# Danhatchia australis

# **COMMON NAME**

Yoania, Danhatchia

#### **SYNONYMS**

Yoania australis Hatch

#### **FAMILY**

Orchidaceae

#### **AUTHORITY**

Danhatchia australis ( Hatch ) Garay et Christenson

#### **FLORA CATEGORY**

Vascular - Native

# **ENDEMIC TAXON**

Νo

# **ENDEMIC GENUS**

No

### **ENDEMIC FAMILY**

No

# STRUCTURAL CLASS

Orchids

#### **NVS CODE**

**DANAUS** 

# **CHROMOSOME NUMBER**

2n = 22

# **CURRENT CONSERVATION STATUS**

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, EF, Sp, TO

# **PREVIOUS CONSERVATION STATUSES**

2012 | At Risk - Naturally Uncommon | Qualifiers: Sp, TO

2009 | At Risk – Naturally Uncommon

2004 | Not Threatened

# **DISTRIBUTION**

Indigenous. New Zealand (see de Lange & Molloy 1998): North Island (recorded from Waipoua south to Mt Pirongia but mainly found north of Waiuku; Te Hauturu-o-Toi / Little Barrier Island, Great Barrier Island (Aotea Island), Mokohinau Islands), South Island (Kaihoka Lakes area, North-west Nelson). Also Australia (New South Wales).

# **HABITAT**

Coastal to lowland, in forest dominated by taraire (<u>Beilschmiedia tarairi</u>) and nīkau (<u>Rhopalostylis sapida</u>). This saprophytic orchid grows in deep leaf litter intermixed with a fungus which is mostly associated with nikau. Popular mythology has it that it is exclusively associated with taraire but this is incorrect (see de Lange & Molloy 1998). It has also been collected once growing from amongst dense shrubs of Spanish heather (<u>Erica lusitanica</u>). Easily overlooked as it does not necessarily flower every year, and after heavy flowering plants may rest for several years before flowering again.





Under taraire, Great Barrier Island. Jan 1983. Photographer: Ewen Cameron, Licence: CC BY-NC.



Danhatchia australis. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Saprophytic, subterranean, leafless, rhizomatous, perennial herb lacking chlorophyll. Rhizomes buried deep within partially decomposed leaves and leaf mould; 3-5 mm diameter, vermiform, brittle, more or less opaque, pinkish grey coloured, much-branched and interwoven, irregularly bearing tufts of long colourless hairs, and vestigial scaleleaves. Stems erect up to 200 mm tall, unbranched, pale rose-pink, pinkish-grey, pale brown to mushroom grey, glabrescent to glandular-pubescent. Scale-leaves 1-7-(15), 10-15 mm long, chartaceous, much paler than stem, many-nerved, basal scale-leaves semi-tubular, those higher up open-sheathed. Floral bracts similar to scaleleaves. Pedicels very short. Flowers 1-5-(10), suberect. Perianth 6 mm long, brownish or pinkish-grey with white apices, externally more or less glandular-pubescent. Dorsal sepal more or less oblong, slightly concave; lateral sepals similar, more or less spreading. Petals similar, included within sepals. Labellum sessile, orbicular to broadly oblong, column-embracing; base broad, slightly pouched bearing on each side several fleshy hairs and/or elongated calli; median line thickened; sides becoming thick, fleshy and stiff towards apex, externally tuberculate; margins inturned, thin and membranous; mid-lobe minute, orbicular, deeply concave. Column almost as tall as labellum, basally subcylindric becoming winged, wings very narrow; filament broad, rigid; connective slightly produced; anther tall, erect, stationary, each cell with two sets of transversely oblique, closely packed, vermiform, sectile, pollinia; stigma appearing bilobed, often funneliform, with side lobes that flare widely in old flowers; rostellum long, narrow-triangular, wedged between the long pollinia.

### MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

# **SIMILAR TAXA**

None. It could be confused with *Gastrodia* which can grow in similar habitats but orchids from that genus have much taller, glabrous, dark brown or black-brown, spotted stems bearing fewer scale-leaves, and larger flowers.

#### **FLOWERING**

December-February

#### **FLOWER COLOURS**

Grey, White

#### **FRUITING**

December-April

# **PROPAGATION TECHNIQUE**

A saprophytic orchid which is unknown from cultivation. Should not be removed from the wild.

# **THREATS**

Not threatened in New Zealand—but not very common either, and at risk from orchid collectors.

#### **ETYMOLOGY**

australis: Southern

# **TAXONOMIC NOTES**

Plants discovered in Australia in 2009 and initially assigned to *Danhatchia australis* were then described as a new species *D. novaehollandiae* D.L.Jones et M.A.Clem. (Jones & Clements 2018). However, subsequent critical assessment of this species by Orchid experts at the New South Wales Herbarium (NSW, Sydney) can see no valid reason to uphold *D. novae-hollandiae* (M.A.M. Renner pers. comm.). It is their view, and this is accepted here, that *Danhatchia novaehollandiae* is the same as *D. australis*.

See:

 $\underline{\text{http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl\&search=yes\&namesearch=Danhatchia+novaehollandiae\&dist=}\\$ 

http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Danhatchia~australis

# **ATTRIBUTION**

Fact sheet prepared for NZPCN by P.J. de Lange 2 March 2007. Description adapted from Moore & Edgar (1970), supplemented with observations obtained from fresh plants and herbarium specimens.

### REFERENCES AND FURTHER READING

de Lange PJ, Molloy BPJ. 1998. Two new localities for *Danhatchia australis* (Orchidaceae). <u>New Zealand Botanical</u> Society Newsletter 51(1): 6–9.

Jones DL, Clements MA. 2018. *Danhatchia novaehollandiae* (Orchidaceae: Goodyerinae), a new species from southeastern Australia. *Australian Orchid Review 83(4)*: 56–57.

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

# NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Danhatchia australis Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <a href="https://www.nzpcn.org.nz/flora/species/danhatchia-australis/">https://www.nzpcn.org.nz/flora/species/danhatchia-australis/</a> (Date website was queried)

# **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/danhatchia-australis/