

# Myosotis bryonoma

## SYNONYMS

None - first described in 2018

## FAMILY

Boraginaceae

## AUTHORITY

*Myosotis bryonoma* Meudt, Prebble et Thorsen

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR, Sp

## BRIEF DESCRIPTION

Minute herb of high-elevation bogs and wet places in mountain ranges of Otago, New Zealand. Rosette leaves fleshy, bearing hairs on the leaf underside orientated parallel to midrib. Inflorescences

## DISTRIBUTION

Endemic. New Zealand, South Island, Otago

## HABITAT

In damp to saturated high-elevation (subalpine to alpine) bogs, seepages, flushes, hollows, swamps, wetlands, and snow-melt streams and banks; on silt, peat, schist, basalt in exposed, sunny, flat or gently sloping open areas of smooth, short mossy bog turf containing mixed bryophytes, cushions -plants and small herbs



*Myosotis bryonoma* in flower, Nevis Valley, Otago. Photographer: John Barkla, Date taken: 01/11/2011, Licence: CC BY.



*Myosotis bryonoma* in flower in subalpine seep, Nevis Valley, Otago. Photographer: John Barkla, Date taken: 01/11/2011, Licence: CC BY.

## DETAILED DESCRIPTION

Single rosettes with fibrous roots. Rosette leaves 3–5, fleshy, petiolate; petioles sometimes wide, indistinct, not sheathing, 1.0–6.6 mm x 0.6–1.7 mm; lamina 2.5–7.4 mm x 1.5–4.5 mm, widest point usually at or above middle, rarely below middle, narrowly obovate to very broadly obovate, ovate to very broadly ovate, rarely narrowly elliptic, broadly elliptic, rotund, lanceolate, or oblanceolate; apex obtuse, with hydathode on abaxial side; trichomes 0.2–0.7 mm long, straight, antrorse, appressed, sparsely to densely distributed (but abaxially usually glabrous), adaxially and abaxially oriented parallel relative to the midrib. Inflorescences 1–5 per rosette, prostrate to ascending, unbranched (rarely once-branched), 10–45 mm long, wholly bracteate, with up to 3–7 cauline leaves per inflorescence (including all branches) and, of these, 1–3 associated with flowers and 2–4 not associated with flowers; adventitious roots lacking at tips; scape 0.4–1 mm wide; trichomes 0.2–0.6 mm long, straight, antrorse, appressed, sparsely to densely distributed, sometimes overlapping. Lowest cauline leaves generally petiolate; petioles 0.9–5.0 mm x 0.5–1.2 mm; lamina 2.7–6.9 mm x 1.6–3.3 mm, oblanceolate to narrowly obovate, rarely elliptic or obovate to broadly obovate; apex obtuse, with hydathode on abaxial side; trichomes as on rosette leaves. Uppermost cauline leaf sessile; lamina 2.5–6.0 mm x 0.9–2.6 mm, oblanceolate to narrowly obovate, lanceolate to ovate, or rarely elliptic or obovate; apex obtuse or acute, with hydathode on abaxial side. Flowers up to 1–3 per inflorescence (including all branches), each subtended by a cauline leaf. Internodes up to 0–1.6 mm long at flowering or 0–4.7 mm long at fruiting. Pedicels up to 0.4–1.1 mm long at flowering or 0.6–6.5 mm long at fruiting; trichomes 0.2–0.9 mm long, straight, antrorse, appressed to patent, densely distributed, sometimes overlapping. Calyx 1.1–3.3 mm long at flowering or 1.8–3.2 mm long at fruiting x 1.6–3.4 mm wide at the top at fruiting; calyx lobes 1.4–2.1 mm x 0.5–1.1 mm at fruiting, lobed to 0.5–0.9 the length of the calyx; trichomes 0.1–0.8 mm long, straight, antrorse, appressed, densely distributed, sometimes overlapping, and inside densely distributed and overlapping. Corolla 1.3–6.6 mm diameter, white with yellow faucal scales; corolla lobes 0.4–2.5 mm x 0.6–2.1 mm, obovate to very broadly obovate, rarely ovate or very broadly ovate; corolla tube 1.6–4.2 mm long from base to faucal scales, 0.5–2.2 mm wide at faucal scales. Stamens 1.7–4.8 mm long; filaments 0–0.3 mm long, attached to corolla tube below faucal scales, 1.0–3.8 mm above base of corolla tube; anthers 0.5–1.1 mm long, included, sometimes partially exerted, only tips reaching faucal scales. Style 1.1–5.9 mm long at flowering, 1.9–5.4 mm long at fruiting. Nutlets 4, 1.1–1.9 mm x 0.7–1.1 mm, ovoid, convex or keeled, winged or scarcely winged, smooth, shiny, light brown

## SIMILAR TAXA

Differs from *M. tenericaulis* by the shorter and wider petioles, smaller and fleshier leaves, abaxially glabrous rosette leaves, appressed parallel-oriented trichomes on the rosette leaves adaxially, and few-flowered inflorescences that have shorter internodes. Differs from *M. colensoi* and *M. cheesemaniae* by the shorter rosette leaf petioles, abaxially glabrous rosette leaves, and the shorter calyx and corolla tube. Differs from *M. brevis* and all other *M. pygmaea* species-group species by the larger corollas, shorter calyx trichomes, and (except for *M. glauca*) straight, appressed trichomes on the rosette leaves adaxially. Distinguished ecologically from other New Zealand *Myosotis* by being restricted to mountain bog habitats.

## FLOWERING

November - April

## FLOWER COLOURS

White, Yellow

## FRUITING

February - April

## PROPAGATION TECHNIQUE

*Myosotis bryonoma* is not known to have been successfully cultivated.

## THREATS

*Myosotis bryonoma* was listed as *M. aff. tenericaulis* (AK 7570; Garvie), as Taxonomically Indeterminate At Risk–Naturally Uncommon RR, Sp (de Lange et al. 2013). Meudt & Prebble (2018) agreed with that assessment. The species though occupying a large area is never particularly common, biological sparse and tied to small areas of suitable alpine bog habitat.

## ETYMOLOGY

**myosotis:** Mouse-eared

**bryonoma:** Meaning 'dwelling in moss' the epithet is derived from the Greek words 'bryon' (moss) and 'nomos' (place or condition for living).

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 3 June 2018. Description adapted from Meudt & Prebble (2018).

## REFERENCES AND FURTHER READING

Meudt, H.M.; Prebble, J.M. 2018: Species limits and taxonomic revision of the bracteate-prostrate group of southern hemisphere forget-me-nots (*Myosotis*, Boraginaceae), including description of three new species endemic to New Zealand. *Australian Systematic Botany* 31: 48-105

## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/myosotis-bryonoma/>