# Leptinella intermedia

# **SYNONYMS**

Cotula intermedia D.G.Lloyd

#### **FAMILY**

Asteraceae

#### **AUTHORITY**

Leptinella intermedia (D.G.Lloyd) D.G.Lloyd et C.J.Webb

#### **FLORA CATEGORY**

Vascular - Native

#### **ENDEMIC TAXON**

Yes

## **ENDEMIC GENUS**

Nο

#### **ENDEMIC FAMILY**

Nο

#### STRUCTURAL CLASS

Herbs - Dicotyledonous composites

#### **NVS CODE**

**LPTINT** 

#### **CHROMOSOME NUMBER**

2n = 156

## **CURRENT CONSERVATION STATUS**

2017 | Data Deficient

#### PREVIOUS CONSERVATION STATUSES

2015 | Data Deficient

2012 | Not Threatened

2009 | Not Threatened

2004 | Data Deficient

## **DISTRIBUTION**

Endemic. South Island vicinity of Hakataramea Pass

### **HABITAT**

Alpine (> c.1600 m a.s.l.) in wet flushes within herbfield and tussock grassland.

#### **DETAILED DESCRIPTION**

Monoecious creeping, perennial herb forming small tufted patches in herb field turf. Rhizomes shallowly buried, initially dark, pliant, sparsely pilose hairy, becoming pale, stiff and glabrous; branches uncommon, usually single at flowering nodes; leaves spirally arranged, 1-2 at the apex, 5-10 mm part. Short shoots ascending from rhizome, bearing up to 5 tufted leaves at the apex. Roots slender, weak up to 0.6 mm diameter. Leaves 1-pinnatifid, 8-40 x 2-12 mm; blade 4-30 mm long. elliptic, coriaceous, light green, sometimes with brown pigmentation on proximal pinnae, glabrous; midrib somtimes raised on ventral surface; pinna 4-10 pairs, not overlapping, cut to rhachis, elliptic; teeth usually few perpinna, up to 5 on distal margins and 3 on proximal, cut to 1/2 across pinna, triangular, obtuse. Peduncles glabrescent, villous, borne on rhizomes, more or less equal in length to leaves, 30 mm, ebracteate or bearing 1 simple bract. Capitula 4-5 mm diameter; surface convex; involucre hemispherical, involucral bracts 12, subequally 1-2-seriate, broadly elliptic, dark green, somewhat villous, with wide, brown scarious margins; pistillate florets up to 10 in an incomplete row, 2 mm long, almost straight, yellow-green; corolla slightly longer than wide, dentition equal; staminate florets similar, up to 40. Cypsela 1.3 x 0.9 mm, golden brown, biconvex, compressed, without wrinkles.



#### SIMILAR TAXA

Of uncertain status mostly resembling an F1 hybrid between L. pusilla Hook.f. and L. pectinata (Hook.f.) D.G.Lloyd et C.J.Webb subsp. pectinata. It is perhaps closest to glabrous forms of L. pusilla from which it mainly differs by its monoecious rather than dioecious flowering habit, glabrous, dark veined, rather coriaceous leaves, and higher chromosome number (2n = 156 cf. 2n = 104). Since its formal description in 1972 this species has not been definitely collected since, searches of the only known habitat have only found occasional hybrids between L. pusilla and L. pectinata subsp. pectinata.

#### **FLOWERING**

December

#### **FLOWER COLOURS**

Green, Yellow

#### **FRUITING**

January - March

## LIFE CYCLE

Papery cypselae are dispersed by wind and possibly attachment (Thorsen et al., 2009).

#### **PROPAGATION TECHNIQUE**

Plants were cultivated prior to their formal description in 1972 but no records of how they were grown seem to have been kept. Probably easy from rooted pieces.

## **THREATS**

Unknown. This species has not been reliably reported since it was described in 1972. Its assumed habitat is still present and intact but periodic searches have yet to find further plants.

#### **ETYMOLOGY**

leptinella: From the Greek word leptos (meaning slender, thin or delicate), referring to the ovary

## **TAXONOMIC NOTES**

Leptinella intermedia was described by Lloyd (1972) from a single wild gathering and plants he grew from that and held in cultivation. Lloyd (1972) speculated that *L. intermedia* although now stable, had a hybrid origin, possibly involving *L. pectinata* and *L. pusilla*. Given (1981) noted that while the species had not been seen again, superficially similar plants had been found at the type locality, and he too speculated that the species may be a hybrid - and not in this case stable. Subsequently de Lange et al. (2013) rejected this species on the grounds that it was a hybrid. However, as doubt still remains it seems preferrable to retain this species for now, pending a more thorough investigation of the problem. Indeed all of the New Zealand members of *Leptinella* are now in need of a modern taxonomic revision, with major taxonomic issues evident in the *L. dioica*, *L. squalida* complexes as well as problems like that described here for *L. intermedia*. As retention of the species is advocated, *Leptinella intermedia*, using Townsend et al. (2008) is given an interim threat status of 'Data Deficient', a conservation ranking that requires formal ratification when the New Zealand Indigenous Vascular Plant Threat Listing Panel next meet.

#### **ATTRIBUTION**

Fact sheet prepared for NZPCN by P.J. de Lange 31 August 2006. Description from Lloyd (1972) - as Cotula intermedia.

## REFERENCES AND FURTHER READING

de Lange, P.J.; Rolfe, J.R.; Champion, P.D.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Norton, D.A.; Hitchmough, R.A. 2013: Conservation status of New Zealand indigenous vascular plants, 2012. *New Zealand Threat Classification Series 3*. Department of Conservation, Wellington.

Given, D.R. 1981: Rare and Endangered plants of New Zealand. Reed. Auckland.

Lloyd, D.G. 1972: A revision of the New Zealand, Subantarctic, and South American species of *Cotula*, section *Leptinella*. *New Zealand Journal of Botany 10*: 277-372.

Townsend, A.J.; de Lange, P.J.; Norton, D.A.; Molloy, J.; Miskelly, C.; Duffy, C. 2008: The New Zealand Threat Classification System manual. Wellington, Department of Conservation.

## NZPCN FACT SHEET CITATION

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# MORE INFORMATION

 $\underline{\text{https://www.nzpcn.org.nz/flora/species/leptinella-intermedia/}}$