

***Veronica (Hebe) angustissima* – almost roadside**

Elizabeth Miller

Hebe angustissima is a species with a very limited distribution range, mostly within the Bay of Plenty region, in the valleys of the Motu and Waioweka (Waioeka) Rivers, but also from the Wellington region, where it occurs along the Otaki River and tributaries, and in the Takapu Stream (Bayly and Kellow), a very disjunct distribution. Because of its small range and specialized habitat, it has been classified since 2009 as 'At Risk - Naturally Uncommon' in the New Zealand Threat Classification List.



Hebe angustissima on a steep rocky bank above the Motu River, November 2019.

Photo: Elizabeth Miller

The species has had a varied history, originally described by Cockayne in 1918 (as *Veronica salicifolia* var. *angustissima*) from specimens gathered from the Otaki Gorge, with reference only to the southern part of the range known today. It has sometimes been included within *H. stricta* e.g. by Eagle (1982), as *H. stricta* form 'i'. It was recognised by Tony Druce in a 1980 unpublished list as a distinct variety and later (1993) as a separate species. The species was reranked by Bayley & Kellow (2006) in their very thorough monograph, "An illustrated guide to New Zealand

Hebes". The genus name was transferred from Hebe to Veronica by Phil Garnock-Jones in 2007 (Garnock-Jones et al.)

It was distinguished from other varieties by Cockayne by the combination of long, narrow, thin leaves to c. 10 cm in length, and slender racemes of flowers to c. 17 cm long with flowers spaced apart, white corolla with purple anthers extending well out of the corolla, also deeply-cut calyx almost as long as the corolla tube, with narrow pointed lobes, and minutely pubescent flower stems.

It is restricted to river banks, usually within the flood zone, amongst mosses and small shrubs and herbaceous species such as *Pratia angulata* – fascinating places to explore in the limited areas where there is sometimes access from above to exposed shingle banks along the water's edge. Towards the mouth of the Motu River, below State Highway 35, it is obvious that when the river is in flood the water can rise well up the bank, more than a metre, because there is plenty of plant debris amongst overhanging branches and along the banks amongst the vegetation, washed down from higher up the river. At an access point near the S.H. 35 bridge, the river has widened and is somewhat braided, so this signifies an impressive amount of water coming down from the hills from time to time.

This plant was known by Heginbotham (Heginbotham & Esler), who listed it as *Hebe stricta* form "i", following Eagle (1982). The species was collected during the 1980s from Bay of Plenty sites by Ewen Cameron (AK304102, Motu River), and by Bruce Clarkson, a foundation member of the Rotorua Botanical Society, who spent several years studying rare and threatened species and their habitats in the region between Gisborne and the Rotorua basin. He collected specimens from both Waioeka Gorge (NZFRI 18442) and Motu River, this latter grown on to obtain flowering material (NZFRI 18346). The National Forestry Herbarium is fortunate to also hold specimens from the Otaki Gorge, the type locality, site of the material used for the original description, also collected by Bruce Clarkson in 1989 (NZFRI 18541, 18543, 18544). Although its habitat is very restricted it was recorded by authors of the Motu Ecological District PNA report (Clarkson et al. 1986). The herbarium at Museum of NZ, Te Papa Tongarewa, has a specimen online collected by Michael Bayley from the Otaki Gorge in 1999 (WELT SP081521).

The editors, who on several occasions have stopped for a brief look along the bank of the Motu River below the small forest remnant that includes hard beech (*Fuscospora/Nothofagus truncata*), kanuka (*Kunzea robusta*) and kowhai (*Sophora tetraptera*) as well as various small divaricating shrubs, have seen this species above

and below the SH 35 bridge (NZFRI 29572) and recently noticed it along the bank beside the small landing stage used by the tourist jet boat operators, a very convenient site to view this attractive small species. So, if you are travelling east of Opotiki on S.H. 35, take the chance to pause and see this charming small hebe. It is reported to flower between February and June (most specimens in the Australasian Virtual Herbarium (AVH) have been collected in April) so that part of the year would be a good time to take the opportunity to search for it. By early December 2019 there are two observations, of which one is mine, on the increasingly popular iNaturalist website (<https://inaturalist.nz/>).

Bayley & Kellow comment that the disjunct distribution raises questions about whether it possibly occurs at intervening localities, and also whether the populations at the two localities are strictly the same species, but their shared characteristics, including habitat, grouped them together. Future phylogenetic analysis that includes this species would be needed to shed more light.

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## **Okareka mistletoe restoration project**

### **Weed control/plant releasing work day for 2020**

Come and join Rotorua Botanical Society to control weeds threatening mistletoe sites and plant new host trees. Activities will involve hand-pulling, cutting, sawing of vines, climbers and small trees.

**When: Sat 17 October – Weed control/plant releasing  
work day**

**Meet: Corner Summit and Loop Roads (lake end) @ 8:45 am  
Grade: medium-hard – activities suitable for all ages  
and abilities will be provided**

**Please contact the organiser Paul Cashmore  
027 650 7264 (mob) or 07 349 7432 (work) to RSVP.  
Equipment to bring will be advised.**