

# Taeniophyllum northlandicum

## COMMON NAME

New Zealand spaghetti orchid

## FAMILY

Orchidaceae

## AUTHORITY

Taeniophyllum northlandicum R.Rice et M.A.M.Renner

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## CHROMOSOME NUMBER

$n = 19 \parallel 2n = 38$

## CURRENT CONSERVATION STATUS

2012 | Non-resident Native – Coloniser | Qualifiers: DP, OL, TO

## PREVIOUS CONSERVATION STATUS

2009 | Data Deficient

## DISTRIBUTION

Endemic. New Zealand, North Island, Northland

## HABITAT

This species has been recorded twice only in New Zealand, with the initial discovery being made south of Whangarei in late 2009 and the more recent discovery being made in the far north near Kaitaia in December 2021. So far, this species has been recorded from the upper trunk and branches of gorse (*Ulex europaeus*) at one site and on feijoa (*Acca sellowiana*) and southern magnolia (*Magnolia grandiflora*) at the other.

## FEATURES

Diminutive epiphytic orchid; plant 30-50 mm diameter, growing tightly appressed to bark in moist, well lighted to semi-shaded situations. Roots terete, fleshy, swollen, c.1.0-1.5 mm diameter, up to 25 mm long, pale green to yellow-green. Leaves reduced to caducous scales on inflorescence. Inflorescence a 1-6-flowered raceme; raceme 15-25 mm long, bracteose, peduncle and rhacis capillary, zig-zagged between flower; bracts minute, narrowly ovate, caducous. Sepals and petals greenish yellow, fleshy, scarcely opening, and only then in the upper 1/2 to one 1/3. Dorsal sepal 3.5 x 0.5 mm, lateral sepals 3.2 x 0.6 mm. Petals 3.2 x 0.6 mm. Labellum 1.5 mm long, scaphoid, 3.2-3.3 mm long, minutely 3-lobed, bearing minute apical appendage; spur c.1,3 mm long. Capsule ellipsoidal, 6 mm long.



On gorse, Northland. Photographer: Matt Renner



On gorse. Northland. Photographer: Matt Renner

## SIMILAR TAXA

Easily recognised by seemingly leafless, greenish roots from which arise (in the appropriate season) small greenish-yellow flowers. Plants could only be confused with *Drymoanthus* which has rather similar looking roots, but which differs by the white (not green) roots, and by possessing large, conspicuous leaves.

Previously as *Taeniophyllum norfolkianum* Beadel et al. (2010) noted that the flowers of New Zealand specimens were 7-10 mm long, this is much larger than the range given by Jones (2006) for that Norfolk Island endemic and that of the specimens they lodged of *T. northlandicum* in the Auckland Museum Herbarium. The measurements given in the description here is based on those herbarium specimens. At the time the size ranges given were still larger than those given by Jones (2006) of *T. norfolkianum* suggesting that the exact identity of New Zealand plants may require further investigation. Recently Rice (2019) described the New Zealand plant as a new endemic species, noting that it differs from *T. norfolkianum* in its growth habit, root size (10-25 x 1.0-1.5 mm c.f. 15-60 x 1.2 mm), warty rather smooth raceme axis, with plants producing fewer flowers (1-6 c.f 5-12 flowers),. The flowers of *T. northlandicum* have a saccate rather spurred labellum base, and longer, more slender and triangular petal and sepals than the shortly ovate to sub hastate petals and sepals seen in *T. norfolkianum*. Finally the labellum of *T. northlandicum* is prominently 3-lobed and furnished with a longer, thicker, recurved apical horn at the lip apex (indistinctly 3-lobed, horn slimmer, upright, non-recurved in *T. norfolkianum*).

## FLOWERING

November

## FLOWER COLOURS

Green, Yellow

## FRUITING

Unknown

## PROPAGATION TECHNIQUE

Difficult - should be left in the wild

## THREATS

The first discovered population occurs on private land within a gorse dominated shrubland and silver fern (*Cyathea dealbata*) - mahoe (*Melicactus ramiflorus* subsp. *ramiflorus*) forest remnant south of Whangarei. At this stage the species is not known to be directly threatened within this habitat though it is vulnerable to fire. The second population is on a privatey owned lifestyle property surrounded by regenerating native forest and also does not appear to be under any direct threat. As *Taeniophyllum* is very small and easily overlooked it is likely that it occurs elsewhere in northern New Zealand. In the belief that this orchid was *Taeniophyllum norfolkianum* it was assessed in 2012 and again in 2017 as "Non-resident Native – Coloniser | Qualifiers: DP, OL, TO". In reality as there have been no further surveys for this species since 2010, and the habitat it was found in is privately owned and was being cleared this orchid merits an assessment of "Data Deficient".

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P. J. de Lange 27 September 2010 based on New Zealand specimens.

## REFERENCES AND FURTHER READING

Beadel, S.; Renner, M.; Brandes, U. 2010: A new species of epiphytic orchid for New Zealand, near Whangarei. *Trilepidea* 82: 3-4.

Green, P.S. 1994: *Flora of Australia* 49 - Oceanic Islands 1. Canberra, AGPS.

Jones, D.L. 2006: *A complete guide to the native orchids of Australia including the island territories*. Sydney, New Holland Publishers Ltd.

Rice, R. 2020: *Introduction to the Australian & New Zealand Bulbophyllum & Vandaceous Orchids (with other observations in subtribe Aeridinae)*. Nature & Travel Books, Sydney.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Taeniophyllum northlandicum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/taeniophyllum-northlandicum/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/taeniophyllum-northlandicum/>