

*obtusatum*). The very young fronds of the pikopiko were gathered when they were four to six inches high, and cooked in a hangi on top of the kumara, and eaten as a vegetable. It was as tender as asparagus, and not unlike it in taste, and very nice indeed to eat. These young fronds of pikopiko were sometimes cooked and left in water for about two weeks, when they acquired an acid taste. The taste was like that of tinned asparagus, slightly acid, and it

was considered a great luxury".

I can find no convincing evidence that the young shoots of *Polystichum richardii* were ever eaten regularly as food, and therefore conclude that pikopiko has two meanings – the Maaori name for the plant *Polystichum richardii* (and its derivatives), and for the unfurled edible shoots of *Asplenium bulbiferum*.

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# *Spergularia* in Auckland

Mike Wilcox

Adams, West and Cowley (2008) have recently revised the genus *Spergularia* (Caryophyllaceae) in Australia, where five indigenous and six introduced species are recognised. Five species were recorded as occurring both in Australia and New Zealand. In light of this re-assessment I was curious as to which of these *Spergularia* species we have in the Auckland area, and have accordingly checked material held in the Auckland Museum herbarium (AK), emphasising seed characteristics.

## 1. *Spergularia media* (L.) C.Presl

Native to Europe, naturalised in Australia and New Zealand (Canterbury) (Webb et al. (1988) – "coastal rocks and salt marshes, throughout New Zealand").

This species seems rare in Auckland, the only record being from Matheson Bay. The seeds are a smooth and of a rusty brown colour, and surrounded with a wing.

Matheson Bay, *P.Hynes*, 8 Dec 1968, AK 126121

Matheson Bay, *P.Hynes*, 29 Dec 1969, AK 121603

2. *Spergularia tasmanica* (Kindb.) L.G.Adams  
Native to Australia and New Zealand. *Spergularia tasmanica* is recognised as a new species, previously included here under *S. media*. It is illustrated in Webb & Simpson (2001) on page 161 and also on page 6 as *Spergularia media* (from Titahi Bay, Wellington), but the papillate seed with the broad wing having a distinct gap, clearly identify this from the descriptions, illustrations and keys in Adams et al. (2008) as *S. tasmanica*.

The seed is black and prominently papillate. In some populations (Auckland west coast) the seed has a very obvious wing (as illustrated in Adams et al. (2008), and Webb & Simpson (2001)) while others are wingless (Hauraki Gulf islands). This species occurs on coastal rocks on offshore islands along the east coast from Three Kings Islands southwards. It is very rare on the mainland east coast, but is frequent on the west coast.

The description given by Adams et al. (2008) emphasises that the seed is consistently winged, and the species occurs on inland salt marshes as well as maritime cliffs, whereas in Auckland the seed is often not winged, and it occurs exclusively on coastal cliffs. No specimens from Auckland were examined by Adams, West and Cowley.

#### *Wingless seeds*

The Noises, David Rocks, *L.M. Cranwell*, 6 Dec 1932, AK 100400, AK 100395  
 Gannet Rock, Hauraki Gulf, *B.E.G. Molesworth*, 10 Nov 1947, AK 23329  
 Ruakura Point, Kawakawa Bay, *J.A. Rattenbury*, 9 Dec 1953, AK 261946  
 Rakino Island, *R.O. Gardner* 4372, 7 Oct 1984, AK 222089  
 The Noises, David Rocks, *P.J. de Lange* 2316, 4 Feb 1994, AK 224375  
 Motuihe Island, Tern Rocks, *P.J. de Lange & G.M. Crowcroft*, Feb 1994, AK 230205  
 Rotoroa Island, *P.J. de Lange* 6722, 4 Nov 2006, AK 297770  
 Tiritiri Matangi Island, *E.K. Cameron* 14030, 4 Dec 2006, AK 298004

#### *Small wing*

Hahei, Poikeke Island, *E.K. Cameron* 13656, 2 Mar 2006, AK 295199

#### *Large wing*

Piha, *S.A. Rose*, 6 March 1948, AK 24009  
 Piha, Lion Rock, *A.G. Simpson*, 3 June 1957, AK 266149  
 Piha, Lion Rock, *P.A. Luckens*, Jan 1958, AK 261947  
 Karekare, *B.S. Parris*, 21 Dec 1966, AK 128899  
 Bethells, *A.E. Wright* 1985, 28 Feb 1977, AK 141357  
 Destruction Gully, Manukau, *R.O. Gardner* 3384, 5 Feb 1983, AK 166050  
 Mercer Bay, *P.J. de Lange* 5390, 5 Dec 2001, AK 256166

### **3. *Spergularia marina* (L.) Griseb.**

Widely distributed in the northern hemisphere, and regarded as native also in Australia and New Zealand. [Webb et al. (1988) – “sand flats and coastal pastures, Canterbury and Otago.”]

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The seeds are rusty brown, without a wing, and have prominent marginal papillae which are paler than the testa. This is the common sea spurrey of Auckland salt meadows.

Onepoto Basin, Northcote, *A.E. Esler*, 18 Mar 1983, AK 161375 (as *S. bocconeii*)  
 Shoal Bay, shell bank, *P. Fisher*, 2 Sep 1985, AK 275155  
 Ambury Park, Mangere Bridge, *M.D. Wilcox*, 24 Oct 1997, AK 282342  
 Awhitu, salt marsh margin, *P.A. Aspin* 532, 12 Dec 2006, AK 299687

### **4. *Spergularia bocconeii* (Scheele) Graebn.**

Native to Mediterranean Europe, naturalised in Australia and New Zealand. [Webb et al. (1988) – “sandy or stony waste land, Auckland, Wanganui, South Island.”]

The seeds are smooth, brown, and wingless. There are now no records of this species from Auckland, the collection by A.E. Esler (AK 161375) from Onepoto Basin Northcote, turning out to be *S. marina*.

### **5. *Spergularia rubra* (L.) J.Presl & C.Presl**

Native to Europe, naturalised in Australia and New Zealand. [Webb et al. (1988) – “wasteland, dry pastures, riverbeds, throughout New Zealand.”]

Widely occurring in Auckland on gravelly or sandy waste ground, tracks and stock yards. Bright rose-pink flowers. Silvery stipules. Seed grey-brown, without a wing.

Mt Roskill, *P.Hynes*, 4 Dec 1972, AK 131291  
 Remuera, footpath, *S. Reed*, 1 Jan 1974, AK 133890  
 Newmarket, crack in footpath, *A.E. Orchard* 4111, 11 Jan 1974, AK 133879  
 Mangere Mountain, *D.J. Court*, 12 Nov 1974, AK 180950  
 Tamaki Drive, waste ground, *A.E. Wright* 1457, 2 Oct 1976, AK 140978  
 Forest Hill, by reservoir, *E.B. Bangerter* 5436, 20 Nov 1979, AK 150947  
 Cornwallis, gravelled parking area, *J. Mackinder*, 6 Dec 1981, AK 157957  
 Ambury Park, cattle yards, *M.D. Wilcox*, 23 Dec 1999, AK 282217  
 Awhitu, Kohekohe, by cattle yards in sand, *P.A. Aspin*, 20 Nov 2003, AK 288907