Townsonia deflexa

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | At Risk – Naturally Uncommon | Qualifiers: Sp, DPS, DPT
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Orchids

FLOWER COLOURS
Green, Red/Pink

DETAILED DESCRIPTION
Dark green to bright green slender 50–150 mm orchid, spreading though mossy patches and leaf litter usually in forest. **Stem** erect, very slender almost translucent. **Cauline leaf** confined to flowering plants, this 10 mm long, green, orbicular to oblong, apiculate, sessile, usually positioned at mid section of stem. **Leaf of sterile and flowering plants** distinctly petiolate, arising from horizontal rhizomes near to or remote from flowering stems; lamina 10 mm long, orbicular to broadly ovate, obtuse to apiculate, rounded or subcordate at base, margin more or less finely crenate. **Inflorescence** a 10–20 mm long raceme; 1–4-flowered. **Floral bracts** small, membranous, translucent. **Perianth** 5 mm long, horizontal and deflexed, greenish. **Sepals** with thick rounded keels and mor eor less involute margins; dorsal sepal broad, subacute; lateral sepals slightly longer, minutely cucullate. **Petals** very much shorter, oblong, erect. **Labellum** shorter than sepals, broad-ovate, partly embracing column; apex more or less obtse, recurved; proximal part concave, marked by median triangular thickening and 2 low longitudinal ridges of basal calli. **Column** shorter than labellum; wings broad throughout, sharply truncate or almost toothed above. **Anther** partly hidden behind very prominent stigma.

SIMILAR TAXA
A very distinctive species which is very unlikely to be confused with any other New Zealand orchid species. It is perhaps most similar in flower shape and general structure to *Acianthus sinclairii* Hook.f. but that speces has a single, sessile, ovate, acuminate, green leaf with strongly cordate bases (hence its vernacular: heart-leaved orchid) and the larger flowers have sepals ending in solid tail-like appendages (cauda), and an unwinged column. The flowers of *Acianthus sinclairii* tend to be more red-green, with a larger hooded somewhat translucent, red-spotted dorsal sepal, and larger green, red-rimmed labellum, in contrast to the relatively inconspicuous, fairly uniformly bright green somewhat hyaline translucent flowers of *Townsonia deflexa* (note that the basal portion of the labellum in *Townsonia* is often blotched maroon).

DISTRIBUTION
Endemic. New Zealand: North Island, South Island, Stewart Island/Rakiura, Auckland Islands and Campbell Island/Motu Ihupuku.



Plant shows a sterile leaf. Photographer: Eric Scanlen, Licence: CC BY-NC.



Solitary flower. Photographer: Eric Scanlen, Licence: CC BY-NC.

HABITAT
Lowland to upper montane and subalpine habitats (confined to upper montane and subalpine in northern part of range). A small, easily overlooked orchid favouring mossy logs and deep moss patches where it forms small diffuse colonies. It is often (though not exclusively, e.g., Stewart Island/Rakiura) associated with Nothofagaceae forests.

THREATS
An apparently naturally uncommon, biologically sparse species that does not seem to have ever been subject to any significant decline. However, some of its northern South Island, West Coast habitats are threatened by coal mining.

GENUS
Townsonia

FAMILY
Orchidaceae

AUTHORITY
Townsonia deflexa Cheeseman

SYNONYMS
Townsonia viridis sensu Schltr. nom. inv., New Zealand plants had been referred to Acianthus viridis Hook.f. which is now regarded as an Australian endemic Townsonia viridis (Hook.f.) Schltr.

TAXONOMIC NOTES
Townsonia has had a vexed history being various treated as *Acianthus viridis*, *Townsonia viridis* or the New Zealand endemic *T. deflexa*. Based on a mostly unpublished molecular (nrITS based study) and limited chromosomal evidence *Townsonia* was reinstated as a genus distinct from *Acianthus* (B.P.J. Molloy pers. comm.) and a study of the Australian and New Zealand Orchidaceae has upheld this (P. Weston pers. comm. November 2014). However, further work is needed to determine whether *T. deflexa* is truly distinct from the Tasmanian *T. viridis*—for now it is accepted as such.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
November–February

FRUITING
December–April

PROPAGATION TECHNIQUE
Difficult—should not be removed from the wild.

PLANT OF THE MONTH
This plant has been featured as a Plant of the Month – see Trilepidea: NZPCN newsletter for April 2018 for the full story.

ETYMOLOGY
deflexa: Bent sharply downwards

MANAAKI WHENUA ONLINE INTERACTIVE KEY
Key to native orchids of New Zealand

NVS CODE
TOWDEF

CHROMOSOME NUMBER
2n = 28

PREVIOUS CONSERVATION STATUSES
2017 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp
2012 | At Risk – Naturally Uncommon | Qualifiers: Sp
2009 | At Risk – Naturally Uncommon
2004 | Sparse
Jump to current conservation status

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.

ATTRIBUTION
Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007: Description adapted from Moore and Edgar (1970). Some of this factsheet information is derived from Flora of New Zealand Online and is used under a Creative Commons Attribution 3.0 New Zealand licence.

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/townsonia-deflexa/

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