

Pimelea lyallii

SYNONYMS

None

FAMILY

Thymelaeaceae

AUTHORITY

Pimelea lyallii Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

PIMLYA

CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: CD, DP, RR, Sp

PREVIOUS CONSERVATION STATUSES

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

2009 | At Risk – Naturally Uncommon

2004 | Gradual Decline

BRIEF DESCRIPTION

Low growing shrub with flexible twigs bearing crowded pairs of pointed leaves that are densely hairy underneath inhabiting dunes in southern New Zealand. Twigs usually buried in sand. Leaves 5–7 mm long by 2–3 mm wide. Flowers hairy, white, in clusters at tip of twigs. Fruit white.

DISTRIBUTION

Endemic. Confined to the Foveaux Strait and Stewart Island/Rakiura coastline.

HABITAT

Coastal in sand dunes and their associated swales.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Three Sisters, Omaui. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.



Cannibal Bay, Catlins. Photographer: John Barkla, Licence: CC BY.

DETAILED DESCRIPTION

A small to medium-sized shrub. **Stems** prostrate, flexible, up to 600 mm long, sometimes producing adventitious roots if buried by sand. **Young branches** ascendant and moderately to densely clad in long, white (sometimes yellowish) hairs; internode length 2.5–8.0 mm; older stems sparsely hairy to glabrous, brown. **Node buttresses** short, lunate (0.3–0.5 mm), smooth, brown, hairless, or with sparse, short hair, masked by internode hair on young stems, not prominent on leafless stems. **Leaves** usually distant, sometimes closely spaced and imbricate, ascendant, then patent or deflexed, persistent, on short (0.5 mm), often red petioles; lamina pale green, glabrous above, moderately densely to densely covered in white to yellowish hair below (also along margins and at tip); 5–7 × 2–3 mm wide, elliptic to slightly ovate, flat to slightly concave above, midvein obscure below; acute, base cuneate. **Stomata** on both leaf surfaces. **Inflorescences** terminal on branchlets, loose, 3–4-flowered, sometimes clustered in groups of 2 or more; receptacles flat to convex, very hairy. **Involucral bracts** 4, up to 9 × 3 mm, sometimes with a few hairs on the upperside near the base, densely hairy below and on margins and tips. **Plants** gynodioecious. **Flowers** white, on short pedicels (0.5 mm); tube and calyx lobes very hairy outside; inside hairless; female tube 3.5 mm long, ovary portion 3 mm, calyx lobes 1.2 × 0.9 mm; hermaphrodite tube 5 mm long, ovary portion 2 mm, calyx lobes 2.0 × 1.6 mm. **Anther filaments** inserted at mouth of tube; anther yellow. **Ovary** very hairy at summit. **Fruits** ovoid, fleshy, 5.0 × 3.8 mm, white, opaque. The tube breaks off, irregularly, near the base as the fruits ripen. **Seeds** pyriform, with thin crest, 2.5 × 1.8 mm. Description based on Burrows (2009).

SIMILAR TAXA

Pimelea lyallii is easily recognised within its natural habitat because it is the only species found within active to semi-stable dune fields. *P. lyallii* could only be confused with plants currently attributed to *P. prostrata*. From this it is perhaps best distinguished by its longer leaves and flower perianths. Herbarium material is less easily resolved, particularly when it is sterile.

FLOWERING

October–April

FLOWER COLOURS

White

FRUITING

November–April

PROPAGATION TECHNIQUE

Easy from semi-hardwood cuttings but difficult to maintain in cultivation.

THREATS

Widespread along the south Otago, Foveaux Strait and Stewart Island/Rakiura coastlines but its range is contracting in the northern part due to dune consolidation, coastal development and the spread of weeds.

ETYMOLOGY

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

lyallii: Named after David Lyall (1817–1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

WHERE TO BUY

Occasionally available from some specialist native plant nurseries.

NOTES ON TAXONOMY

New Zealand *Pimelea* Sol. ex Gaertn. urgently require a full taxonomic revision using modern techniques.

ATTRIBUTION

Description based on Burrows (2008).

REFERENCES AND FURTHER READING

Burrows CJ. 2009. Genus *Pimelea* (Thymelaeaceae) in New Zealand 3. The taxonomic treatment of six endemic hairy-leaved species. *New Zealand Journal of Botany* 47(3): 325–354.
<https://doi.org/10.1080/00288250909509813>.

MORE INFORMATION

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