Acianthus sinclairii

COMMON NAME heart-leaved orchid, pixie cap

SYNONYMS Acianthus fornicatus var. sinclairii (Hook. f.) Hatch

FAMILY Orchidaceae

AUTHORITY Acianthus sinclairii Hook.f.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Orchids

NVS CODE ACISIN

CHROMOSOME NUMBER 2n = 40

CURRENT CONSERVATION STATUS 2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened 2009 | Not Threatened 2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: Kermadec Islands Raoul Island), Manawatāwhi / Three Kings Islands, North Island, South Island (rare in the east south of Marlborough, extending to Fiordland in the west), Stewart Island/Rakiura, Chatham Islands.

HABITAT

Coastal to montane (up to 1100 m a.s.l.). Usually in lightly shaded to heavily shaded shrubland and forest. Very rarely found in more open, sunny habitats. Often near streams or within seepages in forest.





Coromandel, June. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Kapiti Island. June 2005. Photographer: Jeremy R. Rolfe, Date taken: 02/06/2005, Licence: CC BY.

DETAILED DESCRIPTION

Diminutive perennial herb. Plants at flower up to 100 mm tall, often elongating further in seed. **Stem** erect, slender, hyaline suffused with red or purple. **Leaf** solitary, sessile, inserted at about ¹/₄–¹/₂ way up stem, 10–35 mm long, green sometimes mottled or flecked maroon, ovate, acuminate, base cordate. **Raceme** to 50 mm long. **Floral bract** small, membranous, foliaceous, green or green tinged with maroon, ovate. **Flowers** 1–10 not obviously scented; perianth 6–8 mm long, more or less erect, usually greenish, often purpled, with dull red on labellum. **Sepals** shortly and abruptly caudate; dorsal sepal broadly lanceolate to ovate, concave, arched over column; lateral sepal similar of similar length, linear-lanceolate. **Petals** shorter, lanceolate, acuminate. **Labellum** shorter than sepals, broad-ovate; apex acute and more or less recurved, often coarsely papillose; proximal portion deeply concave, bearing two rounded calli at base. **Column** shorter than labellum, without wings. **Pollinia** globose, 4 in each anther cell, more or less coherent, eventually breaking into tetrads of grains toward the end of flowering.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Most likely to be confused when vegetative with species of spider orchid (*Nematoceras* Hook.f.) from which it is not easily distinguished unless bearing flower buds, which are multiple in a raceme, rather than mostly solitary, rarely in pairs. Plants are somewhat similar to species of *Cyrtostylis* R.Br. but *Cyrtostylis* tend to favour more open habitats and these species have sessile leaves held close to or at the base of the stem and lying on or very close to the ground, and the labellum is larger, oblong, rather than ovate, and the petals are as long as, or longer than the lateral sepals, rather than much shorter. The very uncommon *Townsonia deflexa* forms interconnected creeping patches, and has a much smaller, petiolate leaf distinct from the flowering stem which supports a small, orbicular rather than ovate cauline leaf. *Townsonia* usually has 1-2-(4) rather than (1)-6-(10) flowers, a winged column (not winged in *Acianthus sinclairii*), and the sepals are not caudate (caudate in *Acianthus sinclairii*).

FLOWERING January–October

FLOWER COLOURS Green, Violet/Purple

FRUITING April–December

LIFE CYCLE

Seeds are dispersed by attaching to fur, feathers and clothing (Thorsen et al., 2009)

PROPAGATION TECHNIQUE

Easily grown from the division of whole plants. Does best in deep, moist leaf litter such as that produced under kanuka (*Kunzea* spp.) trees. Easily established in a semi-shaded site and excellent in pots. Should not be allowed to dry out during the growing season.

ETYMOLOGY

acianthus: From the Latin acus 'sharp, pointed' and Greek anthos 'flower' **sinclairii**: After Sinclair (c. 1796–1861). Colonial Secretary and naturalist.

WHERE TO BUY

Not commercially available

ATTRIBUTION

Description adapted from: Moore and Edgar (1970).

REFERENCES AND FURTHER READING

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

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <u>https://doi.org/10.1016/j.ppees.2009.06.001</u>.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/acianthus-sinclairii/