

# Hedycarya arborea

## COMMON NAME

porokaiwhiri, pigeonwood

## SYNONYMS

*Hedycarya dentata* G.Forst.; *Hedycarya scabra* A.Cunn., *Zanthoxylum novae-zelandiae* A.Rich.

## FAMILY

Monimiaceae

## AUTHORITY

*Hedycarya arborea* J.R.Forst. et G.Forst.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

HEDARB

## CHROMOSOME NUMBER

$n = 57II$ ,  $2n = 116$ , c.166

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Common small tree. Leaves dark green, glossy, oval, with toothed margins, in pairs on short stalks from a flattened part of the dark twigs. Flowers simple, green, around 1cm wide, arranged in small sprays. Fruit orange, oval, about 1cm long.

## DISTRIBUTION

Endemic. Three Kings, North and South Islands. In the South island uncommon in the east south of Kaikoura reaching its southern limit on that coastline on Banks Peninsula, it is more ranging in the west reaching northern Fiordland at least.

## HABITAT

A common forest tree of coastal and lowland forest, extending into montane areas in the warmer parts of the North Island

## WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).



Coromandel. November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Coromandel. November. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Tree up to 12 m. tall; trunk up to 0.5m dbh, clear of branches for first few metres, ; bark dark grey to brown-grey, firm (not flaking) finely tessellated. Branches numerous, upright to spreading; branchlets finely brown-pubescent at tips. Leaves coriaceous, glabrous except for midrib and main veins and petioles, adaxially dark green, glossy or glaucescent, abaxially similar but paler and dull; petioles 10-15-20(-35)mm long; lamina 40-120(-180) × 25-30(-50-60) mm, elliptic-obovate, oblanceolate to lanceolate, cuneately narrowed to base, obtuse to subacute or acute, margins distantly serrate (with occasional subentire leaves) or toothed. Inflorescence a branched raceme; peduncles and pedicels slender, pubescent. Male with perianth c.10 mm diameter, pubescent, stamens numerous, anthers sessile. Female with perianth c.6 mm diameter; carpels up to 20. Drupe 1-seeded, ovoid, 10-15(-16) mm long, red or orange-red up to 10 per branch. Endocarp 9-14 mm long, elliptic to obovate, rarely circular, brown to grey-brown, surface ± smooth, usually with a few irregular bumps and/or longitudinal ridges. Description adapted from Allan (1961) and Webb & Simpson (2001).

## SIMILAR TAXA

None. Plants from the Three Kings (Manawa Tawhi (Great) Island) and the Poor Knights are notable for their very large broad-elliptic to broad-obovate, distantly bluntly toothed leaves (see comments by Allan 1961). However, de Lange & Cameron (1999) noted that not all *Hedycarya* on the Poor Knights share these characteristics and that such large-leaved plants grade into "typical" *H. arborea* on the other Hauraki Gulf Islands. The situation seems similar to that observed for large-leaved forms of *tawa* (*Beilschmiedia tawa*) that some authors have segregated as a distinct species, *B. tawaroa* (see Wright 1984). Like *B. tawaroa*, these larger, broader leaved island forms of *Hedycarya arborea*, exhibit no other morphological or cytological distinctions (see de Lange & Murray 2002). Nevertheless they would repay further study

## FLOWERING

December - February

## FLOWER COLOURS

Cream, White

## FRUITING

March - June

## LIFE CYCLE

Fleshy drupes are dispersed by frugivory (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easily grown from fresh seed. A quick growing tree ideal for the warmer parts of the North Island (though once established it will tolerate a reasonable amount of cold). The fruit is avidly sought after by kereru (*Hemiphaga novaezelandiae*).

## ETYMOLOGY

**hedycarya:** Sweet-nutted

**arborea:** From the Latin arbor 'tree', meaning tree-like

## ATTRIBUTION

Factsheet prepared for NZPCN by P.J. de Lange 20 February 2011. Description adapted from Allan (1961) and Webb & Simpson (2001).

## REFERENCES AND FURTHER READING

- Allan, H.H. 1961: Flora of New Zealand. Vol. I, Wellington, Government Printer.
- de Lange, P.J.; Cameron, E.K. 1999: The Vascular Flora of Aorangi Island, Poor Knights Islands, Northern New Zealand. *New Zealand Journal of Botany* 37: 433-468.
- de Lange, P.J.; Murray, B.G. 2002: Contributions to a chromosome atlas of the New Zealand flora – 37. Miscellaneous families. *New Zealand Journal of Botany* 40: 1-24.
- Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285-309
- Webb, C.J.; Simpson, M.J.A. 2001: Seeds of New Zealand Gymnosperms and Dicotyledons. Christchurch, Manuka Press.
- Wright, A. E. 1984: *Beilschmiedia* Nees (Lauraceae) in New Zealand. *New Zealand Journal of Botany* 22: 109-125.

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/hedycarya-arborea/>