



# Threatened, rare and unusual plants of Waiouru Army Training Ground



## Table of Contents

Introduction	1
<i>Amphibromus fluitans</i>	2
<i>Carex berggrenii</i>	3
<i>Carex rubicunda</i>	4
<i>Carex uncifolia</i>	5
<i>Chaerophyllum colensoi</i> var. <i>delicatulum</i>	6
<i>Deschampsia cespitosa</i>	7
<i>Euchiton ensifer</i>	8
<i>Logania depressa</i>	9
<i>Luzula rufa</i> var. <i>albicomans</i>	10
<i>Muehlenbeckia ephedroides</i>	11
<i>Myosotis glauca</i>	12
<i>Peraxilla tetrapetala</i>	13
<i>Pimelea barbata</i> subsp. <i>omoia</i>	14
<i>Ranunculus recens</i>	15
<i>Uncinia strictissima</i>	16

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# *Amphibromus fluitans*

## Common Name(s):

Water brome

## Current Threat Status (2012):

Nationally Vulnerable

## Distribution:

Indigenous. New Zealand, North and South Islands. In the North Island It is known from Ninety Mile Beach and Karikari Peninsula to Paekakariki and Lake Wairarapa. In the South Island known only from Maher's Swamp, near Punakaiki and from Lake Tekapo. Present in Australia where it is very uncommon. The largest populations of the species seem to be at the Waihora and Arohaki lagoons, at Lake Rerewhakaaitu in wetlands on the north eastern and eastern margin of Lake Wairarapa.

## Habitat:

Coastal to montane in moderately fertile, seasonally dry wetlands or along the edges of shallow lakes and lagoons.

## Features\*:

Somewhat flaccid to weakly tufted, stoloniferous, semi-aquatic grass, forming circular grey-green mats 70-400 x 150 mm on muddy ground (up to 400 mm tall when growing up through surrounding vegetation). Culms decumbent, rooting at lower nodes, erect or floating above. Leaf-sheath papery, smooth or scabrid, often wholly scabrid toward culm apex. Ligule 1.5-5 mm, long-tapered, acute, initially entire, becoming lacerate. Leaf-blade 50-125 x 0.6-3 mm, grey-green, flat or inrolled, upper surface somewhat scabrid, shallowly ribbed, undersides notably more scabrid and prominently ribbed, apex acute. Culm internodes mostly smooth, rarely scabrid below nodes. Panicle 65-13 mm, erect, initially enclosed below by uppermost leaf-sheath, at fruiting often expanding entirely above leaves; branches and pedicels scabrid. Spikelets 15-25 mm, 3-6-flowered, pale green. Glumes unequal, glabrous, obtuse margins ciliate-scabrid; lower 2-3 mm, 1-nerved, narrowly lanceolate, upper 2-4 mm, 3-nerved, ovate-lanceolate. Lemma 4-5.5 mm, 7-nerved, firm, green, margin rather wide, hyaline, minutely scabrid or hairy; lemma lobes 2, obtuse; awn 7-18 mm, straight, arising from lemma midpoint. Palea < lemma, keels stiffly ciliate, interkeel glabrous. Seeds 1.5-2 x 0.5-0.7 mm.

## Flowering:

September - May  
(dependent on water levels)

## Fruiting:

September - July  
(dependent on water levels)

## Threats:

Habitat loss through wetland drainage, stock grazing and competition from weeds.

## \*Attribution:

Description modified from Edgar and Connon (2000).

## References and further reading:

Edgar, E.; Connor, H.E. 2000: Flora of New Zealand Vol. V. Grasses. Christchurch, Manaaki Whenua Press. 650 pp.

Gardner, R. 2000. Notes towards an excursion Flora. *Amphibromus fluitans* (Poaceae). Auckland Botanical Society Journal, 55: 54-55

Ogle, C.C. 1987. A rarely seen native grass *Amphibromus fluitans*. Wellington Botanical Society Bulletin, 43: 29-32

## For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=47](http://nzpcn.org.nz/flora_details.asp?ID=47)



**Caption:** *Amphibromus fluitans* plants flowering on semi-dried mud of seasonal pond

**Photographer:** Colin Ogle Lake Wairarapa, Boggy Pond.



**Caption:** *Amphibromus fluitans* close up of spikelets

**Photographer:** Colin Ogle, Lake Wairarapa, Boggy Pond



# *Carex berggrenii*

## Common Name(s):

Berggrens Sedge

## Current Threat Status (2012):

Naturally Uncommon

## 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.

## 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 subtrigonal, 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, trigonous.

## Flowering:

October - February

## Fruiting:

October - June

## 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.

## \*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.

## For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=230](http://nzpcn.org.nz/flora_details.asp?ID=230)



Photographer: John Barkla



Caption: Hawkdun Range  
Photographer: John Barkla

## *Carex rubicunda*

### Common Name(s):

Sedge

### Current Threat Status (2012):

Nationally Vulnerable

### Distribution:

Endemic. North and South Islands. In the North Island known from swamps in the southern Kaingaroa Plain, the Kaimanawa and Ruahine Mountains, and wetlands within Tongariro National Park. Its exact distribution in the South Island is still unclear. It has long been known from Lakes Te Anau and Manapouri, and has recently (2009-2010) been found at Lake Lyndon (Canterbury) and Lake Wanaka (Otago). It is likely to be found at other sites.

### Habitat:

A species of mainly montane to subalpine lake, tarn, and pond margins. Also found in other ephemeral wetlands, often in places seasonally flooded.

### Features\*:

Diminutive, shortly rhizomatous, stiffly erect, reddish brown tufted sedge with curled leaf apices frequenting lake, pond, and tarn margins, flushes, slow flowing stream and seepage in montane to subalpine conditions. Culms 10-150 x 0.5-1 mm, glabrous, terete, basal sheaths light brown to grey brown. Leaves much longer than culms, 30-300 x 0.5-1 mm, red to red-brown, rigid, plano-convex, occasionally with margins inrolled, striated on undersides, margins finely scabrid, leaf apex obtuse, twisted and curled when dry. Inflorescence 10-15 mm long, usually hidden within foliage towards base of plant. Spikes 3-4(-6), shortly pedunculate to almost sessile, pale yellow-brown, terminal spike wholly male, subterminal spike female or with some males near apex, remaining spikes female, 5-10 x 3 mm, clustered at the same level round base of male spike, all subtended by leaf-like bracts, these about same length as leaves. Glumes equal to or slightly shorter than utricles, ovate, membranous, nerved, pale pink, maturing brown, with green midribs, apices acute. Utricles 1.5-2 x 1 mm, plano-convex, obovoid, smooth or faintly nerved, gradually narrowed at either end, light brown below, trending to darker purple-brown toward the 0.3 mm long glabrous beak, apex hardly bifid, crura minutely scabrid; stipe 0.5 mm long. Stigmas 2. Nut about 1 mm long, obovoid to suborbicular, pale grey-brown.

### Flowering:

October - January

### Fruiting:

October - August

### Threats:

A locally common species of suitable habitats within the Central North Island. Some populations might be at risk from horse trampling, vehicle traffic and invasive wetland weeds. Status in the South Island needs clarification.

### \*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.

### For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=401](http://nzpcn.org.nz/flora_details.asp?ID=401)



**Caption:** Green Form. Ex L. Wanaka

**Photographer:** John Barkla



**Caption:** *Carex rubicunda*

**Photographer:** John Hobbs



# *Carex uncifolia*

## Common Name(s):

Sedge

## Current Threat Status (2012):

Nationally Endangered

## Distribution:

Endemic. North and South Islands. In the North Island known only from the Central Volcanic Plateau from Mt Hauhangatahi and in the nearby Moawhango. In the South Island much more widespread known from the Red Hills, between the Wairau Valley and Nelson, south through Canterbury to Central Otago.

## Habitat:

A species of damp seepages, open wetlands and damp turf within tussock grassland. Also abundant in damp sites overlying ultramafic rocks.

## Features\*:

Shortly rhizomatous, dark purple red to beetroot red, densely tufted sedge up 30-70 x 30-70 mm. Culms completely obscured by light grey-brown, chartaceous, somewhat fibrillose leaf-sheaths. Leaves 0.5 mm wide, dark purple-red, maroon red to beetroot red, much > culms, plano-convex, nerved on the undersides, smooth on the upper surface, margins scabrid, apex subobtuse, often curled. Inflorescence comprised of short densely compacted spikelets, these 3-4 (-5), terminal spike male, rather slender, shortly pedunculate, glumes lanceolate, acute, red-brown; remaining spikes female; these sessile, 5-12-flowered, glumes 3.5 x 1.5 mm, dull red-brown, distinctly nerved, lanceolate, acute with the mid rib extending into a scabrid awn. Utricles 2-3.5 x 1.5 mm, biconvex to obscurely trigonous. Elliptic-lanceolate, spreading when mature, light red-brown, distinctly nerved, narrowed to a more or less scabrid beak 0.5-1 mm long, bidentate, orifice scabrid. Stigmas 3. Nut 1.5 mm long, dark grey-brown, obtusely trigonous, oblong-obovoid.

## Flowering:

September - January

## Fruiting:

October - May

## Threats:

Naturally uncommon, this species has a biologically sparse distribution, reaching its greatest abundance on ultramafites on the Red Hills, West Dome and the Livingston Range. Elsewhere it is uncommon and some populations have been lost due to weed invasion, trampling from horses and through vehicle damage.

## \*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.

## For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=405](http://nzpcn.org.nz/flora_details.asp?ID=405)



**Caption:** West Dome Mossburn  
**Photographer:** Gillian Crowcroft



**Photographer:** John Barkla

# *Chaerophyllum colensoi* var. *delicatulum*

**Common Name(s):**  
mountain myrrh

**Current Threat Status (2009):**  
Nationally Critical

**Distribution:**  
Endemic to New Zealand, where it is found in the North and South Islands, from the Hauhangaroa Range to Southland. It has a mainly easterly distribution in the South Island.

**Habitat:**  
A plant of ephemeral wetlands, subalpine flushes, and tarn margins. Strictly subalpine in the North Island but descending to lower montane habitats in the South Island.

**Features:**  
Diminutive, shortly rhizomatous, perennial herb arising from stout tap root, plants forming circular mats up to 50 x 50 mm (usually much less). Petioles filiform, brown-green, yellow-green to white, 10-20 mm long. Leaves radical, spreading up to 20 mm long, dark green, red-green to brown-green 1(-2) pinnate with 4-6(8) distant pairs of primary pinnae. Both leaf surfaces sparsely covered in fine hairs, lamina margin particularly so, pinnae of equal length, or broader toward middle and decreasing in length toward distal and proximal ends, linear, narrowly lanceolate to lanceolate, apex narrowly acute, deeply toothed, entire, or with prominent secondary pinnae in the basal 1-3 primary pinnae pairs. Peduncles 1-5(-15), filiform, stout or slender up to 30 mm long, decumbent to sub-erect, spreading. Involucre of 5-8 ovate-oblong bracts; bracts up to 5 mm long, pale green to yellow-green, entire. Pedicels at flowering subsessile, elongating in fruit up to 6 mm. Flowers 3-8, 1.5-2 mm diameter. Petals 3-5, 0.3-0.5 x 0.3-0.5 mm, ovate, cream. Mericarps 1.5-2 x 0.6-1.3 mm, narrow-ovate to ovate, glabrous. Ribs 3-5.

**Flowering:**  
October - February

**Fruiting:**  
December - May

**Threats:**  
The open wetland turf and tarn margin habitats frequented by *O. colensoi* var. *delicatula* are extremely vulnerable to invasion by faster growing and taller weeds. In many parts of the North Island this species has gone extinct because of weed competition. *O. colensoi* var. *delicatula*, along with many other wetland marginal turf plants is also extremely vulnerable to changes in the hydrology of the wetlands they require. In many places these are now drying out too early, because of changes in adjacent land use management, so increasing their vulnerability to weed species invading and becoming permanently established.

## References and further reading:

Allan, H.H. 1961. *Flora of New Zealand. Volume I. Indigenous Tracheophyta: Psilopsida, Lycopsida, Filicopsida, Gymnospermae, Dicotyledones.* Wellington, Government Printer.

Chung, K-F. 2007. Inclusion of the South Pacific alpine genus *Oreomyrrhis* (Apiaceae) in *Chaerophyllum* based on nuclear and chloroplast DNA sequences. *Systematic Botany* 32(3): 671-681.

**For more information, visit:**  
[http://nzpcn.org.nz/flora\\_details.asp?ID=83](http://nzpcn.org.nz/flora_details.asp?ID=83)



**Caption:** Close up of *Oreomyrrhis colensoi* var. *delicatula*  
**Photographer:** Colin Ogle



**Caption:** *Oreomyrrhis colensoi* var. *delicatula* specimen  
**Photographer:** Cathy Jones



## *Deschampsia cespitosa*

### **Common Name(s):**

tufted hair-grass, wavy hair-grass

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

Declining

### **Distribution:**

A cosmopolitan species found in many temperate parts of the world. Recorded in New Zealand from North, South, Stewart and Chatham Islands. It has disappeared from most of its historic range, and now occurs in only a handful of sites in the New Zealand region. Its range and abundance appear to be continuing to shrink. Historically it was recorded from various Chatham Island sites but is currently known from only four sites on Chatham Island and one site on Pitt Island.

### **Habitat:**

Wetlands and lake margins. Coastal to subalpine damp grass or sedge swards near lakes, rivers and swamps. Also found in estuarine margin communities. In the Chatham Islands, occurs in lowland jointed rush lake-edge communities, in a coastal stream bank site and in upland wetlands.

### **Features:**

A stiffly erect green to yellow-green tussock, which stands 20–50 cm tall. The leaves are narrow (1–4 mm wide) and are flat or partly rolled and dull green above and bright green beneath and rough to touch. An attractive grass with blonde flowering heads 1 m or more tall that occur in January. Seed is produced in February.

### **Flowering:**

January

### **Fruiting:**

February

### **Threats:**

Very palatable to farm and feral stock. Grazing and trampling by cattle is the chief cause of decline. Contamination or replacement of NZ forms of *Deschampsia* with imported forms is also a serious risk.

### **For more information, visit:**

[http://nzpcn.org.nz/flora\\_details.asp?ID=163](http://nzpcn.org.nz/flora_details.asp?ID=163)



**Caption:** Milford Sound, Fiordland NP

**Photographer:** Gillian Crowcroft



**Caption:** *Deschampsia cespitosa*

**Photographer:** Cathy Jones

## *Euchiton ensifer*

### **Common Name(s):**

Creeping Cudweed

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

Nationally Endangered

### **Distribution:**

Endemic. North and South Islands. In the North Island known from the Kaingaroa Plain (Matea Road) and Kaimanawa Ranges. In the South rather locally distributed from Nelson south to Southland but not, apparently in Westland.

### **Habitat:**

Montane to alpine in damp sites, particularly tarn and other ephemeral pond margins, or in seepages and flushes within tussock grassland. Sometimes on stream banks.

### **Features:**

Stoloniferous, creeping perennial. Stems 1-4(-6), decumbent to ascending, spreading, simple, 20-100 mm tall. Leaves mainly basal; these short-petiolate, 13-50 x 1-5 mm, narrow-elliptic to linear, cuneate, acute, mucronate, densely covered in closely appressed white indumentum on lower surface except mid-vein, almost glabrous to sparsely tomentose above; cauline leaves only slightly reducing up stem, linear, apetiolate. Capitula 1-2 mm diameter, 1-9 in loose terminal clusters; longest subtending leaves < to marginally > diameter of cluster. Involucral bracts 4.2-5 mm, elliptic-oblong, obtuse to subacute; stereome green; lamina pale brown with darker markings toward base; gap and margins tinged pale to bright rose or red-purple. Achenes 0.8-1 mm long, covered with short antrorse hairs.

### **Flowering:**

October - January

### **Fruiting:**

November - April

### **Threats:**

A naturally uncommon, biologically sparse species which, based on current information does not appear to under any serious threat. However, weeds encroaching on montane wetlands are threatening a few populations.

### **For more information, visit:**

[http://nzpcn.org.nz/flora\\_details.asp?ID=255](http://nzpcn.org.nz/flora_details.asp?ID=255)



**Caption:** Euchtiton ensifer  
**Photographer:** John Smith-Dodsworth

## *Logania depressa*

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

Extinct

### **Distribution:**

Endemic. North Island (exact location unclear). Colenso collected it from an area "south of the Kaimanawa Mountains and to the west of the Moawhango River". This area was equated by Oliver (1921) to an area "probably east of Waiouru and north of Moawhango Township".

### **Habitat:**

Unclear. The only facts available are that Colenso recorded it just once in an ice-covered hollow within tussock grassland. The tussock would have been *Chionochloa rubra* (Hook.f.) Zotov subsp. *rubra* var. *rubra*. Other suggestions of likely habitats have little if any basis and are best regarded as wishful thinking.

### **Features:**

Prostrate, multibranched, stipulate, dioecious, subshrub, 80-150 mm high. Branches short, slender, rigid, hairy. Stipules minute, hairy, rounded distally. Leaves more or less sessile, usually clustered on short lateral shoots, glabrous, lamina 3-6 x 1-3 mm, coriaceous, elliptic, ovate to narrowly obovate; base cuneate; margin entire; apex obtuse; venation not evident. Inflorescence axillary; a (2-3-)5 flowered, reduced botryum. Flowers unisexual (male flower only known). Calyx 1.1-3 mm; lobes ovate to oblong, 0.8-1 x 0.5-0.7 mm; margin entire, ciliate; apex obtuse to rounded. Corolla white, 2 mm; tube 1 mm, lobes 1 mm, rounded, margins ciliate; outer surface glabrous, inner hairy at mouth. Stamens inserted half way up tube; filaments 0.5 mm, glabrous; anthers 0.5 mm. Gynoecium rudimentary; pistil 1.5-1.7 mm, ovary much reduced, depressed, glabrous; style filiform, glabrous; stigma ellipsoid to clavate. Female flowers, capsules and seeds not known.

### **Flowering:**

February (Male flowers only, female flowers have never been seen)

### **Fruiting:**

Fruits have never been seen

### **Threats:**

Extinct. This species was collected just once on the 22 February 1847 and has never been seen since. Its presumed habitat is now largely modified tussock grassland, some of it covered with a large hydro dam. Most of this area is also heavily infested with *Hieracium pilosella* L.

### **For more information, visit:**

[http://nzpcn.org.nz/flora\\_details.asp?ID=780](http://nzpcn.org.nz/flora_details.asp?ID=780)



## *Luzula rufa* var. *albicomans*

**Common Name(s):**

Red woodrush

**Current Threat Status (2012):**

Non Threatened

**Threats:**

Not Threatened

**For more information, visit:**

[http://nzpcn.org.nz/flora\\_details.asp?ID=957](http://nzpcn.org.nz/flora_details.asp?ID=957)

# *Muehlenbeckia ephedroides*

## Common Name(s):

Leafless pohuehue, leafless muehlenbeckia, Twigs

## Current Threat Status (2012):

Declining

## Distribution:

Endemic. North and South Islands. In the North Island mainly eastern from Lake Taupo (Acacia Bay) and the northern Hawkes Bay south to Wellington and Cape Palliser. In the South Island eastern from Marlborough to Southland.

## Habitat:

Coastal to subalpine (0-1200 m a.s.l.). A species of river flats, beaches, sand spits, alluvial fans, outwash gravels and river terraces, also found in grey scrub. Favouring open, dry, free draining but fertile sites, usually on gravel and sandy soils, in habitats naturally free from other taller plants. Sometimes found on gravel roads.

## Features:

Gynodioecious, sprawling to prostrate, grey-green, grey to grey-black shrub forming dense, untidy mats up to 1.5 m or more diameter. Stems much branched, final branches c.1 mm diameter, flexuous, striate, puberulent, grey to grey-black or grey-green. Leaves 5-25 mm long, dark to grey-green, narrow-linear, glabrous to glabrate, margins revolute, ascending, distant, spaced along constricted nodes, often sparse, deciduous, sometimes absent; ochreae 1-2 mm long, chartaceous, truncate. Inflorescence a few-flowered fascicle or raceme; pedicels 1-1.5 mm, pale, bracteate, slender. Flowers with pistillate on separate plants, and staminate and perfect on the same plant; if mainly male then raceme often lax, if female then fascicle dense, mixed male and perfect racemes more or less intermediate. tepals 3-3.5 mm long, united about halfway, lobes narrow-triangular, white, greenish or pale yellow-green; stigmas frimbriate. Fruit 3 x 1.5 mm, trigonous, ovoid, lustrous black, tepals becoming swollen, white and succulent, or rarely chartaceous and dry.

## Flowering:

November - June

## Fruiting:

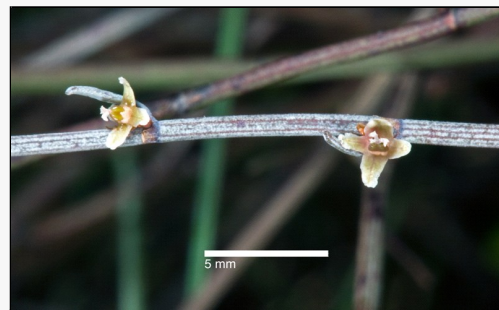
November - June

## Threats:

Most abundant within the north eastern South Island. It is highly threatened in the North Island and appears to be extinct around Lake Taupo. Small populations persist in the Hawkes Bay, southern Wairarapa and south Wellington coastline. In the South Island it appears to have suffered little obvious decline but it is rarely common. In some areas its past presence can be determined by hybrid swarms that exist between it and other New Zealand *Muehlenbeckia* species.

## For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=287](http://nzpcn.org.nz/flora_details.asp?ID=287)



**Caption:** Female flowers. In cult. ex Pencarrow.

**Photographer:** Jeremy Rolfe



**Caption:** Fruit. In cult. ex Pencarrow.

**Photographer:** Jeremy Rolfe

# *Myosotis glauca*

## Common Name(s):

None known

## Current Threat Status (2012):

Nationally Vulnerable

## Distribution:

Endemic, North and South Islands. In the North Island known from one site in the southern Kaimanawa Range. In the South Island known from widely scattered sites from Canterbury, Central Otago and northern Southland.

## Habitat:

Open, dry sandy, gravelly ground or clay pans. Often in wind ablated scrapes, and shows a marked preference for base rich substrates. Usually found growing in small patches often in the vicinity of scabweeds. It has also been found growing admist *Muehlenbeckia axillaris* (Hook.f.) Endl. mats.

## Features:

Decumbent, biennial or perennial herb, forming small, circular patches on open ground. Rosette rather open, sparsely leafy. Petiole broad 5(-10) mm long. Leaves 10-30 x 5-8 mm, glaucous green or grey, obovate to spatulate, apex obtuse or rounded, rarely subacute, base narrowly cuneate to attenuate; upper surface clad in short, stiff, sparse tightly appressed hairs. Lateral branches few, decumbent, 50-100 mm long, extending well beyond rosette leaves, rather openly branching, internodes 10-15 mm long. Stem leaves similar to rosette-leaves. Bracts up to 8 x 6 mm, rather leafy, obovate. Inflorescences cymose, cymes simple, few- to many-flowered, subtended by leafy bracts throughout, internodes < bracts, often rather short. Pedicels 1.5-2 mm long. Calyx 3-5 mm long, elongating to 4-8 mm long in fruiting material, lobes deeply cut to half calyx length, lobes subacute, hairs few, confined in lines to margins and on vertical lines of calyx, very short, stiff and coarse. Flowers white. Corolla 3 mm diameter, corolla tube cylindric 0.4-0.6 mm, lobes very narrow, apex obtuse; stamens on short filaments, anthers 0.5-0.8 mm, wholly included within corolla tube, anther tips obscured, rarely reaching scales; style 0.1-0.3, stigma capitate. Nutlets 1.2-1.5 x (0.8-)1-1.2 mm, brown-black to grey-black, broadly ovate.

## Flowering:

(August-) September to December (however sporadic flowering may occur throughout the year)

## Fruiting:

September to January (however fruits may be found throughout the year)

## Threats:

Seriously threatened by weed invasion of the dry, open sites it requires.

## References and further reading:

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Canterbury University Press, Christchurch.

## For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=76](http://nzpcn.org.nz/flora_details.asp?ID=76)



**Caption:** *Myosotis glauca*, Nevis  
**Photographer:** John Barkla



**Caption:** *Myosotis pygmaea* var. *glauca* in cultivation  
**Photographer:** John Barkla



## *Peraxilla tetrapetala*

### Common Name(s):

Red mistletoe, pikirangi, pirita, roeroe, pirinoa

### Current Threat Status (2012):

Declining

### Distribution:

North and South Island, but less common in the North Island.

### Habitat:

Coastal to montane. A hemiparasite whose main hosts are mountain beech (*N. solandri* var. *cliffortioides*), black beech (*Nothofagus solandri* var. *solandri*), red beech (*N. fusca*), and silver beech (*N. menziesii*). However, it has been recorded as a parasite on a further 17 species (2 exotic) including puriri (*Vitex lucens*) and pohutukawa (*Metrosideros excelsa*).

### Features:

A shrub that can grow up to 2 m across. It usually parasitises close to the trunk of its host. It has characteristic small raised blisters or lesions on small, usually rhombic leaves. The flowers are solitary or 2-4 together and are bright red (up to 40 mm long). The ripe fruit is fleshy and green. Veins on the leaves are hardly evident and only the midrib is conspicuous. Leaf tips are never notched. Host trees are typically beech or *Quintinia*.

### Flowering:

October to January

### Fruiting:

April to June

### Threats:

A wide variety of threats are now acknowledged as working in unison to cause the national decline of this and allied leafy mistletoes species. The most obvious threat seems to be brush tailed possums (*Trichosurus vulpecula*), which heavily browse mistletoes, to such an extent that they are held as the primary cause for the loss of the beech mistletoes from large parts of the countries beech forest.

### References and further reading:

Simpson, M.J.A. 1976. *Elytranthe* in the vicinity of Nelson Lakes National Park. Wellington Botanical Society Bulletin, 39: 39-40

Urlich, S., Hopkins, C.J., Thompson, T. 2007. The survival of *Peraxilla* mistletoes in the Tararua Range. Wellington Botanical Society Bulletin, 50: 37-47

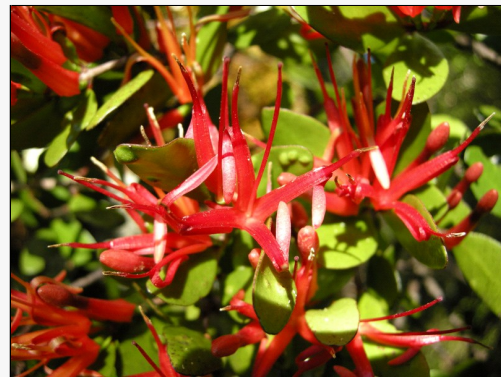
### For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=192](http://nzpcn.org.nz/flora_details.asp?ID=192)



**Caption:** Fruit. Ahuriri Valley, Otago

**Photographer:** John Barkla



**Caption:** Whakapapa, Tongariro National Park

**Photographer:** John Sawyer

## *Pimelea barbata* subsp. *omoia*

### Common Name(s):

Pimelea

### Current Threat Status (2012):

Naturally Uncommon

### Distribution:

Endemic. New Zealand: North Island (Moawhango River Gorge on the western side of the southern Kaimanawa Range)

### Habitat:

Montane. Sandstone cliffs and slopes below them, within open shrubland and short grassland

### Features\*:

Small to medium-sized prostrate to procumbent shrubs (plants sometimes forming large patches, to 1 m or more wide). Branching mainly sympodial. Young branchlets brown, densely covered by relatively long white to dull-white hairs; internodes 1.5-6.0 mm long; older stems glabrate, grey-brown to brown. Node buttresses lunate (0.4 mm long) masked by hairs on young branchlets, not very prominent on leafless stems. Leaves decussate, on very short petioles (0.4 mm), ascending, often becoming patent to deflexed. Lamina 8-12 × 3-5 mm, broad-elliptic to ovate, often rather variable in size and differing from plant to plant, slightly adaxially concave, acute, base cuneate. Adaxial leaf hairs dense. Vestiture short, white, hispid, villous, or rarely curled, usually appressed. Older leaves may be glabrate, dull-green. Mid-vein may be evident abaxially. Stomata on both adaxial and abaxial surfaces. Inflorescences terminal on branchlets, compact, 2-7-flowered. Involucral bracts 4, the same size as or larger than adjacent leaves (7-10 × 4-6 mm). Receptacle with dense, long hairs. Plants gynodioecious. Flowers white on very short pedicels (0.6 mm). Outside densely hairy, inside hairless. Female tube 4 mm long, ovary portion 2 mm, calyx lobes 1.8 × 1.2 mm; hermaphrodite tube 6.5 mm long, ovary portion 2 mm, calyx lobes 2.3 × 1.9 mm. Anther dehiscence introrse. Ovary with short sparse hairs on summit. Fruits ovoid, fleshy, red 5.0-6.0 × 3.5-4.0 mm; seeds ovoid 3.2 × 2.0 mm, crest thin.

### Flowering:

September - January

### Fruiting:

November - May

### Threats:

*Pimelea barbata* subsp. *omoia* has been formally listed as "Taxonomically Indeterminate/Naturally Uncommon in Appendix 2 of de Lange et al. (2009) as *Pimelea* aff. *aridula* (c) (CHR 402249; Moawhango) qualified OL (One Location) and St (Stable). Beyond its formal taxonomic recognition, Burrows (2011) offers no concrete data or reasons to suggest a change in this status.

### \*Attribution:

Fact Sheet Prepared for NZPCN by: P.J. de Lange (9 October 2011)

### References and further reading:

Burrows, C.J. 2011: Genus *Pimelea* (Thymelaeaceae) in New Zealand 5. The taxonomic treatment of five endemic species with both adaxial and abaxial leaf hair. *New Zealand Journal of Botany* 49: 367-412.

de Lange, P.J.; Norton, D.A.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Hitchmough, R.; Townsend, A.J. 2009: Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61-96.

### For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=6712](http://nzpcn.org.nz/flora_details.asp?ID=6712)



**Caption:** Moawhango River. Nov 2011.

**Photographer:** Colin Ogle



**Caption:** Moawhango River. Nov 2011.

**Photographer:** Colin Ogle



## *Ranunculus recens*

### Common Name(s):

None known

### Current Threat Status (2012):

Nationally Vulnerable

### Distribution:

Endemic to the North, South and Stewart Islands. In the North Island only known from one site in the Moawhango, and from the south Taranaki coastline. In the South Island known from North West Nelson, and the Otago and Foveaux Strait coastline. Local at Masons Bay on Stewart Island. Past records from the Chatham Islands remain unconfirmed and modern field surveys suggest they result from misidentification of seedlings of an complex of unnamed buttercups allied to *R. foliosus* and *R. royi*.

### Habitat:

Mainly coastal but also alpine in one North Island location. A species of turf and peaty soils developed over freshwater seepages.

### Features:

Tufted, non-rhizomatous herb forming small circular appressed patches 10-50 mm wide. Petiole broad, flat, usually hairy. Leaves yellow-green, dark green, sometimes blotched or entirely chocolate brown, ovate, 3-lobed to about 1.2 toward base, lobes crenate or shallowly pinnatifid, 8-15(-20) mm, sparsely hairy on margins or glabrous. Flowers solitary, 8-10 mm diam., sessile, or rarely on short hairy scapes. Sepals spreading, sparsely hairy. Petals 5, yellow, linear-oblong, nectary single, 0.5 mm from petal base, with very small scale. Receptacle hairy. achenes 30-60, somewhat flattened, glabrous, brick red with dark tips; beak curved 0.5 mm long.

### Flowering:

(September-)- October-November

### Fruiting:

October -January(-April)

### Threats:

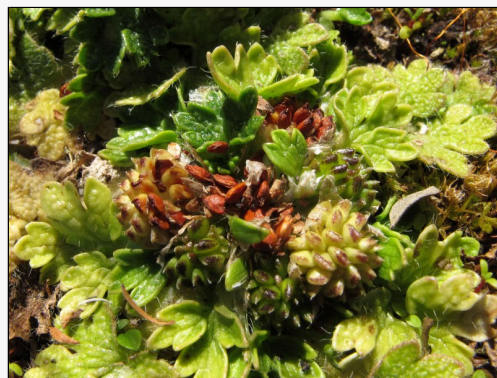
A turf species most at risk from weeds and physical damage through trampling by stock and human traffic.

### For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=199](http://nzpcn.org.nz/flora_details.asp?ID=199)



**Caption:** Otago Peninsula  
**Photographer:** John Barkla



**Caption:** Fruits  
**Photographer:** John Barkla



# *Uncinia strictissima*

## **Common Name(s):**

Bastard grass, hook sedge

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

Nationally Endangered

## **Distribution:**

Endemic. In the North Island known only from the Central Volcanic Plateau. In the South Island it apparently has an easterly distribution, being recorded from the Nelson lakes, Canterbury, Otago and Southland.

## **Habitat:**

Lowland scrub, swamps, lake margins and in damp clears within lowland forest.

## **Features\*:**

Dark olive-green to red-green rush-like sedge, forming dense tufts. Culms 300-550(-700) mm x 1 mm, initially trigonous and scabrid but maturing as terete and smooth (except for just under the inflorescence). Basal bracts dull dark brown. Leaves much reduced, inrolled or flat, 1-2 mm wide, rigid, strongly nerved, scabrid on margins, midrib bright red. Spikes 30-100 mm long, subtended by a reddish filiform bract > spike. Female flowers 10-15, distant in longer spikes, internodes up to 14 mm long at base but decreasing to 3 mm toward apex. Glumes < or = utricles, persistent, obtuse or subacute, green to light brown, tinged pink. Utricles 6-7.5 x 2 mm, plano-convex, nerved, light brown, often pink near apex, stipe and beak up to 15 mm long.

## **Flowering:**

October to  
December

## **Fruiting:**

November to May - but as the inflorescence is long persistent, fruits may be present all year round.

## **Threats:**

Herbarium specimens indicate that this was never a common species. However, it is clear that it has declined over large parts of its range, and it is now very close to extinction in the North Island. The species seems to be threatened by habitat loss as a result of weed invasion and by animal browse.

## **\*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.

## **For more information, visit:**

[http://nzpcn.org.nz/flora\\_details.asp?ID=97](http://nzpcn.org.nz/flora_details.asp?ID=97)



**Caption:** *Uncinia strictissima*

**Photographer:** John Barkla



**Caption:** *Uncinia strictissima*

**Photographer:** John Barkla