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
2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES
2009 | Not Threatened
2004 | Not Threatened

Ileostylus micranthus, plant, November, Taiharuru, Kennedy Bay. Photographer: John Smith-Dodsworth

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

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.

FEATURES
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 of 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

Please cite as: de Lange, P.J. (Year at time of access): Ileostylus micranthus Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/ileostylus-micranthus/ (Date website was queried)

MORE INFORMATION

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