

# Ileostylus micranthus

## COMMON NAME

Green mistletoe, pirita

## SYNONYMS

Loranthus micranthus Hook.f.

## FAMILY

Loranthaceae

## AUTHORITY

Ileostylus micranthus (Hook.f.) Tiegh.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

Yes

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

ILEMIC

## CHROMOSOME NUMBER

2n = 22

## CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: TO

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Bushy yellowish-green shrub growing on other trees with clusters of tiny green flowers and orange fruit. Leaves fleshy, variable in shape, 30-80mm long, in pairs on stalks that arise from a flattened section of the squareish stem. Roots creeping along host plant's stem.

## DISTRIBUTION

Indigenous. North, South and Stewart Islands, also on Norfolk Island.

## HABITAT

Mainly a coastal and lowland species which rarely extends into upper montane forest. Prefers shrubland and secondary regrowth. This species shows some regional host specificity but nevertheless has been recorded from a wide range (nearly 300) of indigenous and exotic hosts. One of the few indigenous mistletoe's to regularly grow in urban situations.

## WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

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



Ileostylus micranthus, plant, November, Taiharuru, Kennedy Bay. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Female flowers, Taiharuru, Kennedy Bay (November). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Woody, epiphytic much branched, bushy hemiparasite. producing multiple haustoria (these attaching at intervals long host branch) and epicortical, often spiraled roots. Leaves opposite, coriaceous. Petioles 5-50 mm long, flattened and slightly winged. lamina 30-60(-80) × 15-40(-68) mm, dark green to yellow-green, broadly elliptic, slightly ovate, ovate, obovate to rhomboid, base attenuate, apex obtuse to rounded. Inflorescences axillary, solitary or paired, in cymose panicles, these 10-15(-20) mm long with 8-9-12(-15) flowers arranged in threes. Flowers male, female or hermaphroditic (the dioecious condition most commonly seen when *Ileostylus* is parasitic on species of totara (*Podocarpus* spp.)). Calyx cylindrical, presenting as an truncate rather obscure narrow rim 0.2 mm high. Petals 4, free, c.3-4 mm × 0.8-1.6 mm, greenish to yellow-green. Anthers 4, basifixed. Style contorted, usually initially coiled in middle, up to 3.0-4.5 mm long when uncoiled. Ovary 1-locular. Fruit a 1-seeded, 5-8 mm, yellow or orange, ellipsoid or globular (rarely ellipsoid-globular) berry. Seed 5.0-5.5 mm long, elliptic, rounded at both ends, terete.

## SIMILAR TAXA

*Tupeia antarctica* is often confused with *Ileostylus*. *Ileostylus* differs from *Tupeia* by its external rather than internal haustoria; having multiple haustoria and epicortical roots; by the styles of the flowers which are characteristically 'bent' rather than straight; by the yellow or orange rather than white or white spotted purple fruit; and by the young stems that are squarish rather than round (terete) in cross-section.

## FLOWERING

September - December

## FLOWER COLOURS

Green

## FRUITING

December - July

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Difficult. For best results use fresh fruit. Fruit should be squeezed gently so that seed is exposed. The exposed seed should be placed on a suitable host branchlet (ideally in dry weather so that the fruit does not wash off), and allowed to dry. Sometimes the fruit may need to be covered with netting to exclude birds. Then its up to the Gods! Seed almost always germinates (it will even germinate on glass) but unless an attachment is formed (and this may take months) the young plant soon dies. Some people find growing *Ileostylus* straight forward, others tricky. The process is often rather hit and miss and best results seem to be achieved when seed is placed on the same host plant (ideally the same genotype of the host) as that parasitized by the mother plant.

## ETYMOLOGY

**ileostylus:** Style folded like a small intestine

**micranthus:** Small flower

## ATTRIBUTION

Factsheet and description prepared for the NZPCN by P.J. de Lange (7 May 2011).

## REFERENCES AND FURTHER READING

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### **NZPCN FACT SHEET CITATION**

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### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/ileostylus-micranthus/>