



Trithuria inconspicua

Current Threat Status (2018):

Threatened - Nationally Critical

Distribution:

Endemic. New Zealand. North Island, Northland, where it is known from western dune lakes from near Awanui to the Pouto Peninsula.

Habitat:

An aquatic of shallow to medium depth (5-7m) freshwater lakes (exact depth range dependant on water quality and light levels). Preferring reasonably stable substrates but has been found growing in fine sand, gravel and organic muds. Apparently intolerant of surrounding taller vegetation. Mature plants are often partially buried in sediment so that only their upper most leaf tips are exposed.

Features*:

Aquatic perennial herb, tufted 15–55 mm high, from a shortly branching erect rhizome, trichomes present; copious adventitious roots. Apomictic or sexual. Plants in populations often female only, or plants co-sexual with unisexual or bisexual reproductive units. Leaf-bases weakly dilated (not sheathing), hyaline, toothed auricles present or absent; leaves spreading, glabrous, 15–55 × 0.25–0.4 mm; lamina linear-filiform, adaxially faintly compressed below, terete above, apex rounded with a hydathode. Reproductive units 1–4 per tuft, (3.5–)4–5(–7) mm long, on glabrous terete scapes 20–40 × 0.3–0.4 mm; involucre bracts 2–4(–7), male reproductive unit bracts 3.5–5.0 mm long, ovate to narrow-ovate, stamens (1–)3–8; anthers 0.8–1.4 mm long, bright red, filaments 1–5 mm long. Bisexual reproductive unit bracts 4–5 mm long; stamens 1–5; carpels 2–10. Female reproductive unit bracts 2.5–5.0 mm long; carpels 8–24, reddish, with 5–13 stigmatic hairs of unequal length, 0.3–1.0 mm long, red becoming hyaline. Fruits 0.4–0.56 × 0.2–0.4 mm, ellipsoid to ovoid, deciduous from persistent stalks, pericarp thin and membranous, smooth, indehiscent. Seed faintly reticulate, yellowish-brown to reddish-brown with a darker apical cap (formed by an operculum).

Flowering:

October - December

Fruiting:

December - February

Threats:

Seriously threatened in Northland due to the recent spread of the introduced bladderwort *Utricularia gibba*, and also by the continuing spread of oxygen weeds into these important lakes. Indeed it as of 2004 it has been confirmed as extinct in two more far North dune lakes.

*Attribution:

Fact Sheet by P.J. de Lange (6 January 2004). Fact sheet updated by P.J. de Lange (4 February 2019). Description based on Smitsen et al. (2019).

References and further reading:

Smitsen, R.D.; Ford, K.A.; Champion, P.D.; Heenan, P.B. 2019: Genetic variation in *Trithuria inconspicua* and *T. filamentosa* (Hydatellaceae): a new subspecies and a hypothesis of apomixis arising within a predominantly selfing lineage. *Australian Systematic Botany* 32: 1–11.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=128



Caption: Kai Iwi Lakes.

Photographer: Jeremy Rolfe



Caption: Kai Iwi Lakes.

Photographer: Dennis Gordon, NIWA