

Schizacme helmsii

SYNONYMS

Mitrasacme montana var. *helmsii* Kirk

FAMILY

Loganiaceae

AUTHORITY

Schizacme helmsii (Kirk) K.L.Gibbons

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Endangered | Qualifiers: DP, RR, Sp

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Endangered | Qualifiers: DP, RR, Sp

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

BRIEF DESCRIPTION

bronze green plants forming sprawling, diffuse patches and isolated tufts in open (sparsely vegetated) sodden ground. Stems up to 50 mm tall, leaves fleshy, spreading, 1.9–4.8 × 1.4–2.2 mm, obovate, with thickened margins and often minutely petiolate. Flowers white, tubular.

DISTRIBUTION

Endemic. New Zealand: South Island, North Westland, Paparoa Ranges, Denniston and Stockton Plateaus

HABITAT

Montane in wet tussock (*Chionochloa juncea*) grassland, cushion bogs, forming a sparse turf in sodden peaty skeletal quartzite soils or occurring in sparsely vegetated heath land

DETAILED DESCRIPTION

Perennial plants forming bronze-green sprawling, diffuse patches and isolated tufts. Stems up to 50 mm tall. Leaves, fleshy, ± glabrous, ± petiolate to sessile (mostly indistinct from lamina base), petiole 0.6–1.2 mm long, winged; lamina obovate, 1.9–4.8 × 1.4–2.2 mm; veins pinnately arranged; lamina margin thickened; base attenuate; apex obtuse or rounded. Bracts glabrous, scarcely distinguishable from leaves, 2.2–4.4 × 1.0–1.5 mm, narrowly obovate; apex obtuse or rounded. Flowers white, pedicellate or sessile; pedicels glabrous, up to 0.5 mm long when flowering, elongating slightly at fruiting. Calyx tube 0.2–0.7 mm long; lobes unequal or equal, glabrous narrowly deltoid to narrowly ovate; apex acute or obtuse; larger pair 1.7–2.7 × 0.7–1.2 mm. Corolla tubular; tube 2.2–4.4 mm long; lobes 0.5–1.3 mm long, acute to obtuse. Styles 1.2–1.7 mm long. Capsule laterally flattened; 2.5–2.9 × 3.7–5.0 mm wide; locules elongate, oblique; distal portion of carpels free, divaricate, with wings forming a sheath between them; wings bilobed; styles persistent or withering somewhat in fruit, generally incurved. Seed 0.6–0.8 × 0.4–0.6 mm, oblong-elliptic, pale brown to brown.



SIMILAR TAXA

Distinguished from *Mitrasacme novae-zelandiae* var. *novae-zelandiae* by the weakly petiolate (rather than sessile), flexible obovate, spreading leaves with thickened margins (rarely with an indistinct hyaline), and tubular rather than bell-shaped flowers. Both *Mitrasacme* are sympatric in the Paparoa ranges, North Westland

FLOWERING

November-January

FLOWER COLOURS

White

FRUITING

February-April

PROPAGATION TECHNIQUE

Unknown

THREATS

Although a biologically sparse, naturally uncommon plant because the majority of the known populations and much of the range of this variety is confined to the coal measures of the Denniston and Stockton Plateaus, and these habitats are being actively coal mined or at risk of future coal mining this variety is now assessed as 'Threatened / Nationally Endangered' (de Lange et al. 2013). Although *Mitrasacme montana* var. *helmsii* is known also from the Paparoa Ranges it is extremely uncommon there.

TAXONOMIC NOTES

A full revision of the New Zealand *Mitrasacme* is required. When Dunlop (1996) erected the Australasian genus *Schizacme* they indicated that the New Zealand taxa *Mitrasacme montana* var. *helmsii* and *M. novae-zelandiae* var. *novae-zelandiae* were congeneric with Australian species of *Schizacme* but did not provide a formal treatment of them (Webb & Simpson 2001). Aside from the generic position, morphological evidence suggests that *M. montana* var. *helmsii* needs formal elevation to species rank, and further some Fiordland and Stewart Island populations currently attributed to *M. novae-zelandiae* var. *novae-zelandiae* may warrant segregation and formal taxonomic recognition.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 12 November 2014. Description adapted from Kirk (1890), Allan (1961) and Webb & Simpson (2001), supplemented with observations made from dried material.

REFERENCES AND FURTHER READING

- de Lange, P.J.; Rolfe, J.R.; Champion, P.D.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Norton, D.A.; Hitchmough, R.A. 2013: Conservation status of New Zealand indigenous vascular plants, 2012. *New Zealand Threat Classification Series 3*. Department of Conservation, Wellington.
- Dunlop, C.R. 1996: *Schizacme*. Pp. 58-59, 314 in Orchard, A.E. (ed.) *Flora of Australia*. Vol 28: Gentianales. Melbourne, CSIRO publishing and Australian Biological Resources Study.
- Kirk, T. 1890: On the occurrence of a variety of *Mitrasacme montana* Hook.f. in New Zealand. *Transactions and Proceedings of the New Zealand Institute* 22: 445-446.
- Webb, C.J.; Simpson, M.J.A. 2001: *Seeds of New Zealand Gymnosperms and Dicotyledons*. Christchurch, Manuka Press.

NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/mitrasacme-montana-var-helmsii/> (Date website was queried)

MORE INFORMATION

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