Taxon (cont.)	CRW	TB SR	TNW	Ch SR	RWP	r & pa	TEC
Thuidium laeviusculum		AK351794					
Tortula muralis							AK351871
Tortula truncata							AK351864
Weissia controversa							AK351856
Weymouthia cochlearifolia		AK351886					
Weymouthia mollis		+	AK351828				
Zygodon intermedius		AK351842				AK351878	
Zygodon menziesii							AK351870

What's in a name? *Lathyrus japonicus* at Lathyrus Bay, Catlins, South Island

Ewen K. Cameron

Fig. 1. Beach pea (*Lathyrus japonicus*) at the back of Lathyrus Bay where it is well-established along c. 70 m of the sandy upper beach edge, and inland up to 15 m amongst the grasses and flax. Photo: Rory Gold, 22 Feb 2009.

The Auckland Bot Soc Catlins trip in January 2014 was based at Tautuku Bay (Young 2014), nearly 4 km away from Lathyrus Bay, which is just south of Tautuku Beach on the south side of the Tautuku River. Unfortunately the combination of a full field programme, and the access governed by the tide and private land resulted in no attempt being made to visit the remote Lathyrus Bay during our Bot Soc camp.

In 2008 Keith Hammett was contacted by Lynton Diggle, a maritime historian, about the identification of a type of perennial "sweet pea" found at Lathyrus Bay which possibly related to a nineteenth century ship wreck. After a little difficulty the pea was identified by a botanical "consortium" as beach pea (*Lathyrus japonicus*) (which incl. *L. maritimus*) and Keith published an account of the remarkable story of how the Bay was supposedly named (Hammett 2009): that in 1871 a constable was sent to investigate the discovery of a skeleton and two European graves in addition to wreckage at the mouth of the Tautuku River; as well as some wreckage the constable reported "about half an acre of sweet peas in blossom, growing just above the high water mark". The inference is that the wreck may be the sailing ship *Burmah*, which left London on 28 Aug 1859 and was last seen on 17 Nov 1859 by another ship well south of Australia, about two weeks sailing time from her destination, Lyttelton,

but was never seen again. The *Burmah* was carrying 15 horses and nine cattle, and beach pea may have been an impurity in the ship's animal fodder.

The earliest record of the name "Lathyrus Bay" being used appears to be on a local map dated 1896 (Roy Gold pers. comm.). Although the name is not approved by the New Zealand Geographic Board (pers. comm. to EKC) it does however appear on the Crown Topographical Maps, e.g. NZMS 260, Sheet G47, 1983. In February 2009, Rory Gold photographed the beach pea *in situ* at Lathyrus Bay (Fig. 1) and sent some flowering (purplish-blue with darker lines in the standard) and fruiting material up to Keith Hammett which became a herbarium specimen (AK 304570-71) (Fig. 2). This appears to be the first New Zealand herbarium collection of this species in the wild[1], and Keith's account of it (Hammett 2009) the first published naturalised record. Beach pea is unrecorded for the Australian flora (Australian Plant Name Index, accessed 24 Apr 2014). A DNA study would be interesting to resolve its provenance and potentially could add support for it being carried on the *Burmah* – i.e. if its provenance is SE England.

Perennial beach pea's native range is circumpolar in the northern hemisphere. It commonly occurs in temperate coastal areas of Asia, Europe, and North America (Ohtsuki et al. 2001). Its extensive distribution range is explained by seed dispersal by currents and by the seed's ability to remain viable while floating in seawater for up to 5 years (Brightmore & White 1963, Mabberley 2008). Its European distribution is: maritime sands and shingle; rarely on shores of larger lakes; coasts of western and southern Europe; inland in NW Russia and northern Norway (Tutin et al. 1968). Beach pea is sometimes also recorded as native to South America – but this appears to be based on a naturalised population in Chile (Burkart 1935, Seijo & Fernandez 2001). Various subspecies and varieties have been recognised for beach pea, but the literature seems quite confusing as to their current acceptance.

It is curious that this hardy beach pea, apparently present at Lathyrus Bay for over 150 years, hasn't managed to spread by seed along the coast and establish in other localities. The local current on this coast apparently flows northeast and I feel sure that if beach pea established on Tautuku Beach it would be noticed – we ourselves walked along nearly 1 km of this beach in January 2014 recording what was growing there. However, Lathyrus Bay faces south and is well contained – any drifting seed would have to clear the Tautuku Peninsula, and then the discharging Tautuku River might push it further out to sea, perhaps making it miss land altogether. Interestingly, the seed germinated but the plants failed to thrive in Auckland (Keith Hammett pers. comm.).

So what's in a name? In this case a very interesting historical and extant addition to the naturalised flora of New Zealand and perhaps only one of two naturalised populations in southern hemisphere.

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I thank Keith Hammett for involving me in the plant's identification, Rory Gold for collecting the specimen and supplying the photograph, Ian Popay for being first to work out its true identity, the New Zealand Geographic Board for their feedback, Dhahara Ranatunga for scanning the herbarium specimen (Fig. 2), and Lesley van Essen and Jennifer Tate for label data and the image of the herbarium specimen in Massey University (MPN) (see footnote).

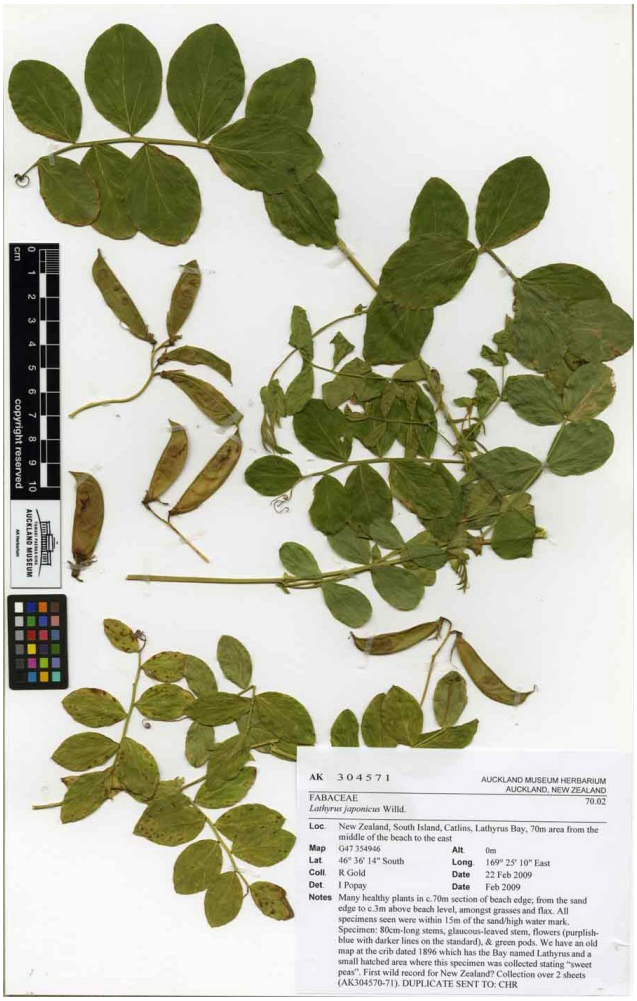

Fig. 2. The first wild beach pea herbarium collection for New Zealand; with immature pods. AK 304571, *R. Gold*, 22 Feb 2009, Lathyrus Bay.

Footnote:
[1]There is at least one other herbarium collection of *Lathyrus japonicus* in New Zealand: MPN 35031. It is from the Manawatu, collector unknown, collected 1960–1980, ex Grassland Division, and is likely to be from a cultivated specimen (Lesley van Essen, pers. comm.).

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The vegetation and flora of 'Matukureia Swamp', Puhinui, South Auckland – with notes on *Ranunculus macropus*

P.J. de Lange, R.O. Gardner, T.J.P. de Lange

Fig. 1. Matukureia Swamp as viewed looking north-north-west. (Photo: P.J. de Lange, Oct 2013).

Fig. 2. Looking east across Matukureia Swamp toward the terraced, quarried remnant of McLaughlin's Mountain (Matukureia). Note the solitary cabbage tree growing in the middle of the swamp. (Photo: P.J. de Lange, Oct 2013).

Introduction

The swamp (37° 1′ 2.31″ S, 174° 50′ 30.12″ E, c.9 m a.s.l., Figs. 1, 2, 3) discussed here appears to have no official name, so being highly original thinkers we decided to refer to it using the Maori name for the nearby quarried ruin that was once Matukureia Volcano, and which is now more usually known as McLaughlin's Mountain (Fig. 2). Matukureia Swamp was first drawn to our attention when one of us (ROG) 'discovered' it during September 2000 whilst doing a survey of the scoria fields located south-west of McLaughlin's Mountain, which is the southern-most portion of the Auckland Volcanic Field (Hayward et al. 2011).

Matukureia Swamp is a eutrophic palustrine system, classified here as a 'swamp' using the New Zealand wetland types classification system of Johnson and Gerbeaux (2004). The swamp occupies a small remnant of a tuff-ring. The tuff ring was formed during the initial 'wet' (i.e., phreatomagmatic) eruptions of this volcano. Subsequently most of this tuff ring was lost when the eruption style switched from the 'wet' eruptive phase to one producing 'dry' scoria and lava, after which virtually all of the parent tuff ring (except that in which the swamp eventually developed) was obliterated (Hayward et al. 2011). At some stage (possibly even while the 'dry' eruption phase of the volcano was still active) a small permanent water body developed within the remnant portion of the tuff ring. Subsequent paludification has seen this water body gradually infilled with sediment and highly decomposed organic matter (peat grade D10 of Von Post scale – see Taylor and Pohlen (1979)), to form the swamp described here.