

# Pimelea microphylla

## COMMON NAME

pimelea

## SYNONYMS

*Pimelea polycephala* Colenso, *Pimelea laevigata* var. *alpina* Cheeseman

## FAMILY

Thymelaeaceae

## AUTHORITY

*Pimelea microphylla* Colenso

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

PIMMIC

## CURRENT CONSERVATION STATUS

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

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR, Sp

2009 | At Risk – Declining | Qualifiers: RR, SP

2004 | Range Restricted

## BRIEF DESCRIPTION

Cushion-forming small-leaved central North Island endemic shrub bearing leaves densely crowded near the tip of twigs and numerous small hairy white flowers and whitish fruits. Leaves 2.5–3.0mm long, by 1–2mm wide, hairy on the underside or at tip when young (lens needed).

## DISTRIBUTION

Endemic. North Island: Central Volcanic Plateau from Kaingaroa – Rangitikei south across the Kaimanawa and Kaweka Ranges and west across the Rangipo Desert including Mt Tongariro, Ngauruhoe and Ruapehu.

## HABITAT

Bare or sparsely vegetated scoria, lapilli, tephra, pumice flats and coarser volcanic debris; sometimes in crevices on solid volcanic rock; also on bare soil and stony debris on surfaces covered by old tephra on windswept high ridges of the sandstone ranges, to 1650 m.



Rangipo, Tongariro NP. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.



Rangipo Desert. Photographer: Jeremy R. Rolfe, Date taken: 28/11/2014, Licence: CC BY.

## DETAILED DESCRIPTION

A small, compact, prostrate to suberect, much-branched shrub forming loose cushions, to 60 mm high and 250 mm diameter, with short, notably sympodial branching. Young branchlets moderately to densely clad in short, grey hair, on strips between glabrous node buttress tissue; internode lengths 0.25–0.6 mm, rarely to 1 mm; older stems sparsely hairy to glabrous, grey-brown to blackish. Narrow node buttresses occupy the length of the internodes and are prominent on leafless stems. Leaves decussate, ascendant, imbricate, and crowded near the ends of branchlets, on very short (0.1–0.3 mm) red petioles, or sessile. Mature leaves glabrous, but almost all plants have some young leaves with a few short hairs at the distal end and young leaves of some individuals are moderately densely hairy, above. Lamina broad-elliptic or broad-ovate, 2.5–3.0 × 1.0–2.0 mm, upper surface concave to slightly keeled, leathery, medium green to yellowish-green; sometimes margins are slightly upturned and red-margined, midvein obscure; obtuse, base cuneate. Stomata on both leaf surfaces. Inflorescences terminal on branchlets, 1–4-flowered; receptacles with short, dense to sparse hair. Involucral bracts 4; 2.5–3.5 × 2–2.5 mm, broad-elliptic to broad-ovate, often with a few hairs at the distal end or sometimes densely hairy below. Plants gynodioecious. Flowers white or sometimes pale red, on very short pedicels (0.1 mm); tube and calyx lobes hairy outside; inside hairless, or with sparse hair in the style portion. Female tube 3.2 mm long, ovary portion 3 mm, calyx lobes 1.3 × 1 mm; hermaphrodite tube 3.2 mm long, ovary portion 1.8 mm, calyx lobes 1.5 × 1.5 mm. Anther filaments inserted just below mouth of tube; anther yellow. Ovary moderately hairy at summit, sparsely hairy elsewhere. Fruits oblate, fleshy, white or sometimes pink, opaque, 5.5 × 4.2 mm. The tube breaks off irregularly as the fruits ripen. Seeds pyriform, surface granulate, thin crest, 3 × 2 mm.

## SIMILAR TAXA

*Pimelea microphylla* is superficially similar to, and has been included in the *Pimelea prostrata* complex. The most recent treatments of the genus (Burrows 2009a,b) treat *P. microphylla* as a separate from *P. prostrata* but do not explain why. From the *P. prostrata* complex *P. microphylla* differs by its smaller more compact cushion-forming growth habit, erect, sympodial branching habit with the leaves crowded toward the branchlet apices, pale yellow-cream (rarely reddish tinged flowers). The fruits of *P. microphylla* are often coloured pink.

## FLOWERING

November - February

## FLOWER COLOURS

Red/Pink, White

## FRUITING

January - May

## PROPAGATION TECHNIQUE

Can be grown from semi-hardwood cuttings. However, plants are often very slow to establish and dislike competition and excessive moisture or humidity. Probably best grown in a rock garden or alpine house

## THREATS

*Pimelea microphylla* may be threatened. There is some evidence that it is declining over parts of its range due to the spread of heather and on the Kaingaroa Plain at least, habitat modification for farming and forestry.

## ETYMOLOGY

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

**microphylla:** Small leaf

## WHERE TO BUY

Not commercially available.

## TAXONOMIC NOTES

New Zealand *Pimelea* urgently require a full taxonomic revision using modern techniques. The treatments of Burrows (2009a, b et seq.) offer a useful foundation for further revision

## ATTRIBUTION

Fact Sheet by P.J. de Lange (1 November 2009). Description based on: Burrows (2009b).

## REFERENCES AND FURTHER READING

Burrows, C.J. 2009a: Genus *Pimelea* (Thymelaeaceae) in New Zealand 2. The endemic *Pimelea prostrata* and *Pimelea urvilliana* species complexes. *New Zealand Journal of Botany* 47: 163–229.

Burrows, C.J. 2009b: Genus *Pimelea* (Thymelaeaceae) in New Zealand 3. The taxonomic treatment of six endemic hairy-leaved species. *New Zealand Journal of Botany* 47: 325–354.

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pimelea-microphylla/>