	DC & GK	R & D
Phormium tenax	×	
Pterostylis agathicola	×	×
Pterostylis alobula	×	
Pterostylis banksii	×	×
Pterostylis brumalis	×	×
Pterostylis trullifolia	×	
Rhopalostylis sapida	×	×
Ripogonum scandens	×	×
Rytidosperma biannulare		×
Rytidosperma gracile	×	
Schoenus maschalinus		×
Schoenus tendo	×	×
Thelymitra longifolia	×	×
Uncinia banksii		×
Uncinia uncinata	×	×
Uncinia zotovii	×	

Muehlenbeckia complexa var. *grandifolia* Carse

Mei Nee Lee

Muehlenbeckia australis (Polygonaceae) is a commonly occurring native scrambling vine. It has a wide distribution throughout the North and South Islands, Three Kings, Stewart Island and Chatham Islands (Allan 1961), and is usually seen on bush margins scrambling over other plants.

In late summer 2011, I came across a population of *Muehlenbeckia* ?*australis* in a site off Don Buck Road in Massey, West Auckland. The site was a weedy gully with tall wattle trees in the canopy and an infestation of kiwifruit (*Actinidia deliciosa*) climbing up the wattle trees (*Acacia* spp.). The understory was a mix of

Fig. 1. AK 326493 *Muehlenbeckia australis* (M.N. Lee & J. Byrd, 5 April 2011). Arrows indicate locations of the ochreae (fused stipules at nodes, typical of Polygonaceae). Photo: E. Cameron, 5 Nov 2011.

Fig. 2. Close-up of pubescence on the young stems. Note that the ochrea (arrow) is relatively smooth. Photo: E. Cameron, 5 Nov 2011.

Table 1. Specimens of *Muehlenbeckia complexa* var. *grandifolia* in the AK herbarium.

AK number	Collector	Collection Date	Location	Habitat
AK3906	H Carse	Feb 1926	Mt Smart Road, Onehunga, Auckland	[Not mentioned]
AK100213	J Adams	[Not given on specimen]	Thames	[Not mentioned]
AK110744	B S Parris, L R Keen	09 Dec 1966	Spragg's Bush, Waitakeres, Auckland	Rare, in dense bush.
AK211942	I L Barton	26 Feb 1962	Otau Valley, Hunua Range, Auckland	Outskirts of bush. A winding liane.
AK261992	R Shanks	Apr 1955	Sanitorium Hill, Cambridge	Straggling climber at edge of bush, with raupo, maraitai.
AK326493	M N Lee, J Byrd	5 April 2011	Opposite Massey Pony Club, across Swanson Stream, Massey, Auckland	Scrambling over 2m tall chinese privet next to a *Carex lessoniana* clump, upstream from a large kahikatea tree, in sun.

native and exotic species, including mahoe (*Melicytus ramiflorus*), hangehange (*Geniostoma ligustrifolium*), *Cyathea dealbata*, wild ginger (*Hedychium ?gardnerianum*), Chinese privet (*Ligustrum sinense*) and *Tradescantia fluminensis.*

I almost dismissed the *Muehlenbeckia* until I noticed that the stems were brown and hairy rather than the usual smooth grey. As the gully was very weed-infested and backing onto houses (and gardens), I decided it would be a good idea to take a small specimen and double check that I had correctly identified the plant and that it was not a weed I had not encountered before.

I collected a flowering specimen (Figs. 1 and 2) and consulted the Flora. The entry for *Muehlenbeckia australis* (Allan 1961, pg. 223) states "branchlets slender … glabrous or nearly so", and the leaves were too big for *Muehlenbeckia complexa*.

Feeling perplexed, I consulted Ewen Cameron and Rhys Gardner. Rhys has come across a similar pubescent *Muehlenbeckia australis* in the Hunua Ranges. Looking through the Auckland Museum Herbarium collection I found five specimens of *Muehlenbeckia australis* with pubescent stems (see Table 1), among them a Carse specimen (AK 3906) collected from Mt Smart Road, Onehunga in February 1926.

Carse recognised this plant as a form of *Muehlenbeckia complexa*, publishing it as *Muehlenbeckia complexa* var. *grandifolia* (Carse 1916). In his paper, Carse remarks "At first sight this well-marked plant might be mistaken for *M. australis*, but an examination of the ultimate branches shows that they are terete and densely pubescent, which at once settles the point. The leaves, too, are much more coriaceous than those of *M. australis*. In short, save in size and habit, it bears no resemblance to that plant. This variety is confined to damp alluvial situations, and though, no doubt, connected by intermediates with the numerous and varied forms which this species assumes, is worthy of varietal distinction."

Carse notes on the AK 3906 specimen "I have collected this in many places from Mongonui (sic) to Manawatu County. It is not uncommon in the vicinity of Auckland". Presumably this note is to refute any suggestion that his *Muehlenbeckia complexa* var. *grandifolia* was restricted to Mangonui County, as in the title of his 1916 paper.

I would dispute Carse's suggestion that this plant bears no resemblance to *Muehlenbeckia australis*. To my eye, this plant is more a pubescent *Muehlenbeckia australis* than a large-leaved *Muehlenbeckia complexa*. I have not come across any populations of *Muehlenbeckia complexa* (either natural or planted) in the vicinity of the gully, but found a population of normal, non-hairy *Muehlenbeckia australis* about 600 m away from the gully. I haven't noticed any intermediates in this area either.

In a decade of participating in Auckland Bot Soc trips, and looking at plants around Auckland and further afield, this is the first time I have come across this large-leaved pubescent *Muehlenbeckia*. I might not have taken a second look if it were not for the situation of the gully and the weeds in it.

Maybe we tend to overlook this and other common plants, but it would be interesting to note if Carse's *Muehlenbeckia complexa* var. *grandifolia* is still "not uncommon in the vicinity of Auckland". Resolving the taxonomic status of this plant could make a nice student thesis study.

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Occurrence of the tropical reed grass, *Phragmites karka,* in Auckland

Mike Wilcox

Common reed or cane grass (*Phragmites australis* (Cav.) Trin. ex Steud.) is widely distributed in Europe, Asia, Africa, America and Australia (Hocking et al. 1983; Clayton et al. 2010). It is recorded as a naturalised plant in New Zealand (Edgar & Connor 2010) with occurrences in Napier and in Canterbury. Biosecurity New Zealand (2009) have classified it as an unwanted organism under the Biosecurity Act 1993, and banned it from sale, propagation and spread, and issued a threat notice about it because of its potential to spread and block waterways. It is a bamboo-like grass, growing up to 3 m tall.

Fig. 1. *Phragmites karka* to 3.5m tall, Tahapa East Reserve, 5 June 2011. Photo: Mike Wilcox.

In June 2011 I came across a dense stand of *Phragmites* in Auckland, which I at first thought was *P. australis*. The location was Tahapa East Reserve in Meadowbank. The stand was on dry land at the edge of the reserve in front of a house near the entrance from Tahapa Crescent, comprising thousands of culms over an area of c. 120 square metres. Culms varied in thickness from 5 to 20 mm, were dull and ridged, and were 1 to 4.0 m tall including flower head (Fig. 1). Several plants had flower heads (Fig. 2), but no seed had been set, and the stand appeared to be a single clone. Judging by the extent of the stand and size and maturity of the plants, it had been there for years and was probably initially planted for some purpose, and subsequently increased by rhizomatous spread. The field in the reserve is regularly mowed up to the edge of the reeds.

Fig. 2. Flower head of *Phragmites karka*, Tahapa East Reserve, 5 June 2011. Photo: Mike Wilcox.