

# Pseudognaphalium lanatum

## SYNONYMS

Gnaphalium lanatum G.Forst., Anaphalis lanata (G.Forst.) F.Muell., Gnaphalium luteoalbum var. compactum Kirk, Gnaphalium luteoalbum var. incanum A.Rich., Pseudognaphalium ephemereum de Lange

## FAMILY

Asteraceae

## AUTHORITY

Pseudognaphalium lanatum (G.Forst) Smissen, Breitw. & de Lange

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledonous composites

## CHROMOSOME NUMBER

2n = 14

## INTERIM CONSERVATION STATUS

2023 | Not Threatened | Interim

## PREVIOUS CONSERVATION STATUSES

2017 | Threatened – Nationally Critical | Qualifiers: DP, EF, RR, Sp

2012 | Threatened – Nationally Critical | Qualifiers: DP, EF, RR, Sp

2009 | Threatened – Nationally Critical | Qualifiers: DP, EF, RR, Sp

2004 | Sparse

## DISTRIBUTION

Endemic. New Zealand, South Island, eastern from the upper Wairau River to Southland.

## HABITAT

Montane to subalpine. Usually in intermontane basins where it is a plant of ephemeral wetlands, kettlehole, tarn and lake margins, strictly in places which are flooded in winter and dry out in summer.



North Coast McKormick Peninsula (north of Dea's Head), Main Auckland Island, Strannik Auckland Island Expedition. Photographer: Alex Fergus, Date taken: 12/01/2023, Licence: CC BY-NC.



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## DETAILED DESCRIPTION

Sparingly to much branched annual herb forming greyish more or less circular patches 10-80 mm diameter, and 10-15 mm tall on dried out mud of montane to alpine lake, pond and tarn beds. All parts densely clad in off white to greyish, floccose, cottony hairs (hairs initially white fading with age to off-white or grey); hairs shedding somewhat on older leaves. Branches filiform, decumbent, apices more or less ascending. Rosette leaves 3-8, mostly all withered at flowering; 7.4-18.6 x 2.0-4.6 mm, obovate, spathulate, oblong-spathulate, oblanceolate, elliptic to linear-lanceolate; apices obtuse to acute, often apiculate, bases cuneate to attenuate, dull grey-green to grey, margins often weakly undulate; mid stem and upper stem leaves 2-3, spreading, up to 10.2 x 1.8 mm, mostly narrow-oblanceolate to spathulate or linear-lanceolate, apices acute to subacute, becoming distinctly smaller near inflorescence, greyish-white to white due to dense hair covering, margins plane. Inflorescence of 1-3 terminal capitula, each subtended by a foliose bract 5.0-8.2 x 2.1-6.3 mm. Capitula mostly solitary, if more than 1 then arranged in very compact, simple, 3-flowered cymes, 2.3-4.3 mm diameter, 2.8-3.8 mm long, outer surface densely invested in white cottony hairs. Involucre narrowly barrel-shaped to urceolate; Involucral bracts arranged in 2-3 rows, basal 1/3 brown to dark brown, otherwise translucent, hyaline, pale amber, somewhat lustrous, weakly oblong, ovate, elliptic to more or less rhomboidal; adaxially with a central tuft of white, cottony hairs otherwise glabrous; outer bracts 4-12, 2.6-3.1 x 1.0-1.2 mm, slightly larger than inner 1-2 rows; inner row 4-8 (third row if present comprising 4-6 bracts). Receptacle 0.68-1.00 mm diameter, very slightly convex, alveolate. Florets 3-6, filiform, 0.9-1.4 mm long, not or scarcely exceeding involucre, corolla pale lemon yellow to almost greenish yellow; female florets 2-4, bisexual 1-2. Cypsela oblong-ellipsoid, more or less terete or compressed, 0.4-0.6 x 0.2-0.3 mm, yellow-orange, surface sparsely invested in papillate hairs. Pappus bristles 9-15, 1.8-2.6 mm long, white, barbellate readily detaching from cypsela

## SIMILAR TAXA

There are at least two plants in New Zealand that have been referred to as *Pseudognaphalium luteoalbum* by past flora treatments. Smissen et al. (2022) demonstrated that one of these plants, which they referred to *P. luteoalbum* sens. lat. is probably introduced, it is best distinguished from indigenous plants by the red rather than yellow-green / yellow florets, and usually grows in urban areas, wasteland and along roadsides. For the indigenous plants they revived *Gnaphalium lanatum*, providing a new combination in *Pseudognaphalium*, *P. lanatum* for it. This is the name that is used here for all of the indigenous *Pseudognaphalium*. In their treatment, Smissen et al. (2022) did not recognise *P. ephemerum*, seeing it as part of a broad concept of *P. lanatum*. A full taxonomic treatment of New Zealand *Pseudognaphalium* is still needed, notably a recircumscription of *P. lanatum* which currently lacks a modern description, and because it is still not certain if the naturalised *Pseudognaphalium* is conspecific with *P. luteoalbum* sens. str. In the interim, the description in this fact sheet is narrowed to those plants that had been called *P. ephemerum* until such time as a new description for *P. lanatum* is furnished.

## FLOWERING

November - February

## FLOWER COLOURS

Green, Yellow

## FRUITING

December - April

## PROPAGATION TECHNIQUE

Difficult - should not be removed from the wild.

## THREATS

As now circumscribed *Pseudognaphalium lanatum* is a widespread, common plant of mostly indigenous habitats. Those plants that had been referred to as *P. ephemerum* and which are now included in *P. lanatum* are biologically sparse, seemingly naturally uncommon in their occurrences which are dictated by the presence of suitable wetland habitats. In some locations, such as Lake Lyndon the type locality for that species many thousands of plants can appear in a good season, while at other sites it may be known from year to year by only a handful of specimens. Although its ecological requirements play a strong role in its year to year abundance it cannot be denied that at many of its known locations, especially in the northern South Island it is now seriously threatened by the spread of invasive weeds into its ephemeral wetland habitat.

## ETYMOLOGY

**pseudognaphalium:** Like *Gnaphalium* (downy), a related plant

## WHERE TO BUY

Not commercially available

## NOTES ON TAXONOMY

*Pseudognaphalium ephemereum* is a nomen novum and combination for the plant previously known as *Gnaphalium luteo-album* var. *compactum*. This plant was transferred to *Pseudognaphalium* and elevated to species rank by de Lange in de Lange et al. (2010) as a temporary measure to assure its conservation management. Increasingly it is recognised that *Pseudognaphalium* is probably better placed within *Helichrysum*, as the defining characters of that genus are shared with *Helichrysum*. Nevertheless Smissen et al. (2022) elected to use *Pseudognaphalium* in preference to *Helichrysum* when revisiting the taxonomy of New Zealand *Pseudognaphalium*.

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (28 February 2008). Description by P.J. de Lange based on live plants and herbarium specimens. - this description was subsequently published by de Lange et al. (2010)

## 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.

Smissen, R.D.; Breitwieser, I.; de Lange, P.J. 2022: *Pseudognaphalium* (Asteraceae, Gnaphalieae) diversity in New Zealand revealed by DNA sequences with notes on the phylogenetic relationships of Hawaiian Islands plants referred to *Pseudognaphalium sandwicensium*. *New Zealand Journal of Botany*: 1–28 (online). (Published online: October 2022 DOI:10.1080/0028825X.2022.2132871)

## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pseudognaphalium-lanatum/>