

Myosotis hikuwai

FAMILY

Boraginaceae

AUTHORITY

Meudt, Prebble & G.M.Rogers

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CHROMOSOME NUMBER

Unknown

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: DP, OL

BRIEF DESCRIPTION

In spite of its unusual erect habit spring annual

DISTRIBUTION

South Island: Otago.

HABITAT

On excessively well drained, gravelly alluvial outwash terrace bordering river, beside recreational track, in open kānuka shrubland and woodland; with *Acaena agnipila*, *Carex breviculmis*, *Crassula mataikona*, *Hieracium lepidulum*, *Hydrocotyle moschata*, *Hypericum perforatum*, *Kunzea serotina*, *Myosotis brevis*, *Myosotis discolor*, *Myosotis glauca*, *Myosurus minimus* subsp. *novae-zelandiae*, *Veronica verna*, and bryophytes.



Locally common in dryland herbfield patches amongst kanuka treeland, Queenstown Otago.

Photographer: John Barkla, Date taken:

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Locally common in dryland herbfield patches amongst kanuka treeland, Queenstown Otago.

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DETAILED DESCRIPTION

Single rosette with fibrous roots, sometimes stoloniferous. Rosette leaves 5–6, petiolate; petioles not sheathing, 3.9–5.2 mm long, 0.6–2.3 mm wide; lamina 3.4–7.2 mm long, 2.1–3.3 mm wide (length:width ratio 1.3–2.7:1), widest point above middle, oblanceolate, narrowly obovate, obovate or broadly obovate; apex obtuse, with hydathode on abaxial side (rarely not visible); trichomes 0.3–0.7 mm long, mostly straight, some flexuous, adaxially antrorse, patent, oriented parallel or slightly oblique to the midrib, sparsely distributed, marginally antrorse, patent, sparsely distributed, rarely densely distributed, abaxially antrorse, appressed or patent, oriented parallel or oblique to the midrib, glabrous or with isolated trichomes; ratio of rosette-leaf trichome length to rosette-leaf length ~0.1:1. Inflorescences 1–5 per rosette, ascending to erect, once-branched or twice-branched, not bifurcating, up to 34–40 mm long, wholly bracteate, with up to 12–22 cauline leaves per inflorescence (including all branches) and of these, 12–20 associated with flowers; adventitious roots lacking at tips; scape 0.5–0.8 mm wide; trichomes 0.3–1.1 mm long, straight, rarely flexuous, antrorse, mostly patent, sometimes appressed, densely distributed. Lowest cauline leaves generally petiolate; petioles 3.3–4.9 mm long, 0.9–2.2 mm wide; lamina 4.7–5.9 mm long, 1.9–3.3 mm wide (length:width ratio 1.8–2.5:1), widest at or above middle, narrowly obovate, rarely oblanceolate; apex obtuse; trichomes as on rosette leaves. Uppermost cauline leaf sessile; lamina 1.5–3.2 mm long, 1.0–1.4 mm wide (length:width ratio 1.6–2.3, 1.9:1), widest above middle, rarely below middle, narrowly obovate, obovate, or narrowly ovate; apex acute; trichomes as on rosette leaves. Flowers up to 12–20 per inflorescence (including all branches). Internodes up to 2.1 mm long at flowering and up to 5.9 mm long at fruiting. Pedicels up to 1.1 mm at flowering or up to 1.4 mm at fruiting; trichomes 0.2–0.9 mm long, mostly flexuous, some straight, antrorse, appressed to patent, densely distributed and overlapping. Calyx 1.9–3.0 mm long at flowering, 3.4–4.7 mm long at fruiting, 1.5–2.0 mm wide at the top at fruiting; calyx lobes 1.1–2.2 mm long, 0.5–0.8 mm wide at fruiting, lobed to 0.3–0.5 × the length of the calyx; trichomes 0.1–1.2 mm long, flexuous mostly, antrorse, patent, densely distributed and sometimes overlapping, and inside sparsely distributed. Corolla 0.6–1.2 mm wide in diameter (measured, dried), 1.2–1.8 mm (calculated, dried), or 2.2–3.6 (measured, alive; G. Rogers, unpubl. data), white, with yellow faucal scales; corolla lobes 0.4–0.6 mm long, 0.4–0.5 mm wide (length:width ratio 1.0–1.4:1), obovate or very broadly ovate; corolla tube 1.5–2.1 mm long from base to faucal scales, 0.5–0.6 mm wide at faucal scales. Stamens ~2.4 mm long; filaments ~0.1 mm long, attached to corolla tube ~0.4–0.5 mm below base of faucal scales and 1.4–1.8 mm from base of corolla tube; anthers 0.4–0.6 mm long, fully included, wholly below faucal scales. Style 1.3–1.8 mm long at flowering, 1.2–1.5 mm long at fruiting. Nutlets 4, 1.0–1.2 mm long × ~0.7 mm wide (length:width ratio 1.5–1.7:1), ovoid, keeled, rimmed or scarcely rimmed, light, medium or dark brown.

SIMILAR TAXA

Recognised by the erect growth and the spring annual lifestyle. Differs from *M. antarctica*, *M. brevis*, *M. glauca* and *M. umbrosa* in its erect habit and high number of cauline leaves subtending flowers; differs from *M. glauca*, *M. antarctica* and *M. umbrosa* by the combination of small corollas and nutlets (corolla diameter <1.5 mm, nutlets <1.2 mm long and <0.8 mm wide as measured on dried herbarium specimens) and patent trichomes on rosette leaf margins and adaxial surface; differs from *M. brevis*, *M. antarctica* and *M. umbrosa* by the mostly straight trichomes on many cauline- and rosette-leaf surfaces, and calyces with sparsely distributed trichomes; differs from *M. brevis* in its larger calyces (1.9–3.0 mm long at flowering and 3.4–4.7 mm long at fruiting).

FLOWERING

Spring annual; flowering mid-September–late November, fruiting November.

ETYMOLOGY

myosotis: Mouse-eared

hikuwai: The epithet hikuwai refers to the Hikuwai Conservation Area where the only known population of this plant is from. In te reo Māori, hikuwai means 'source of a stream' and may refer to the source of the Clutha River / Mata-Au.

It was first collected in 2013 and has been previously referred to as 'Myosotis sp. morphologically similar to *M. glauca*' (Prebble et al. 2018), *M. aff. glauca* (a) (WELT SP104520; "Mata-Au") (de Lange et al. 2018; Prebble et al. 2022), or *M. "Mata-Au"* (Prebble et al. 2019).

ATTRIBUTION

Fact sheet prepared by Marley Ford (8 April 2023). Distribution, Habitat, features and similar taxa sections copied from Meudt & Prebble (2022).

REFERENCES AND FURTHER READING

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MORE INFORMATION

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