

Other Myosotis species from Banks Peninsula are perhaps better known if still of rare occurrence. M. australis var. lytteltonensis has already been illustrated and discussed in this journal (No.1). On the peninsula it appears to be confined to areas around Lyttelton Harbour.

John Thompson has written about M. pygmaea var. pygmaea (Jl. No.9) and again in this number.

M. forsteri was recorded by Laing (1919) from the Akaroa-Flea Bay ridge and there are two specimens in the Melbourne herbarium from Banks Peninsula. (MEL 71186 Presquile de Banks, N.Z., M. Raoul 1843 and MEL 71231, Akaroa N.Z. ? North Head). Dr. L.B. Moore has confirmed the identification of these two specimens. Further records of this species from the peninsula would be welcomed.

M. sylvatica is naturalised on a ridge above Governors Bay (CHR 278455, D.R. Given and B.P.J. Molloy) and in Kaituna Reserve (CHR 149388, B.H. Macmillan et al.) and another exotic species, M. arvensis grows in depleted grassland on the Port Hills (CHR 85717, A.J. Healy).

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MYOSOTIS PYGMAEA VAR. PYGMAEA

By John Thompson

In Journal No. 9 page 18 I mentioned finding Myosotis pygmaea var. pygmaea in the summit rocks of Mt. Herbert on 3rd December, 1975. Two other records of Banks Peninsula findings of this Myosotis have been brought to my notice by Dr. L.B. Moore and Mrs. M. Bulfin. Dr. B.P.J. Molloy sighted plants on Mt. Herbert summit rocks on 22nd January, 1976.

R.M. Laing mentions in his paper of 1914 that whilst Myosotis pygmaea in other areas grows down to sea level on Banks Peninsula it can only be found on hill tops doubtless due to the increased moisture available. There is a specimen, W 2652, gathered by R.M. Laing and A. Gray at Mt. Bossu dated January or July 1909 in which both flowers and seeds are observable.

I also noted in that Journal that the only records of Myosotis pygmaea var. pygmaea being found on the Port Hills appeared to be one by R.M. Laing on the "Hill tops above Governors Bay", undated and one by P.D. Shallard and N.T. Moar on 30th August, 1956" at the Sign of the Bellbird amongst rocks".

My wife and myself were fortunate in finding last season this Myosotis in three sites on the Port Hills. These were:

Site 1: At the base of rocks below the Sign of the Kiwi, near the I and Y Reserve on 25th August, 1976. There were 5 patches growing mostly with a small thallose liverwort, patches containing from 12 to 50 small plants, evidently seedlings; with no sign of mature plants. Only rosette leaves could be seen.

Site 2 a: At the base of a boulder below Gibraltar Rock on 13th October, 1976. There were 3 plants growing with other small herbs, rosette leaves only. These leaves were of a length and breadth of twice the plants in site 1.

Site 2 b: Under a log below Gibraltar Rock on 29th December, 1976 consisting of several plants well in flower with branches intermingled.

Site 3: Amongst ridge rocks in a damp area in thallose liverworts above Bowenvale Valley. The patch consisted of some 30 plants apparently all seedlings with rosette leaves only, leaves at least half the size of specimens from site 1.

A specimen from each site, except site 2b., was grown in a pot in an unheated glasshouse. On 25th November, 1976 they were examined and the following details noted :

Site 1 specimen: 14 branches with a width of 1 mm, had grown and rebranched, the longest branch being 32 cm containing 18 white flowers each 3 mm across.

Site 2a specimen: 6 branches with a width of 2 mm had grown, 4 of which had rebranched, the longest branches being 9 cm with 8 white 3 mm flowers.

Site 3 specimen: 10 branches with a width of  $\frac{1}{2}$  mm had grown and rebranched, the longest branch being 13 cm with 8 white 3 mm flowers.

On the 27th December, 1976 the plants were again examined. Site 1 specimen's longest branch was 54 cm, that of site 2 24 cm, and that of site 3 17 cm. The growth rates from 25th November, 1976 to 27th December, 1976 were :

Site 1 specimen	-	5 cm per week
Site 2a specimen	-	3 cm per week
Site 3 specimen	-	0.9 cm per week

Allen states that the New Zealand *Myosotis* are "Annual or perennial hairy herbs". Is this species an annual or a perennial ?

On 27th December, 1976 Site 1 was revisited. No plants or remnants were seen.

On 29th December, 1976 Site 2a was examined. There were no signs of any plants. Plants at Site 2b was noticed for the first time on that visit with numerous branches and flowers.

On 14th May, 1977 Site 2b was revisited; several plants with rosette leaves were seen. No remains of any branches were observable. We could not be sure that the plants were seedlings or old plants, the leaves however seemed much too large to have grown from seed in the short time available.

The plants in pots all had the same treatment. Those from Sites 1 and 3 died after completing flowering, that from Site 2 lost all its branches, grew new rosette leaves and is still alive.

It appears that only plants from Sites 2a and 2b were able to live more than one season. These plants were much more robust than the plants from the other two sites.

Myosotis pygmaea var. drucei

A closely related variety Myosotis pygmaea var. drucei was found by A. Wall on Mt. Herbert at 2800 feet altitude on April 1921? C.H.R. 295301.

I shall be pleased to receive information on the whereabouts of this species from anyone who has seen it or knows where it has been found on Banks Peninsula fairly recently.

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A "NEW" ORCHID FOR NEW ZEALAND

By L.B. Moore

In the September 1976 number of the New Zealand Journal of Botany Mr. Digby Graham reported a truly amazing botanical find -- an Australian orchid more than a metre tall, with flowers 2.3 cm long in shades of "purple-black, red-plum to maroon", dozens of plants growing wild and never before recorded in New Zealand; This tongue orchid, Cryptostylis subulata, was discovered in a swamp in the far northern strip of New Zealand near the road that carries thousands of sight-seers every year to the Cape Reinga light house.

Most fortunately I was in that district in the Spring of 1976 and was able to see these orchids as leafy plants 15-20 cm tall in a swamp where, ankle-deep in water, we walked along narrow lanes between shoulder-high rush-like sedges (Baumea teretifolia, B. juncea and Schoenus brevifolius) with an understory of the jointed rush (Empodisma minus, formerly Hypolaena), umbrella fern (Gleichenia), Lycopodium laterale, and a dainty Blechnum (B. minus s.s.). The pink-flowered spiral orchid, Spiranthes sinensis, was almost as common as the tongue orchid, not unlike it in leaf-shape but only about half its size. A plant of each orchid was brought back to grow at Botany Division, DSIR, Lincoln (where they retain their leaves in winter), and also of our other find, a "living fossil", which was on display at the Society's September meeting before it died down for its summer rest.

My guides on this wonderful day in the swamp were Mrs. J. Seymour and her children, all enthusiastic and knowledgeable right down to the smallest one. Later Mrs. Seymour wrote for us something about her reactions on first moving into this area of sand, scrub and swamp, and her subsequent botanical adventures.

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