

# Muehlenbeckia australis

## COMMON NAME

pōhuehue, large-leaved muehlenbeckia

## SYNONYMS

*Coccoloba australis* G.Forst., *Polygonum australe* (G.Forst.) A.Rich. nom. illegit., *Muehlenbeckia adpressa* (Labill.) Meisn., *Polygonum forsteri* Endl.,

## FAMILY

Polygonaceae

## AUTHORITY

*Muehlenbeckia australis* (G.Forst.) Meisn.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lianes & Related Trailing Plants - Dicotyledons

## NVS CODE

MUEAUS

## CHROMOSOME NUMBER

2n = 20

## CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Indigenous. New Zealand - Three Kings, North, South, Stewart Islands. Also Norfolk Island. Chatham Islands plants placed here by other botanists warrant separate taxonomic recognition (see below).

## HABITAT

Coastal to montane - common in disturbed habitats such as shrubland, forest margins and other successional vegetation. Often found in rural and urban landscapes, Most common in coastal to lowland habitats but extending to lower montane (up to 600 m a.s.l.). A rampant and at times aggressive vine which is often regarded by people as a serious pest plant.

## WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Bartons Bush, Trentham. Photographer: Jeremy R. Rolfe, Date taken: 27/06/2005, Licence: CC BY.



Hutt Valley. Photographer: Jeremy R. Rolfe, Date taken: 10/07/2005, Licence: CC BY.

## DETAILED DESCRIPTION

Gynodioecious, rampant, liane forming tangles of growth up to 15 m long (or rarely more); bark dark brown, black, or grey (if exposed often covered in crustose and fruticose lichen growth), firmly attached. Main stem up to 0.1 m d.b.h., terete, much-branched, pliant, branches often tangled or interlaced, pliant, 10–20 mm diameter, terete; branchlets slender, terete, finely grooved, young growth usually glabrous, sometimes glabrescent, if so then finely pubescent, hairs, brown or black, minute, patent, caducous. Leaves alternate, membranous (wilting readily if picked), glabrous; petiole pliant, 20–25(–30) mm long, greenish, vinous-red, maroon or black; lamina of juvenile 10–30 × 5–10 mm, pandurate, subpandurate or trilobed (often on same plant), apex acute, usually sharply acuminate, acumen up to 5 mm long, base truncate, dull light green to green, with green, vinous-red or maroon margin, midrib impressed, dark green or red-green, veins reddish ± evident; lamina of adult 20–80 × 10–30(–40) mm, broad-ovate to broad-oblong, entire, often undulose, apex sharply, acutely acuminate, acumen 10–15 mm long, base truncate to subtruncate, dull light green, green, dark green, with green, vinous-red or maroon margin, midrib yellowish, slightly raised, veins usually obscure or not evident. Ochreae caducous, hyaline, (4–)5–6 mm long. Inflorescences axillary and terminal, paniculate, usually leaf at base, panicles 100–150 × 100 mm, comprised of bracteose racemes 30–50 mm long, bracts 1.5–3.0 mm long, narrowly deltoid, hyaline, membranous, caducous. Flowers ± stellate, greenish to cream, 4–5(–6) mm diameter. Tepals free or fused near base, 5.0–6.0 × 1.5–2.0 mm, oblong, ovate, ± cucullate (especially), greenish or cream (especially). flowers, shortly pedicellate, pedicels 0.4–1.2 mm long, glabrous, green. Tepals 5, widely spreading, stamens 8, antisepalous, in two whorls of four, outer spreading, inner suberect to erect; filaments 5.8–6.2 mm long, cream or white, anthers basifixed, 0.3–0.5 mm, oblong, cream, gynoecium rudimentary (barren). flowers similar but with functional gynoecium, found to varying degrees on otherwise plants. flowers, shortly pedicellate, pedicels 0.2–0.8 mm long, glabrous, green. Tepals suberect, cucullate, staminodes if present 8, often heavily reduced or absent; stigmas broad, fimbriate. Fruit invested by white succulent persistent perianth. Nut 2.8–4.0 × 1.8–2.9 mm, trullate, triquetrous, asymmetric broad at base, apex subacute, angles obtuse, twisted, faces concave, smooth; surfaces dark red brown, dark brown, or brown-black.

## SIMILAR TAXA

A well marked species unlikely to be confused with any other *Muehlenbeckia* or vine species wild in New Zealand. From the other New Zealand *Muehlenbeckia*, except *M. complexa*, it is distinguished by vine growth habit. From *M. complexa* var. *complexa* it is separated by the larger (20–80 × 10–30(–40) mm c.f. 5–20 × 2–15 mm in *M. complexa* var. *complexa*) broadly ovate to broadly oblong acuminate leaves (rather than smaller, oblong, obovate to suborbicular), larger (100–150 × 100 mm c.f. 10–40 × 5 mm in *M. complexa* var. *complexa*) heavily branched panicles (rather than simple spicate or sparingly branched spicate panicles, sometimes with inflorescences reduced clusters of 2–4 flowers in leaf axils). *Muehlenbeckia complexa* var. *grandifolia* is closer to *M. australis* but the branchlets are covered in dark red tomentum, and the inflorescences spicate. The Chatham Islands race of *Muehlenbeckia australis* is allopatric from *M. australis* s.s. it differs by its much larger, coriaceous glossy leaves, and other characters. It is genetically distinct from *M. australis* - it is currently in the process of being formally described.

## FLOWERING

Flowering may occur throughout the year.

## FLOWER COLOURS

Green, White

## FRUITING

Fruits may be present throughout the year

## THREATS

Not Threatened

## ETYMOLOGY

**muehlenbeckia**: Named after a botanist named Muehlenbeck

**australis**: Southern

## EXTRA INFORMATION

The description provided here does not include Chatham Island plants - those are probably sufficiently distinct from *Muehlenbeckia australis* to warrant separate taxonomic recognition.

### **ATTRIBUTION**

Fact Sheet prepared for NZPCN by P.J. de Lange 29 April 2022. Description by P.J. de Lange (29 April 2022).

### **NZPCN FACT SHEET CITATION**

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

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

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/muehlenbeckia-australis/>