# **Melicytus orarius**

# **SYNONYMS**

None - first described in 2017

#### **FAMILY**

Violaceae

## **AUTHORITY**

Melicytus orarius Heenan, de Lange, Courtney et Molloy

## **FLORA CATEGORY**

Vascular - Native

#### **ENDEMIC TAXON**

Yes

# **ENDEMIC GENUS**

Nο

## **ENDEMIC FAMILY**

No

# STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## **CURRENT CONSERVATION STATUS**

2017 | At Risk - Declining | Qualifiers: DP

# **BRIEF DESCRIPTION**

Erect to spreading, densely branched, compact, evergreen shrub, usually up to 2.5 m tall; flowers hermaphrodite; fruits on decurved pedicels, white with mottled bluish-grey to dark mauvish-grey when mature.

## **DISTRIBUTION**

Endemic. New Zealand, Eastern Cook Strait Region (North, South Island and associated islands)

#### **HABITAT**

A species of exposed martime islands, islets, rock stacks, promontories and steep usually west-facing coastal slopes.





Ripe fruit, in garden, plant originally from wild at Pukerua Bay. Photographer: Colin C. Ogle, Date taken: 01/05/1992, Licence: CC BY-NC.



Flowers on garden shrub, ex-Maud Island, Pelorus Sound. Photographer: Colin C. Ogle, Date taken: 01/07/1985, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Erect to spreading, densely branched, compact, virgate, evergreen shrub, usually up to 2.5 m tall, sometimes up to 4 m tall in sheltered sites, in exposed sites often semi-prostrate; bark smooth, grey; main trunks up to 20 cm diameter, often becoming corky; hermaphrodite. Branchlets 1.2-2.0 mm in diameter, green to green-brown, sparsely to moderately hispidulous with patent hairs c. 0.1 mm long, terete to subterete, often slightly angled in cross-section. Adult leaves 16.0-52.0 × 8.0-22.0 mm, coriaceous, obovate, broadly obovate or narrowly obovate, sometimes broadly ovate or broadly elliptic-oblong, hypostomatic, alternate or in fascicles of 2-6 on short spur-like branchlets, often crowded; petiole 1.3-3.5 mm long, 0.4-1.4 mm wide, plano-convex, sparsely to moderately hispidulous; margins usually entire, occasionally with 1 tooth per margin, teeth confined to the distal half of the leaf, apiculus absent or minute; apex usually distinctly retuse, occasionally obtuse or truncate, apiculus absent or minute; base cuneate to obtuse; adaxial lamina glabrous, mid-green to dark-green, dull to slightly glossy, midrib hispidulous with minute scattered hairs proximally, lateral veins immersed, ± visible to obscure, veinlets obscure; abaxial lamina glabrous, paler than upper surface, midrib hispidulous with minute scattered hairs proximally, lateral veins immersed, visible, veinlets obscure. Stipules  $1.0-1.5 \times 0.6-1.5$  mm, triangular to narrowly triangular, caducous or persistent. Inflorescences 1-3-flowered, axillary to old leaves or their petiole scars, 1 or 2 per axil on short shoots or in fascicles. Bracteoles 2, 0.6–0.9 × 0.9–1.4 mm, unequal, position variable on pedicel, from immediately below flower to near the pedicel base; broadly triangular to orbicular-triangular, rounded at apex, margins erose-ciliate, green, drying to light brown. Pedicels 1.5-2.5 mm long, decurved. Sepals 5-6, 1.0-1.3 x 1.0-1.4 mm, unequal, imbricate, triangular to broadly triangular, margins erosulate-ciliate, green proximally, membranous margin purple, apices subacute to obtuse. Corolla broad-cylindric, 2.3–2.5 mm long, 2.8–3.5 mm across at the widest point. Petals 4-6, 2.0-3.5 × 0.9-1.5 mm, obovate oblong, 1 prominent central nerve, distal quarter reflexed, cream to pale yellow, prominent purple margin, hyaline white at base, apices thickened and obtuse to rounded, margins erosulate. Anthers sessile, oblong, 0.6–1.5 mm long, creamy yellow, connate to form an urceolate tube; appendage membranous, orange to tan, ovate-triangular to ovate-narrowly triangular, apex acuminate, fimbriate or longfimbriate, exceeding anthers by 0.6-1.0 mm long. Nectary scale erect, basally attached to the dorsal surface of each stamen, 0.3-1.0 × 0.3-0.6 mm wide at distal end, short-oblong to obovate-oblong, glabrous, off-white or pale green, base cuneate, apices truncate to truncate-obtuse, praemorse. Pollen pale yellow. Ovary 0.8-2.0 x 0.8–1.2 mm, glabrous, broadly ovoid, green; ovules 2–3, parietal, of which usually only 1 or 2 advance to form pyrenes. Style 0.2-0.5 mm long, glabrous, green, persistent in fruit; stigmas 2(-3), 0.5-0.7 mm long, flat, spreading, off white, soon withering. Fruit 5.0–9.0 × 4.5–7.7 mm, an ellipsoid to ovoid berry, initially green, maturing to mottled bluish-grey to dark mauvish-grey and white; calyx persistent; mesocarp 0.3-0.8 mm thick, fleshy, white and/or purple. Pyrenes 1 or 2 per berry, 3.4–6.2 × 2.9–4.0 mm, ellipsoid, broadly ellipsoid to ovoid, usually terete in crosssection with 1 pyrene per fruit, plano-convex in cross-section with 2 pyrenes per fruit, when mature grey or dark grey often with black flecks or streaks, sometimes almost entirely purpleblack or light-brown, smooth, matt on the outer surface, sometimes slightly longitudinally furrowed, with a well-defined marginal ridge on one side; apex obtuse to rounded; base obtuse to rounded, with indistinct to distinct cap; endospermous, endosperm cream or white.

# **SIMILAR TAXA**

Distinguished from Melicytus obovatus by having a smaller stature, distinctly obovate, narrowly obovate or broadly obovate, usually lobed leaves, with the leaf apex prominently retuse; and by the hermaphrodite rather than dioecious flowers. The seeds of M. orarius are usually larger than those of M. obovatus

# **FLOWERING**

August - October

## **FLOWER COLOURS**

Cream, Yellow

### **FRUITING**

October - July

# **THREATS**

In the North Island *Melicytus orarius* is mostly known from scattered individuals, growing in fragmented coastal vegetation remnants. In these sites it is seriously at risk from invasive weeds, fire and - in some sites - roadside maintenance. Only a few - very small - near-shore island populations are known. *Melicytus orarius* is more common in the South Island, where some large, mostly secure island populations are known - but there, too, on the mainland and some near-shore islands, populations are in decline.

## **ETYMOLOGY**

**melicytus**: From the Greek meli (honey) and kytos (hollow container), referring to the staminal nectaries of the flowers. Literally "honey-cave"

# **ATTRIBUTION**

Fact Sheet prepared for NZPCN by P.J. de Lange (16 January 2018). Description based on Heenan et al. (2017)

## REFERENCES AND FURTHER READING

Heenan, P.B.; Courtney, S.P.; de Lange, P.J.; Molloy, B.P.J. 2017: A revised circumscription of *Melicytus obovatus* (Violaceae) and recognition of three new species from Central New Zealand. Submitted: *New Zealand Journal of Botany 56*:

# NZPCN FACT SHEET CITATION

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# **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/melicytus-orarius/