

# Leptinella pusilla

## SYNONYMS

*Cotula perpusilla* Hook.f., *Cotula angustata* G.Simpson

## FAMILY

Asteraceae

## AUTHORITY

*Leptinella pusilla* Hook.f.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledonous composites

## NVS CODE

LEPPUS

## CHROMOSOME NUMBER

2n = 104

## CURRENT CONSERVATION STATUS

2017 | At Risk – Declining

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: North Island (from near Dannevirke (historic) south to Cape Palliser and the south Wellington coast), South Island (easterly from the Richmond Range (Marlborough) south to the Foveaux Strait).

## HABITAT

Coastal to subalpine (0–1200 m a.s.l.) but more frequent at lower elevations. Usually found in open sites on gravel, sand or in sparsely vegetated tussock grassland, or in the shade of rock outcrops.



*Leptinella pusilla*. Photographer: John Barkla, Licence: CC BY.



Palliser Bay. Photographer: Jeremy R. Rolfe, Date taken: 03/10/2009, Licence: CC BY.

## DETAILED DESCRIPTION

Dioecious, creeping, tufted perennial herb of open ground and grassland. **Rhizomes** deeply buried, pale, wiry and glabrous; branches uncommon, usually single at flowering nodes; initially clad in spirally arranged scales set 5–20 mm apart. Short shoots growing upward from buried rhizomes, each apically bearing 4–8 tufted leaves. **Roots** slender, weak, 0.5 mm diameter. **Leaves** 1-pinnatifid, 10–60 × 3–10 mm; blade 5–30 mm long, light green usually with proximal or all pinnae heavily brown-pigmented, lanceolate to obovate, submembranous, glabrous to densely villous hairy, midrib raised along most of ventral surface; pinnae 8–15 pairs, usually distant, sometimes overlapping, cut to rachis, oblong or obovate; teeth absent or up to 8 per pinna, on distal margins only, usually obscured by hairs, cut  $\frac{1}{4}$ – $\frac{1}{2}$  across pinna, narrowly triangular, acute to acuminate, sometimes with a terminal web of hairs.

**Peduncles** villous about equal in length to leaves, 10–30 mm, ebracteate or bearing 1 simple bract. **Pistillate capitula** 2–4 mm extending to 8 mm diameter in fruit; surface convex, involucre urceolate; involucre bracts 15–30, unequally 3-, or more seriate, broadly elliptic, green, more or less villous with a broad, usually brown tipped, scarious margin; inner bracts elongated after anthesis to enclose subglobose fruiting head; florets 25–80, 2 mm long, curved, yellow-green; corolla slightly longer than wide, dentition unequal. **Staminate heads** 3–5 mm diameter; involucre hemispherical, involucre bracts 5–10, subequally uni-, or biseriate, not extending after anthesis; florets similar but slightly more numerous. **Cypselae** 1.6 × 1 mm, initially pale, chartaceous maturing brown and smooth, slightly compressed, unwrinkled.

## SIMILAR TAXA

*Leptinella serrulata* (D.G.Lloyd) D.G.Lloyd et C.J.Webb and *L. calcarea* (D.G.Lloyd) D.G.Lloyd et C.J.Webb are closely related to *L. pusilla*. *Leptinella calcarea* differs by its rigidly stiff, fleshy leaves lacking any brown pigmentation, it is also geographically isolated from both *L. serrulata* and *L. pusilla*. *Leptinella serrulata* differs from *L. pusilla* mainly by its consistently and copiously silvery-hairy, submembranous leaves, and by the pinnae that are usually overlapping rather than distant. Furthermore, the pinnae teeth are more or less oblong rather than triangular. *L. pusilla* is frequently sympatric with *L. serrulata*. Exact distinction between both species is often not that easy and further research is needed to confirm the status of *L. serrulata*.

## FLOWERING

August–November

## FLOWER COLOURS

Green, Yellow

## FRUITING

October–January–(March)

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Easily grown and so fairly common in cultivation. However, most cultivated material is of one sex-type so seed is rarely produced. An excellent ground cover for sunny, dry sites on free drainable soils. Once established this species is remarkably drought tolerant. Plants sold as *Cotula perpusilla* cv. Platts Black are not *L. pusilla* but *L. serrulata*.

## ETYMOLOGY

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

**pusilla**: Small

## ATTRIBUTION

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

## REFERENCES AND FURTHER READING

Lloyd DG. 1972. A revision of the New Zealand, Subantarctic, and South American species of *Cotula*, section *Leptinella*. *New Zealand Journal of Botany* 10(2): 277–372. <https://doi.org/10.1080/0028825X.1972.10429156>.  
Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

### **NZPCN FACT SHEET CITATION**

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

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/leptinella-pusilla/>