Pimelea actea

COMMON NAME

pimelea

SYNONYMS

None (first described in 2008)

FAMILY

Thymelaeaceae

AUTHORITY

Pimelea actea C.J.Burrows

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 36

CURRENT CONSERVATION STATUS

2017 | Threatened - Nationally Critical | Qualifiers: OL

PREVIOUS CONSERVATION STATUSES

2012 | Threatened - Nationally Critical | Qualifiers: OL

2009 | Threatened - Nationally Critical | Qualifiers: CD, OL

2004 | Threatened - Nationally Critical

BRIEF DESCRIPTION

Low growing shrub bearing a few erect twigs to 50cm tall with spaced pairs of small rounded blue-green leaves inhabiting damp sand dunes near Himatangi. Twigs hairy. Leaves to 5.5mm long. Flowers usually present, white, body hairy, both male and female parts present, in clusters. Fruit white.

DISTRIBUTION

Endemic. New Zealand: North Island (Wanganui – Manawatu – formerly at Turakina River Mouth and Foxton Beach; now known only from Himatangi Beach and possibly still at Castlecliff Beach), South Island, (there is an historic gathering of this species from "Sand Flats near Christchurch")

HARITAT

A species of sand country where it grows on sand flats and dune slacks periodically inundated with fresh to brackish water in winter–spring. It has also been collected growing in sand pockets on an old mudstone slump on sea cliffs





In cultivation ex Himatangi. Photographer: Jeremy R. Rolfe, Date taken: 03/11/2008, Licence: CC BY.



In cultivation ex Himatangi. Photographer: Jeremy R. Rolfe, Date taken: 03/11/2008, Licence: CC BY.

DETAILED DESCRIPTION

Small, sparingly branched shrublets up to 500 mm tall. Branches erect to suberect, whip-like, often devoid of leaves for basal 2/3 of stem. Root system small and weak. Young branchlets sparsely hairy in leaf axils and on receptacle, sometimes with well-defined narrow bands of short hair along the full length of the internode; older stems hairless, initially purple-black fading to grey-brown. Node buttresses smooth, brown, and occupy the whole internode or forming hairless strips, sometimes prominent on leafless stems. Internode length less than or equal to 3.0 mm. Leaves decussate, ascendant, becoming patent, persistent, on short (0.5-0.8 mm) red petioles; lamina glabrous, pale green to glaucous-green, $.03-5.5 \times 1.2-3.5$ mm, elliptic to slightly obovate, slightly adaxially concave, obtuse, base cuneate to truncate. Stomata evident only on upper surface. Inflorescences terminal on branchlets, loose, 3-11-flowered. Involucral bracts 4, broad elliptic to ovate $(6 \times 3 \text{ mm})$ partly hiding the flowers. Plants bisexual. Flowers white, on short pedicels (0.8 mm); tube and calyx lobes moderately hairy outside, inside glabrous, or rarely with sparse hair near the mouth; tube to 3 mm long, ovary portion 1 mm long, calyx lobes $1.3 \times 1.0 \text{ mm}$. Anther filaments inserted at mouth of tube, Anthers yellow. Ovary with a few hairs at summit. Fruits globose, fleshy, translucent white, $5.0 \times 4.5 \text{ mm}$. The hypanthium shedding irregularly, near the base as the fruits ripen. Seeds narrow-pyriform, with very thin crest $2.8 \times 1.7 \text{ mm}$

SIMILAR TAXA

Distinguished from all other New Zealand Pimelea by its more or less continuous flowering and easily germinated seeds. It is part of the P. prostrata – P. urvilleana complex from whose members it is easily distinguished by the bisexual flowers, sparingly branched growth habit, slender (whip-like), erect to suberect stems and translucent fruits. Pimelea actea is morphologically similar to P. xenica which differs by its suberect, sprawling habit, more frequent branching and flat leaves which are tightly curled when dry. Pimelea xenica is also ecologically distinct being confined to heathland, gum land, grassland on heavily leached or weather mature soils; it is known only from the northern North Island, extending as far south as the Hawke's Bay.

FLOWERING

September - May

FLOWER COLOURS

White

FRUITING

November - June

PROPAGATION TECHNIQUE

Easily grown from seed and cuttings. An unusual and rather attractive plant for a small garden, rockery or planted in a pot. Cultivation, in the short-term at least may help prevent this species from going extinct. Most cultivated material stems from plants collected by P. J. de Lange from Himatangi in 1991 and cultivated initially at Percy Reserve, Petone.

THREATS

Pimelea actea as Pimelea (a) (CHR 495025; Turakina) was assessed as Nationally Critical by de Lange et al. (2004) and de Lange et al. (2009). The species remains seriously threatened and facing imminent extinction. The sole surviving natural population is known only from private land, is very small, subjected to frequent trampling by horses and other livestock, subject to weed invasion and at constant risk of being overwhelmed by sand. At Castlecliff, this species was known from very few plants at three sites, and recent surveys suggest it may now be extinct there.

ETYMOLOGY

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

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (30 September 2008). Description adapted from Burrows (2008).

REFERENCES AND FURTHER READING

Burrows, C.J. 2008: Genus Pimelea (Thymelaeaceae) in New Zealand 1. The taxonomic treatment of seven endemic, glabrous-leaved species. New Zealand Journal of Botany 46: 127-176.

de Lange, P.J.; Norton, D.A.; Heenan, P.B.; Courtney, S.P.; Molloy, B.P.J.; Ogle, C.C.; Rance, B.D.; Johnson, P.N.; Hitchmough, R. 2004: Threatened and uncommon plants of New Zealand. New Zealand Journal of Botany 42: 45-76.

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NZPCN FACT SHEET CITATION

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MORE INFORMATION

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