# Halocarpus biformis

COMMON NAME pink pine, yellow pine

SYNONYMS Podocarpus biformis Hook., Dacrydium biforme (Hook.) Pilg.

FAMILY Podocarpaceae

AUTHORITY Halocarpus biformis (Hook.) Quinn

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS Yes

ENDEMIC FAMILY No

STRUCTURAL CLASS Trees & Shrubs - Gymnosperms

NVS CODE HALBIF

CHROMOSOME NUMBER 2n = 24

**CURRENT CONSERVATION STATUS** 2017 | Not Threatened | Qualifiers: DP

# **PREVIOUS CONSERVATION STATUSES**

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

### DISTRIBUTION

Endemic. New Zealand: North Island (Coromandel Range, Raukumara Range, Te Uruwera through the Central Volcanic Plateau and Kaingaroa Plain south in a patchy distribution to Ruahine Range and Tararua Range), South Island (mostly west of main divide from Kahurangi Range south to Fiordland then patchy from Mount Cargill to Catlins), and Stewart Island.

# HABITAT

Montane to subalpine scrubland, scrub, and forest.

# WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).





Turoa, Ruapehu, May. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Turoa, Ruapehu, May. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

### **DETAILED DESCRIPTION**

Dioecious, shrub or small tree up to 10 m tall. **Trunk** up to 0.3-0.6 m d.b.h. **Bark** silvery-grey to grey-brown to dark brown, often patterned with red-brown hammer marks where bark has flaked off, wood pinkish. **Foliage** dimorphic, change from juvenile to adult abrupt; juveniles and reversion shoots 10-20 mm × 1.5-3 mm (occasionally more) wide, soft, linear, acute, sometimes mucronate; petiole short, broad, twisted, midvein usually distinct; stomatal lines evident; adult leaves scale-like approximately 2 mm long, densely imbricate, appressed, obtuse, prominently keeled, rhomboid, margins hyaline. **Final branchlets** 3–4 mm diameter sub-tetragonous, not glossy, tips noncurved. **Male strobili** solitary, terminal, approximately 4 mm long, no wider than branchlet; apiculus triangular, obtuse, keeled. **Female cones** on separate plant from male strobili. Carpidia solitary or paired, towards apices of branchlets, resembling scale leaves, but subpatent. **Ovule** ovoid, compressed. Epimatium fused to carpidium at base, coriaceous, surrounding pendulous inverted ovule, integument membranous. **Receptacle** swollen, orange, succulent. **Seed** 2–3 mm long, black (when mature), about oblong in outline, compressed.

# **SIMILAR TAXA**

<u>Halocarpus bidwillii</u>, which has slenderer branchlets 1-1.5mm, scale leaves not or hardly keeled on the back, fleshy arils are white.

<u>Manoao colensoi</u>, <u>Lepidothamnus intermedius</u>, and <u>Lepidothamnus laxifolius</u>, differ by the transition from juvenile to adult foliage being gradual.

<u>Dacrycarpus dacrydioides</u> and <u>Libocedrus bidwillii</u> differ by having juvenile foliage flattened into a single plane. Similar to some species of whipcord Veronica without any fertile stages present; <u>V. lycopodioides</u> has scale leaves with parallel grooves either side of a strong keel, and an mucronate apex; <u>V. tetragona</u> has more or less glossy branchlets, with scale leaves lacking a keel or acute apex; <u>V. armstrongii</u> has spaced scale leaves which partially show the internode, each scale leaf also has a pale margin fringed with minute hairs.

# **FLOWER COLOURS**

No flowers

# FRUITING

February-April

### LIFE CYCLE

Arrilate seeds are dispersed by frugivory (Thorsen et al., 2009).

# ETYMOLOGY

**halocarpus**: From the Greek hals 'sea', 'salty' and karpos 'fruit' **biformis**: From the Latin words, bis 'twice' & formis 'having form of', meaning consisting of two forms.

### **ATTRIBUTION**

Fact sheet prepared for NZPCN by M.D. Ward (11 April 2024). Description from Allan (1961), Wilson & Galloway (1993).

### **REFERENCES AND FURTHER READING**

Allan, H. H. 1961. Flora of New Zealand. Vol. 1. Wellington: Government Printer. Page 110. Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics 11*: 285–309. <u>https://doi.org/10.1016/j.ppees.2009.06.001</u>. Wilson, H.D. and Galloway, T., 1993. Small-leaved shrubs of New Zealand. Christchurch: Manuka Press. Pages 250-251.

### NZPCN FACT SHEET CITATION

Please cite as: Ward, M.D. (Year at time of access): Halocarpus biformis Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <u>https://www.nzpcn.org.nz/flora/species/halocarpus-biformis/</u> (Date website was queried)

#### **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/halocarpus-biformis/