 1.0–1.5 mm wide, moderately scabrid on margins and upper surface. Spikes 3.5–120.0 × c.3 mm, female flowers c.10–20, rather distant, internodes to 12 mm long at base of spike, c.3 mm long above. Glumes = or >, or rarely slightly < utricles, persistent, ovate-lanceolate, acute, membranous, red or green with pale hyaline margins. Utricles 4.5–6.0 × c.1.0 mm, subtrigonous, elliptic-lanceolate, striated or scarcely nerved, grey-green or reddish grey, contracted below to a stipe usually slightly > 1.5 mm long, narrowed above to a beak slightly < 1.5 mm long



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SIMILAR TAXA

From those other *Carex*s with hooked utricles and persistent glumes, with the exceptions of *C. silvestris* (Hamlin) K.A.Ford and *C. strictissima* (Petrie) K.A.Ford, *C. egmontiana* can be distinguished from by having glabrous, semi-terete culms. *Carex silvestris* differs by its bright green rather than usually dull red or reddish green leaves, few-nerved, smaller utricles (< 4.5 mm cf. > 5 mm long) which are green rather than grey-green or reddish grey.

FLOWERING

October - November

FRUITING

November - August

PROPAGATION TECHNIQUE

Easily grown from fresh seed and by division of established plants. Prefers a permanently moist, peaty soil but will grow in most substrates. Except in cool climates this species is best planted in semi-shade.

ETYMOLOGY

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

egmontiana: Of Mount Egmont

ATTRIBUTION

Description adapted from Moore and Edgar (1970). Fact sheet prepared by Peter J. de Lange 17 August 2006.

REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Carex egmontiana* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/carex-egmontiana/> (Date website was queried)

MORE INFORMATION

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