Pennantia baylisiana

COMMON NAMES
kaikōmako manawatāwhi, Three Kings kaikōmako

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Threatened – Nationally Critical | Qualifiers: CD, IE, OL
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Trees & Shrubs - Dicotyledons

SIMPLIFIED DESCRIPTION
Rare multi-trunked small tree bearing very large broad glossy curled leaves inhabiting the three Kings Islands. Leaves 120-160mm long, widest towards tip. Flowers small, green, in clusters along branches. Fruit purple, 10mm long, containing a single seed.



Pennantia baylisiana showing branching habit, Great (Manawa Tawhi) Island, Three Kings Islands. Photographer: Lisa Forester, Licence: CC BY-SA.

FLOWER COLOURS
Green, White

DETAILED DESCRIPTION
Sturdy, multi-trunked tree 5-8 x 4 m tall. Bark greyish, tessellated. Young branches and branchlets lenticellate. Petiole 25 mm long. Leaves subcoriaceous, glabrescent, 120-160 x 70 -100 mm, oblong to obovate, in exposed conditions distinctly recurved, otherwise flat, margins entire, apex obtuse, rounded, or slightly emarginate; base cuneate to obtuse; lateral veins of underside subtended by axillary hairy, pocket-domatium. Inflorescence usually ramiflorous or cauliflorous, rarely terminal, 80-120 x 40-120 mm. Male flowers unknown. Female flowers 1.5 x 1.5 mm, petals 2.6 mm, greenish white, stamen filaments in bud kinked sideways, straightening at anthesis, 1.5 mm long; anther 1-1.4 mm, pollen usually malformed and sterile. Ovary barrel shaped, 2.8 x 2 mm; stigmatic ring 1.5-1.8 mm diam., crested into 3 triangular plates. Fruit ellipsoidal, 10 x 4.5 mm, flesh purple; stone 9 x 3.5 mm.



Nov 2006. In cultivation. Photographer: Geoff Davidson, Licence: CC BY-NC.

SIMILAR TAXA
Morphologically similar to the Norfolk Island Pennantia endlicheri Reissek from which it differs by multi-trunked growth habit, the recurved leaves of exposed branchlets, and mainly ramiflorous or cauliflorous flowering habit. DNA sequences further separate both species. Kaikomako (Pennantia corymbosa J.R. Forest et G.Forst.) differs from both these species by its divaricating juvenile form, much smaller and distinctly toothed or lobed adult foliage.

DISTRIBUTION
Endemic to Great (Manawa Tawhi) Island, Three Kings Island group.

HABITAT
Coastal Forest.

THREATS
Only one tree occurs in the wild. Initially P. baylisiana and indeed all other Three Kings endemic plants were at serious risk from goats. These were successfully eradicated in 1946. Since then the tree has persisted despite periodic storm and drought damage which may kill entire trunks. However, being female the tree was until recently considered functionally extinct. Apparently viable fruits were first found in the wild in 1989, and these, along with fruiting cutting grown plants in New Zealand provide one source of securing the species. However, until such time as more trees occur in the wild, P. baylisiana remains seriously at risk of extinction through natural events such as storms or senescence through old age.

GENUS
Pennantia

FAMILY
Pennantiaceae

AUTHORITY
Pennantia baylisiana (W.R.B.Oliv.) G.T.S.Baylis

SYNONYMS
Plectomirtha baylisiana W.R.B.Oliv.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
October-November

FRUITING
Fruiting occurs between January and April in cultivated material. Ripe fruit has been seen in the wild during February and March

PROPAGATION TECHNIQUE
Easily grown from seed, when viable non hybrid seed is available. Though the only known tree is functionally female, occasional viable fruit is now known to be produced both in the wild and in cultivation. However, if pure seed is desired, plants should grown well away from kaikomako (P. corymbosa) otherwise hybrid seed will be produced. This tree can also be grown from cuttings and basal portions of new stem stuckers. Neither media is easy to strike, and so until recently, this species was rarely seen in cultivation.

ETYMOLOGY
pennantia: After Pennant, a zoologist

NVS CODE
PENBAY

CHROMOSOME NUMBER
2n = 50

PREVIOUS CONSERVATION STATUSES
2017 | Threatened – Nationally Critical | Qualifiers: CD, IE, OL
2012 | Threatened – Nationally Critical | Qualifiers: CD, IE, OL
2009 | Threatened – Nationally Critical | Qualifiers: CD, OL, IE
2004 | Threatened – Nationally Critical
Jump to current conservation status

REFERENCES AND FURTHER READING

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Canterbury University Press, Christchurch.

Gardner, R.O.; de Lange, P.J. 2002: Revision of *Pennantia* (Icacinaceae), a small isolated genus of Southern Hemisphere trees. *Journal of the Royal Society of New Zealand 32*: 669-695.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 October 2003. Description from Gardner & de Lange (2002) - see also de Lange et al. (2010)

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/pennantia-baylisiana/

PDF DATE

25 May 2026