

Euphrasia townsonii

COMMON NAME

eyebright

FAMILY

Orobanchaceae

AUTHORITY

Euphrasia townsonii Petrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

NVS CODE

EUPTOW

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. South Island, Mountains of north-west Nelson to Paparoa Range and St Arnaud Mountains.

HABITAT

Found at 500 – 1500m a.s.l. usually in damp and peaty ground.

DETAILED DESCRIPTION

Slender tufted perennial herb sometimes with stout woody stock; stems slender, much branched and rooting at nodes, branches erect, 50-150 mm tall, slender to filiform, usually densely pubescent with lax flattened white hairs. Leaves sessile, usually rather distant, 4-10 (-15) x 2-4 (-7) mm, narrow to ovate-rhomboid with 1-2 pairs of narrow acute teeth and large triangular acute terminal lobe, cuneate at base, glabrous or with sparse glandular or non-glandular hairs, margins thickened and revolute. Flowers few towards the tips of the branches on slender straight pedicels 5-20 mm long, usually distinctly longer than leaves; calyx and pedicels densely pilose with flattened white hairs and long glandular hairs. Calyx 5-8 mm long, approximately evenly divided 1/3-1/2 way; lobes lanceolate to triangular, acute, margins and midribs thickened and reddish. Corolla white, (10-) 15-20 mm long and diameter; tube much longer than calyx; lobes of lower lip 4-9 mm wide, usually deeply emarginate, of upper lip 2-5 mm wide, entire to emarginate. Anthers golden yellow, marginal hairs numerous, awns usually very unequal, stout. Capsule more or less equal to calyx or much shorter, 3-7 x 2.5-4 mm, broad-oblong to obovate or almost suborbicular, glabrous or nearly so; seeds 8-10 per locule, 1-1.5 mm long.

SIMILAR TAXA

Small forms could be mistaken with *Euphrasia revoluta* form which it can be distinguished by the leaves having 2 pairs of relatively large lateral teeth. The calyx of *E. townsonii* has glandular hairs present, compared to *E. revoluta* being glabrous or having non-glandular pubescent hairs.



Mt Peel, Nelson, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

FLOWERING

November – February (-April).

FLOWER COLOURS

White, Yellow

FRUITING

January – February (-April).

LIFE CYCLE

Seeds is dispersed by wind and possibly water and ballistic projection (Thorsen et al., 2009).

ETYMOLOGY

euphrasia: Eye-medicine

townsonii: Honours William L. Townson (1855-1926)

TAXONOMIC NOTES

Variable in the size and shape of the leaves and size of the flowers. Small forms with narrow-rhomboid leaves up to 5 x 3 mm with only 1 pair of small lateral teeth resemble *E. revoluta* closely, especially unusually short-pedicelled plants such as occur on Mount Robert, but the most robust forms with upper leaves broadly ovate-rhomboid, up to 15 x 7 mm, and with 2 pairs of large lateral teeth are very different. On Mount Arthur and Mount Peel occur dwarf tufted forms only approximately 20 mm high but with flowers and capsules still conspicuous above the imbricate leaves on pedicels 10-15 mm long.

ATTRIBUTION

Fact sheet prepared for NZPCN by M.D. Ward (11 November 2020) Description adapted from Allan (1961).

REFERENCES AND FURTHER READING

Allan, H. H. 1961. Flora of New Zealand. Volume 1. Wellington: Government Printer. Pages 854-855.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/euphrasia-townsonii/>