Dactylanthus taylorii

COMMON NAMES
pua o te reinga, wood rose, flower of Hades

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Threatened – Nationally Vulnerable | Qualifiers: CD, PD, PF, RF
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
White

DETAILED DESCRIPTION
Dioecious, achlorophyllous, holoparasitic, root-parasite. Rhizomes mostly buried just below soil surface, usually terminal on host root and attached over a broad irregular surface to expanded end of host root; ± hemispherical, globose, up to 600 mm diameter, surface dark brown, externally covered with hard angular or warty papillae and old flower and fruiting bases, internally fleshy and ± starchy. Shoots seasonal, numerous, arising irregularly and mostly from base of rhizomes, unbranched 100–300 × 10–15 mm long, covered with glossy, dark brown, maroon-brown to red-brown, membranous, sessile, imbricating scale leaves; lamina 5–20 × 5–9 mm, broadly deltoid, claw-like, long-tapering from base, subacute to acute, entire, glabrous, becoming larger and paler toward shoot apex. Inflorescence a terminal capitulum of 15–28 spadices, 20–40 mm diameter, surrounded by an involucre of brown, cream, pink, red or yellow scale leaves, these up to 30 × 15 mm; spadix-axis erect, 20–25 mm long, ± grooved, flowers crowded on upper 2/3, occasionally diffusely scattered, sometimes admixed with bracts in lower 1/3. Flowers densely crowded; male perianth segments, 0–4 filamentous; stamen usually 1, rarely 2, subsessile or sessile, filament 0.2–0.45 mm, anther bilobed, white, pollen whitish, abundant; female perianth segments 2, usually unequal, adnate to ovary, ovary 2-loculed, style > ovary, filiform, stigma simple. Fruit 1.5–1.8 mm, ovate, asymmetric, angular, dark purple-brown to black brown, terminal end bearing remnant style and perianth. Nut 1.3–1.5 mm, elliptic to elliptic-ovate, asymmetric, glossy dark red-brown or purple-brown, glabrous.

Female inflorescences. Photographer: Dennis Gordon, Date taken: 19/03/2010, Licence: CC BY-NC.

Female inflorescences. Photographer: Dennis Gordon, Date taken: 19/03/2010, Licence: CC BY-NC.

SIMILAR TAXA
None but sometimes confused with galls and root galls found on beech trees, Rhizobium and Frankia nodules and other growths on exposed roots and basal trunks have been collected as wood rose. *Dactylanthus* can be distinguished from these by the presence of small circular scars on the exposed tuber left by former buds and flowering shoots.

DISTRIBUTION
Distributed from Northland down to the Wairarapa. Historically recorded in the Kahurangi National Park area of northern South Island.

HABITAT
Dactylanthus grows parasitically on the roots of about 30 species of native hardwood trees and shrubs such as Griselinia littoralis and Pseudopanax arboreus and Pittosporum tenuifolium. The plant prefers damp but well drained places and is often found at the head of small streams. It has been found at elevations from near sea level to 1200m.

THREATS
Habitat destruction, collectors of wood roses and browsing animal such as possums. Cattle destroy plants through trampling. Decline in numbers of short-tailed bats may have also caused a decline in this species. Rats and pigs are also major browsing threats alongside possums.

GENUS
Dactylanthus

FAMILY
Mystropetalaceae

AUTHORITY
Dactylanthus taylorii Hook.f.

SYNONYMS
None known.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
Yes

ENDEMIC FAMILY
No

FLOWERING
January to May

FRUITING
January to August

LIFE CYCLE AND DISPERSAL
Fleshy nuts are dispersed by granivory and water (Thorsen et al., 2009).

PROPAGATION TECHNIQUE
Unknown.

EXTRA INFORMATION
Dactylanthus Revovery Plan (DOC)

NVS CODE
DACTAY

PREVIOUS CONSERVATION STATUSES
2017 | Threatened – Nationally Vulnerable | Qualifiers: CD, PD, RF, Sp
2012 | Threatened – Nationally Vulnerable | Qualifiers: CD, PD, RF, Sp
2009 | Threatened – Nationally Vulnerable | Qualifiers: CD, PD, RF, Sp
2004 | Serious Decline
Jump to current conservation status

REGIONAL CONSERVATION STATUSES

Auckland: 2025 | Regionally Threatened – Regionally Vulnerable | Qualifiers: CR, DE, DPS, DPT, PF, Rel Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.

REFERENCES AND FURTHER READING

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Image of Dactylanthus - rhizome and pistillate flowers (Transactions of the NZ Institute, Vol 56).
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ATTRIBUTION

Factsheet and description prepared for NZPCN by P.J. de Lange. Description based on Allan (1961) and additional observations of herbarium specimens by P.J. de Lange.
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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/dactylanthus-taylorii/

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