Myosotis venticola

FAMILY

Boraginaceae

AUTHORITY

Meudt & Prebble

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

Nο

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CHROMOSOME NUMBER

Unknown

CURRENT CONSERVATION STATUS

DISTRIBUTION

New Zealand. South Island: Canterbury, Otago (St Bathans); Mackenzie (Lake Ōhau).

HABITAT

On rock or scree slopes, flat spur shoulders, exposed stony, rocky or gravelly ground, or loose sandstone rock; in sparsely vegetated cushion herbfield, degraded tussockland, or high alpine fellfield; with Abrotanella inconspicua, Aciphylla hectori, Agrostis muelleriana, Anisotome flexuosa, Anisotome imbricata, Azorella exigua, Chionochloa macra, Colobanthus buchananii, Craspedia sp., Dracophyllum muscoides, Epilobium sp., Gaultheria depressa, Hieracium sp., Kelleria dieffenbachii, Koeleria cheesemanii, Leptinella pectinata, Luzula pumila, Luzula rufa var. albicomans, Lycopodium fastigiatum, Notogrammitis crassior, Poa colensoi, Racomitrium sp., Ranunculus sp., Raoulia hectorii, Veronica densifolia, Veronica thomsonii, Wahlenbergia albomarginata.





In alpine herbfield, St Bathans Otago. Photographer: John Barkla, Date taken: 10/02/2006, Licence: CC BY.

DETAILED DESCRIPTION

Single rosette with fibrous roots, often clustered with other rosettes forming loose or tight clumps or mats. Rosette leaves 5-30, petiolate; petioles not sheathing, 1.9-7.4 mm long, 0.9-5.4 mm wide; lamina 3.3-11.9 mm long, 2.5-6.6 mm wide (length:width ratio 1.1-2.1:1), widest point at or above middle (rarely below middle), narrowly obovate or obovate, rarely elliptic, narrowly ovate, ovate, broadly obovate or very broadly obovate; apex obtuse, with hydathode on abaxial side; trichomes 0.3-2.0 mm long, flexuous mostly, some straight, adaxially antrorse usually mixed with some retrorse (rarely antrorse only), appressed or patent, oriented mostly parallel, some oblique to the midrib, densely distributed and overlapping, marginally antrorse, appressed or patent, sometimes becoming erect on petiole (rarely mostly erect), densely distributed and overlapping, abaxially mostly retrorse, but often antrorse near apex, appressed or patent, oriented parallel mostly, some oblique to the midrib, densely distributed and overlapping; ratio of rosette-leaf trichome length to rosette-leaf length 0.1-0.2:1. Inflorescences 3-16 per rosette, prostrate or ascending, unbranched, up to 19-47 mm long, partially or wholly bracteate, at least the lowest 1 or 2 flowers subtended by cauline leaves, with up to 5-8 cauline leaves per inflorescence (including all branches) and, of these, 1-4 associated with flowers; adventitious roots lacking at tips; scape 0.5-0.9 mm wide; trichomes 0.2-1.7 mm long, mostly flexuous, some straight, mix of antrorse and retrorse, appressed to patent, densely distributed and overlapping. Lowest cauline leaves generally petiolate; petioles 2.0-5.6 mm long, 0.8-1.6 mm wide; lamina 3.5–12.1 mm long, 1.9–5.0 mm wide (length:width ratio 1.5–2.9:1), widest at or above middle, oblanceolate or narrowly obovate; apex obtuse, rarely acute, with hydathode; trichomes as on rosette leaves. Uppermost cauline leaf sessile; lamina 5.3-7.4 mm long, 1.0-2.8 mm wide (length:width ratio 2.4-6, 3.7:1), widest at, below or above middle, lanceolate, narrowly lanceolate, oblanceolate, narrowly obovate, rarely narrowly oblanceolate; apex acute; trichomes as on rosette leaves. Flowers up to 3-6 per inflorescence (including all branches). Internodes up to 2.4 mm long at flowering and up to 2.8 mm long at fruiting. Pedicels up to 1.6 mm at flowering and up to 2.8 mm at fruiting; trichomes 0.2–0.7 mm long, mostly flexuous, some straight, mix of antrorse and retrorse (rarely antrorse only), appressed to patent, densely distributed and overlapping. Calyx 4.7-6.1 mm long at flowering, 5.0-7.8 mm long at fruiting, 1.6-3.2 mm wide at the top at fruiting; calyx lobes 1.2-3.0 mm long, 0.6-1.0 mm wide at fruiting, lobed to 0.2-0.4x the length of the calyx; trichomes 0.2-1.3 mm long, mostly flexuous, some straight or curved, rarely few hooked, mix of retrorse and antrorse hairs throughout, but mostly antrorse distally and retrorse proximally, appressed to patent, densely distributed and overlapping, and inside densely distributed and sometimes overlapping, rarely sparsely distributed. Corolla 3.0-5.0 mm wide in diameter (measured) or 6.0-7.5 mm (calculated), white with yellow faucal scales; corolla lobes 2.2-2.7 mm long, 1.7-2.5 mm wide (length:width ratio 1.0-1.3:1), broadly or very broadly obovate; corolla tube 3.7-6.3 mm long from base to faucal scales, 1.5-2.1 mm wide at faucal scales. Stamens 4.7-6.6 mm long; filaments 0.2-0.3 mm long, attached to corolla tube ~0.3-0.5 mm below base of faucal scales, 3.1-4.6 mm from base of corolla tube; anthers 1.2-1.7 mm long, partly exserted, tips only surpassing faucal scales. Style 4.6–7.5 mm long at flowering, 4.3–9.0 mm long at fruiting. Nutlets 4, 1.5–2.1 mm long, 0.9–1.3 mm wide (length:width ratio 1.5–1.8:1), ovoid, keeled, rimmed or scarcely rimmed, dark brown, sometimes medium brown

SIMILAR TAXA

Differs from all other southern hemisphere *Myosotis* species (except *M. oreophila*) in the presence of retrorse trichomes mixed with antrorse trichomes on the adaxial side of the rosette and cauline leaves; differs from all other New Zealand bracteate–prostrate species in its retrorse trichomes on the branches, its partially bracteate inflorescences (except some individuals of *M. lyallii*), and its mix of retrorse and antrorse trichomes on the rosette leaves abaxially (except for *M. retrorsa* and *M. umbrosa*); differs from *M. retrorsa* and *M. lyallii* in its appressed trichomes on the rosette leaf adaxially and on the margins, and unbranched inflorescences; differs from M. cheesemanii in its retrorse hairs present on calyces, and flexuous trichomes on the rosette leaves.

FLOWERING

Flowering January, fruiting January-February.

ETYMOLOGY

myosotis: Mouse-eared

venticola: The epithet venticola means 'wind-dwelling' or 'inhabiting windy areas' and comes from the Latin words ventus, meaning 'wind', and cola, meaning 'dweller'. The epithet refers to the very windy alpine habitats in which plants of this species occur, and is a tribute to the formidable gales we encountered when collecting specimens of it in the Dunstan Mountains.

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

Meudt, H. M., & Prebble, J. M. 2022. Morphological analyses support recognition of three new threatened species of bracteate–prostrate Myosotis (Boraginaceae) endemic to the South Island of Aotearoa New Zealand. *Australian Systematic Botany*, 35(5), 364-394.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/myosotis-venticola/