

# Biodiversity



Number 33

## Tawhirikaro (*Pittosporum cornifolium*)

### DESCRIPTION

Tawhirikaro is most often found growing as an epiphyte in established older-growth forest. It forms a small shrub about two metres high and a metre wide, with an open form. The spindly growth often hangs down below its point of attachment in nest epiphytes. The pointed, leathery leaves are 4cm to 7cm long and are whorled around the stem. Tawhirikaro are dioecious, meaning they produce male and female flowers on separate plants. The sweetly scented flowers are small, reddish-yellow with a long stalk and are arranged in terminal clusters, each with three to five flowers; these appear from May to October. The capsules are produced on female plants. They have orange pith inside and contain sticky, black seeds. Capsules may be found on plants throughout the year at various stages, typically opening from mid-spring to mid-autumn.

### DISTRIBUTION

Tawhirikaro is endemic to New Zealand. It occurs naturally on Great Barrier Island, throughout the North Island, and northern South Island. A separate distinct form is also found on the Poor Knights Islands (see Quick Facts).

Tawhirikaro is found in old-growth forest in established trees such as rimu (*Dacrydium cupressinum*) and pukatea (*Laurelia novae-zealandiae*) colonised by the nest epiphytes *Collospermum hastatum* and *Astellia solandri*. It establishes in the debris of these nest epiphytes, which provide moisture and nutrients for growth. It also grows terrestrially as an under-storey plant within kauri forest, and also on exposed rock stacks in Raglan Harbour.

It is found throughout the lowland and coastal zones, occupying a diverse range of environments up to an altitude of around 790m. Its distribution appears to be related to rainfall and temperature, being absent from areas with low rainfall and cooler temperatures. It can tolerate both high light and relatively shaded habitats. Populations are often disconnected due to their specific habitat requirements and the limited extent of old-growth forest.

### TAWHIRIKARO IN TARANAKI

Tawhirikaro has been recorded in many locations around Taranaki, with sightings on the Kaitake Ranges, at Pukeiti and a number of scenic reserves within New Plymouth, on the ring plain and in eastern Taranaki. It is uncommon to find tawhirikaro growing on the forest floor in Taranaki because of the high species diversity and limited light



opportunities in the dense lowland forest. Taranaki has many sites of secondary and older-growth forest, with large canopy or emergent trees that could host tawhirikaro. It may in fact be more common than we realise – we just need to keep looking for it.

### WHAT CAN YOU DO TO HELP

- Report sightings of tawhirikaro to Taranaki Regional Council Environment Services.
- Control possums in forested areas.
- Take care not to remove tawhirikaro plants or their host trees or habitats during vegetation clearance/trimming operations.
- Plant eco-sourced material to preserve our local form of tawhirikaro.



### CONSERVATION

- Tawhirikaro is not a threatened or endangered plant. It is a regionally uncommon plant with scattered populations in the Taranaki region.

### THREATS

- Vegetation clearance.
- Browsing animals – possum.
- Disconnected populations due to loss of old growth forest.

### QUICK FACTS

- The form found on the Poor Knights Islands has larger leaves that are darker green and more glossy in appearance. The flowers are bright yellow. The foliage when young looks similar to a vireya rhododendron.
- Tawhirikaro has evolved to grow in extreme habitats and is less able compete with other species in more favourable habitats.



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