Pachycladon fasciarium

SYNONYMS

None (first described in 2009).

FAMILY

Brassicaceae

AUTHORITY

Pachycladon fasciarium Heenan

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

CURRENT CONSERVATION STATUS

2017 | Threatened - Nationally Critical | Qualifiers: CD, OL

PREVIOUS CONSERVATION STATUSES

2012 | Threatened - Nationally Critical | Qualifiers: CD, OL

2009 | Threatened - Nationally Critical | Qualifiers: CD

2004 | Threatened – Nationally Critical

DISTRIBUTION

Endemic. South I. Eastern Marlborough (Chalk Range, Mead Hill and Ben More).

HABITAT

Pachycladon fasciarium is an obligate calcicole, occurring only on Amuri Limestone bluffs and cliffs at an altitudinal range of 900–1170m.





Flowering plant. Photographer: Jan Clayton-Greene, Licence: CC BY-NC.



Pachycladon fasciarium. Photographer: Jan Clayton-Greene, Licence: CC BY-NC.

DETAILED DESCRIPTION

Monocarpic, glabrous, perennial herb, up to 200mm tall; root-stock stout, up to 20mm diameter. Leaves 19–46 \times 1.5–4.7mm, narrowly linear to narrowly linear-lanceolate, green; margin usually entire, occasionally with 1–3 pairs of minute teeth up to 0.5mm deep; apex acute to subacute; base attenuate; petiole up to 15mm long. Inflorescence 100–150mm tall, with terminal and lateral racemes. Cauline leaves on lower part of rachis, subtending lateral racemes and occasionally lowest flowers, similar to rosette leaves, 6–25 \times 0.5–1.2mm, becoming smaller in distal parts. Racemes 60–100mm long at fruiting, 7–25-flowered. Pedicels 7.0–10.0mm long, suberect to erecto-patent. Sepals 3.1–3.4 \times 2.2–2.3mm, green and often flushed pink, broadly elliptic; apex obtuse. Petals 5.5–6.4 \times 2.8–3.6mm, white; claw 1.8–2.0mm long; limb broadly elliptic to obovate, 3.3–4.4mm long; apex obtuse; base cuneate to obtuse. Median stamen filaments c. 3.0mm long; lateral stamen filaments c. 2.3mm long, cream, flushed green at base; anthers 1.0–1.2 \times 0.6–0.8mm, cream. Ovary c. 3.2mm long, green. Style 0.8–0.9mm long. Stigma 0.5–0.6mm wide. Siliques 25–45 \times 1.4–1.6mm, linear, terete, at maturity yellow-brown and often flushed red-brown; septum intact, without a midvein. Seeds 1.2–1.5 mm long, 0.6–0.8mm wide, 0.3–0.4mm thick, oblong to narrowly ellipsoid, flattened, brown or red-brown; hilum basal; surface regular to irregular, reticulate; wing apical, 0.1–0.4mm long.

SIMILAR TAXA

Most similar to P. fastigiatum from which it is distinguished by glabrous, narrowly linear, shorter, usually entire leaves, with a length-to-width ratio of 7.4–18.4:1 (average 11.3:1). If the leaves are toothed these are usually only 0.5mm deep. The leaves of P. fastigiatum are either glabrous or hairy, elliptic to lanceolate, prominently serrated with teeth usually 1.0–5.8mm deep and with a length-to-width ratio of 3.2–8.8:1 (average 5.2:1).

FLOWERING

November – December

FLOWER COLOURS

Green, White

FRUITING

January

PROPAGATION TECHNIQUE

Difficult - should not be removed from the wild

THREATS

Browsing by goats, possums and rabbits poses a threat and for this reason several plants in the Chalk Range have been caged for protection. The small number of plants is also of concern as it is known from less than 50 plants, flowering is irregular and recruitment is likely to be sporadic and at low levels. Previously recorded as Pachycladon aff. fastigiata (CHR 279206; Chalk Range) in de Lange et al., 2004, Threatened and uncommon plants on New Zealand, New Zealand Journal of Botany 42: 45-76.

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Description from: Heenan (2009b).

REFERENCES AND FURTHER READING

Heenan, P. B. 2009b: A new species of Pachycladon (Brassicaceae) from eastern Marlborough, New Zealand. New Zealand Journal of Botany 47: 155–161.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/pachycladon-fasciarium/