Euphrasia disperma

COMMON NAME
slender-flowered eyebright

SYNONYMS
Euphrasia longiflora Kirk, Siphonidium longiflorum Armst., Anagosperma dispermum Wettst.

FAMILY
Orobanchaceae

AUTHORITY
Euphrasia disperma Hook.f.

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

NVS CODE
EUPDIS

CURRENT CONSERVATION STATUS
2017 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

PREVIOUS CONSERVATION STATUSES
2012 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp
2009 | Not Threatened
2004 | Not Threatened

DISTRIBUTION
Endemic. North and South Islands, in the North, Reporoa Bog, North-west Ruahine Range; in the South, coastal to montane western Nelson and Westland from Karamea to Okarito.

HABITAT
Sea level to 1000m a.s.l. usually in boggy or muddy places.

WETLAND PLANT INDICATOR STATUS RATING
OBL: Obligate Wetland
Almost always is a hydrophyte, rarely in uplands (non-wetlands).

Very long corolla tube; Okarito, behind village in swamp. Photographer: Colin C. Ogle, Date taken: 20/12/1983, Licence: CC BY-NC.

In Sphagnum bog, Reporoa Bog, northwest Ruahine Range. Photographer: Colin C. Ogle, Date taken: 31/01/1989, Licence: CC BY-NC.

DETAILED DESCRIPTION

Succulent prostrate annual herb forming loosely matted patches but not rooting at nodes; main stem 1-2 mm diameter, more or less umbellately divided into usually 5 far-spreading, copiously oppositely branched stems up to approximately 200 mm or more long, or whole plant much smaller; stems and branches glabrous, or more or less pilose. Leaves sessile, fleshy, up to approximately 6 x 2.5 mm, lanceolate to ovate to quadrate in outline, acuminate, apiculate, entire or with a pair of narrow to filiform apiculate teeth up to 1.5 mm long about the middle (both forms usually on same plant), glabrous, or more or less pilose, segments sometimes tipped with cluster of hairs. Flowers borne singly along the branches on short generally horizontal pedicels which are bent abruptly at junction with calyx so that flower stands erect. Calyx 4-6 mm long, glabrous, or more or less pilose, cut approximately 1/2 way into narrow, acuminate, sometimes hair-tipped lobes, anterior clefts usually longer than other 3. Corolla white to cream, 9-15 mm long; tube up to 13 mm long, very narrow to filiform, flaring suddenly into limb 4-5 mm diameter; lobes of lower lip 1.5-2.5 mm wide, entire, of upper lip very short but wider, up to 3.5 mm wide. Anthers free, erect, golden yellow with completely glabrous margins, awns small, almost equal. Ovary with 1 ovule per locule; capsule broader than tall, rupturing calyx at anterior cleft; sometimes 2-seeded and symmetrically obcordate or bicornute, more often 1-seeded by abortion and asymmetric, approximately 2 x 4 mm and ovate to triangular in outline; apparently indehiscent. Seed close to ovate, approximately 1.3-1.4 x 2.3-2.8 (-3.5) mm long.

SIMILAR TAXA

From Euphrasia wettsteiniana it can be distinguished by its smaller and usually shorter long-tubed flowers, and by its less nerved and not having distinctly unidentate leaves. In E. wettsteiniana the corolla (15-70 mm long), and anthers (2 mm long) are much larger than in E. disperma (9-15 mm, and 1mm long respectively). Recently there has been consensus that the outer corolla of E. wettsteiniana has yellow blotches present, which are not present on E. disperma.
When determining between the two species it would be best to consider all the potential differences.

FLOWERING

December - March

FLOWER COLOURS

White, Yellow

FRUITING

February - April

LIFE CYCLE

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

ETYMOLOGY

euphrasia: Eye-medicine

TAXONOMIC NOTES

The flowers are very short in bud, the corolla-tube elongating rapidly just before anthesis. As in Euphrasia dyeri and Euphrasia repens the large oblong cotyledons are often persistent.
Though a wide range in length of corolla-tube, anther-length and leaf-shape was noted in specimens examined (Allan 1961), it was not easy to recognize the distinct discontinuity described by du Rietz.

ATTRIBUTION

Fact sheet prepared for NZPCN by M.D. Ward (12 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 859-860.
du Rietz. G. E. 1931. The long-tubed New Zealand species of *Euphrasia* (=*Siphonidium* Armstr.). Svensk Botanisk Tidskrift. Volume 25: Pages 108-25.
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
Webb, C.J. and Simpson, M.J., 2001. *Seeds of New Zealand gymnosperms and dicotyledons*. Manuka Press. Pages 335 & 338.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/euphrasia-disperma/