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## A Rare Experience: rediscovering *Myosotis petiolata* var. *pottsiana*

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There are three named varieties of *Myosotis petiolata* (Allan 1961), although some consider that these varieties each merit full species status. *Myosotis petiolata* var. *petiolata* is a rather slender plant with small, wide-open flowers and has been recorded from a few localities in Auckland, Bay of Plenty, Hawkes Bay and Nelson. Variety *pansa*, a larger and more robust plant, is illustrated in "Gardening with New Zealand plants and shrubs" (Fisher *et al.* 1970). It occurs north of the Manukau Heads on the sea coast and in river gorges (Allan 1961). It has been found since in other districts near the coast, as far south as White Cliffs, North Taranaki.

*Myosotis petiolata* var. *pottsiana* was discovered by Marc Heginbotham in company with Norman Potts about 1952, by the Te Waiti tributary of the Otara River near Opotiki. It is named after Mr Potts who sent specimens to Botany Division, DSIR, Lincoln. Specimens were also brought into cultivation by Mr Heginbotham. The plant is openly branched, larger in all its parts than var. *petiolata*. The floral features of narrow corolla tube and scales far above the calyx tips distinguish it from varieties *petiolata* and *pansa*. *Myosotis petiolata* var. *pottsiana* no longer occurs in the type locality (Heginbotham, pers. comm.) and it seems likely that the cultivated plants no longer survive. Dr David Given lists it as extinct in a checklist of plants at risk in New Zealand (Given 1981).

During the winter of 1982, I and three others, went to look at the Takaputahi production reserve in the Raukumara State Forest Park. On

our way back through the Waioeka Gorge, we walked up the Manganuku Stream track to see if kokako could be located by using a recorded call tape — in the event, unsuccessfully. I trailed the field, distracted by the many species of plants along the way. I was fascinated by abundant *Arthropodium candidum* gracing the semi-shaded greywacke faces resulting from formation of the track. Then my eye was caught by a plant which I recognised was probably a *Myosotis*, but with its large, roundish leaves and lengthy, remnant flowering laterals, was unlike any native *Myosotis* I knew. In the absence of flowers, Chris Ecroyd of Forest Research Institute tentatively identified it as *Myosotis petiolata* var. *pottsiana*, then later found it to be similar to the type



*Myosotis* sp. (*M. petiolata* var. *pottsiana*) in its natural habitat, Mangamako Stream, Urewera National Park. November 1983. Photo: W. B. Shaw.

specimen at Botany Division herbarium. The site of this colony is about ten miles south of the original location.

In January 1983, Marc Heginbotham, John Aikman and I went back to the Manganuku. We were rewarded by finding the colony in bloom and the floral evidence confirmed the initial identification. A specimen transplanted into pure compost is thriving in my garden and has since grown two floral laterals, one being 29 cm long with a side branch. These have been flowering for many weeks and are still blooming at the time of writing (June 1983).

The plant forms a rather loose rosette, with leaf blade dimensions of 2.5-4.2 cm by 1.8-3 cm and winged petioles 4-7 cm long. Short appressed hairs are scattered over the stems and leaves. The calyx is 4

mm long, 2 mm wide, and the corolla is 12 mm across with a narrow cylindrical tube. The stamens exceed the corolla and the scales are above the level of the calyx tips. The style is about twice the length of the calyx in fruit and the stigma is clavate. Nutlets are dark brown, 1.8 by 1 mm. (According to Allan (1961) the stamens of var. *pottsiana* are shorter than the corolla).

It is assumed that this *Myosotis* is palatable and hence is vulnerable to animal browsing. In this context it is ominous to note that cows were put into part of the Waioeka Gorge Scenic Reserve this year.

The large number of plants at the Manganuku site along less than two metres of trackside, on rock faces and on level ground, gives cause for speculation as to why it has only rarely been recorded. Its long flowering season suggests that plenty of seed is produced over a long period. It appears able to cope with drier and wetter sites but needs a reasonable amount of light. Open rocky riverbeds seem ideal sites for it. It is likely that there are undiscovered colonies in the remote, rugged terrain of the region.

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**EDITOR'S FOOTNOTE:** After receiving this article from Dawn Bowen, I received a letter on the same subject from Willie Shaw of Kutarere, Whakatane, dated 23 November 1983. The following note is quoted from it:

"I have recently discovered *M. "pottsiana"* in three catchments (Ohutu, Waikokopu and Mangamako) on the western side of Urewera National Park. Tony Druce has recently confirmed the identity of a flowering specimen. Between 50-60 plants have been seen in total. Approximately 50 of these were in one group in the Mangamako Stream. From its general scarcity it appears that the plant is susceptible to browsing by deer. The group in the Mangamako is accessible to deer but there are only *very* low numbers of animals in the locality, as demonstrated by the relative abundance of palatable species in the adjacent forest and in the stream bed.

The plants seem to favour open faces just above the flood line." W. B. Shaw