

Leptinella nana

COMMON NAME

pygmy button daisy

SYNONYMS

Cotula nana D.G.Lloyd

FAMILY

Asteraceae

AUTHORITY

Leptinella nana (D.G.Lloyd) D.G.Lloyd et C.Webb

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledonous composites

CHROMOSOME NUMBER

2n = 52

CURRENT CONSERVATION STATUS

2012 | Threatened – Nationally Critical | Qualifiers: CD, EF, Sp

PREVIOUS CONSERVATION STATUSES

2009 | Threatened – Nationally Endangered | Qualifiers: CD, EF, Sp

2004 | Threatened – Nationally Endangered

DISTRIBUTION

Endemic. North and South Islands. In the North Island it is only known from the south western coastline at one site near Titahi Bay. In the South Island it is known from two sites, one at the Rai Valley, Marlborough and the other near Mount Pleasant, in the Port Hills, near Christchurch, Canterbury.

HABITAT

Habitat varies from forest to coastal and montane cliff-top grassland, but common features are the need for disturbance patches, shelter, and supply of moisture. The species appears to have adopted a strategy of constant colonisation of small patches of bare ground and so occupies a highly dynamic and changing micro-habitat.

FEATURES

Diminutive, much-branched, monoecious, perennial herb forming small, diffuse patches. Rhizomes at soil surface, slender, 0.5 mm diam., green, sparsely pilose hairy. Leaves 1-several at apex, mostly distant. Leaves 1-pinnatifid, 4-20 x 0.2-0.4 mm; blade 0.3-15 mm, obovate to narrow-obovate, membranous, green usually without brown pigmentation, glabrous or sparsely pilose hairy, pinnae 6-10 pairs, distal ones close-set or overlapping, proximal ones distant; teeth 0-3 on distal margins of proximal pinnae. Peduncles shorter than leaves, 0.3-10 mm, glabrous to pilose. Capitula 1-2 mm diam, yellow, surface convex, involucre hemispherical; phyllaries 20 in 2 subequal rows, oblong or obovate, red-green, villous, with wide, brown-tipped, scarious margins. Pistillate florets 20-30, staminate 5-7 both in 2 rows, c.1 mm long, straight, yellow-green; corolla equal in length and width. Achenes 1 x 0.5 mm, ovoid, green-brown.



In cultivation ex Titahi Bay. Photographer: Jeremy Rolfe



Growth habit. Titahi Bay. Photographer: Jeremy Rolfe

SIMILAR TAXA

Easily distinguished from all other indigenous, small-leaved, diminutive *Leptinella* species by the branches which radiate from a central cluster, rhizome leaves crowded at the apex, short shoots absent or reduced, leaf bases, phyllaries and florets which lack dark veins; and by the slender rhizomes up to 0.5 mm diam, membranous leaves, and yellow-green capitula up to 2 mm diam.

FLOWERING

Early Spring to end of October and early autumn to early winter

FLOWER COLOURS

Green, Yellow

FRUITING

Through out the year

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easy from rooted pieces and often self sows and establishes in gardens. As it is very small it is easily lost by being over-topped by taller plants. Does best in permanently open ground. An ideal plant, once established for high impact areas, though it seems to prefer a damp soil to do best.

THREATS

Likely factors in any local extirpation of *L. nana* include loss of temporary open sites for colonisation, increased competition from other plants, opening up of protective vegetation allowing sites to dry out or become weedy, increased erosion or deposition of debris, excessive trampling by people and animals, loss of seed dispersal vectors like terrestrial birds and other animals, seed loss to unsuitable habitat, and indiscriminate herbicide use. Slugs are a threat to cultivated *L. nana*.

ETYMOLOGY

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

nana: Small

ATTRIBUTION

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

REFERENCES AND FURTHER READING

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.

Moss, T.C. 1985. *Observations on Cotula nana* Lloyd. *Wellington Botanical Society Bulletin*, 42: 64-67

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* 11: 285-309.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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