Pimelea xenica

SYNONYMS

None (first described in 2009)

FAMILY

Thymelaeaceae

AUTHORITY

Pimelea xenica C.J.Burrows

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2017 | Threatened - Nationally Vulnerable | Qualifiers: DP, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk - Declining | Qualifiers: DP, Sp

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Sprawling shrub to 30 cm tall (usually less) with greyish-hairy stems bearing overlapping pairs of outwrd pointing thin blue-green leaves, hairy white flowers and white fruit inhabiting northern North Island south to Hawke's Bay. Leaves 4–5.5 mm long by 1.5–2.2 mm long, dished, inrolled when dry.

DISTRIBUTION

Endemic. New Zealand: North Island (North Auckland (scattered sites from Cape Reinga and North Cape south to Anawhata), South Auckland (Coromandel Peninsula), eastern Bay of Plenty, near East Cape, and near Tangoio, Hawke's Bay).

HABITAT

Mainly coastal or near-coastal but sometimes further inland. A species of low heathland where it grows on open clay pans or within short shrubland dominated by <u>Leptospermum scoparium</u>, <u>Leucopogon fasciculatus</u>, <u>Ozothamnus leptophyllus</u>, <u>Machaerina spp.</u>, <u>Phormium cookianum</u>, and <u>Veronica spp.</u> Also found on grassy slopes, open eroding banks on bare soil, and on rock outcrops.





Hikurua / de Surville Cliffs, Te Paki. Photographer: Jeremy R. Rolfe, Date taken: 19/10/2009, Licence: CC BY.



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DETAILED DESCRIPTION

A moderately small, erect or suberect shrub, to 30 cm tall, stems gracile, fastigiate to sprawling. **Branching** mainly sympodial with some diffuse lateral. **Branchlets** moderately densely covered by short to long, greyish-white hair. **Internodes** 0.5–1.2 mm long. **Node buttresses** 0.1–0.8 mm, brown, lunate to slightly elongate, usually visible on young branchlets but not prominent on leafless stems. **Older stems** glabrate, grey or grey-brown. **Leaves** decussate, ascendant to patent, on 0.2–0.5 mm red petioles. **Lamina** thin, pliable, with a thickened margin, elliptic to ovate, 4.0–5.5 × 1.5–2.2 mm, pale green or glaucous, keeled and adaxially concave (dry leaf margins are often curled inward), midvein not plainly evident abaxially, obtuse or acute, base cuneate. **Stomata** abundant on adaxial and abaxial sides. **Inflorescences** terminal on branchlets, 3–5-flowered. **Involucral bracts** 4, broader than adjacent leaves (4 × 3 mm), partly hiding the flowers. **Receptacles** sparsely hairy, pedicels 0.3 mm. Plants gynodioecious. **Flowers** white, opening in salverform fashion, sparsely covered in short hair outside, inside hairy in upper tube and sparsely so in ovary portion. **Female tube** 3 mm long, ovary portion wrinkled, 2.4 mm long, calyx lobes 1.5 × 1.3 mm. **Hermaphrodite tube** 4 mm long, ovary portion 1.5 mm, calyx lobes 1.8 × 1.5 mm. **Anther** dehiscence semi-latrorse. **Ovary** with sparse hairs on summit and a few short hairs below that. **Fruits** sub-globose to oblate, fleshy, white, translucent, 5 × 4 mm. **Seeds** ovoid 2.1 × 1.7 mm, thin crest.

SIMILAR TAXA

Pimelea xenica is part of the *P. prostrata* complex,. Within that complex it is morphologically most similar to *P. orthia* and *P. actea*, species with which it shares an erect to suberect growth habitat and pliable leaves with stomata present on both adaxial and abaxial surfaces. It differs from *P. orthia* by its suberect growth habit and over all shorter stature (up to 400 mm tall) and spreading branches. *Pimelea xenica* differs from *P. actea* by its suberect, sprawling habit, more frequent branching and flat leaves which are tightly curled when dry. *Pimelea actea* is a sparingly branched (whip-like) erect shrublet with flat flat leaves. It is endemic to the Wanganui - Manawatu coast where it grows (or used to grow) in sandy habitats on skeletal or recent soils. *Pimelea xenica* is confined to heathland, gumland, grassland on heavily leached or weather mature soils; it is endemic to the northern North Island, extending as far south as the Hawke's Bay.

FLOWERING

September-April

FLOWER COLOURS

White

FRUITING

November-June

PROPAGATION TECHNIQUE

Easily grown from semi-hardwood cuttings and rooted pieces. Seed is difficult to germinate. Best grown in a well drained soil in full sun. An excellent plant for the rockery.

THREATS

Burrows (2009) notes that one population near Cape Reinga was recently destroyed due to road works. However, he affirms that this species is poorly known. It was assessed in 2012 as 'At Risk – Declining' (de Lange et al. 2013) but that was amended in 2017 to 'Threatened – Nationally Vulnerable' (de Lange et al. 2018) after the available data was reconsidered.

ETYMOLOGY

pimelea: Pimeleoides means "resembling Pimelea", a genus in the family Thymelaeaceae (Greek, -oides = resembling, like).

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Factsheet prepared by Peter de Lange with description from: Burrows (2009).

REFERENCES AND FURTHER READING

Burrows CJ. 2009. Genus *Pimelea* (Thymelaeaceae) in New Zealand 2. The endemic *Pimelea prostrata* and *Pimelea urvilliana* species complexes. *New Zealand Journal of Botany 47(2)*: 163–229. https://doi.org/10.1080/00288250909509804.

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Pimelea xenica Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/pimelea-xenica/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/pimelea-xenica/