THREE NEW PLANT RECORDS

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The distribution of plant species through New Zealand is well worth recording, especially when records are substantiated by herbarium vouchers. It helps to answer questions - and raises even more questions - about how our flora and vegetation have developed. One might think that after 200 years of botanizing, the only new information would concern tiny, inconspicuous plants, or taxonomic "splits" recognisable only by specialists. Recently, however, I've made three finds that prove we still have much to learn even about the occurrences of our larger, more obvious native plants.

For some time I've been vaguely aware that in Canterbury there is at least one more "porcupine shrub" or "rock mahoe" than the familiar *Melicytus alpinus* (formerly treated as *Hymenanthera alpina*). On my first visit to the Otanerito addition to the Hinewai reserve east of Akaroa, in October 1991, I climbed the rocky spur that leads from the top of Hinewai to Stony Bay Peak. Here porcupine bushes are common, and clearly of two kinds. One has thick, spinous branches, narrow-obovate leaves, and dull brownish yellow flowers borne mainly near the base of the plant. This keys to *M. alpinus*.

The other plant has thinner, spinous branchlets, linear-obovate leaves, and pale yellow flowers dispersed along the stems. From the descriptions in "Eagle's Trees and Shrubs in New Zealand" (2nd series), I deduced that this was "*Melicytus* species (a) unnamed". Had I read on and seen that the entity is "known only from scrub on the Pouakai Range and along the margins of the Ahukawakawa Swamp, Egmont", i.e. 510 km north of Stony Bay Peak, I probably would have lost my nerve. Fortunately, Tony Druce came across the herbarium sheets recently, and confirmed my identification. The challenge must now be either to find the plant in intermediate localities, or to accept one of the widest distribution gaps yet recognised in New Zealand.

The second new record concerns *Coprosma wallii* which, with heights up to 8 metres and trunk diameters up to 30 centimetres, is the largest of our small-leaved coprosmas. On close inspection it is very distinctive, with drupes that are didymous, i.e., partly divided into rounded halves instead of being more or less spherical as in most coprosmas. This reflects the shape of the pyrenes or "pips" which are completely rounded instead of being flattened on one face. Moreover, nicking the bark reveals a deep orange coloration not matched in any other coprosma. Nevertheless, the species is easily overlooked among the other small-leaved, divaricating coprosmas that accompany it.

C. wallii is also one of the rarest coprosmas. It is most frequent in the upper reaches of the Buller valley and its south-eastern tributaries, and there are scattered colonies on the Volcanic Plateau, on the Wairarapa Plain, and in Canterbury to as far south as Peel Forest. Rowan Buxton and I were therefore

surprised to see two trees on the bank of Windbag Creek, near Paringa in South Westland in December 1991. When I went back for another look this year, these trees had been taken by the creek, but fortunately there is a colony of a dozen or so plants further upstream. I would be interested to hear of other outlying occurrences of *C. wallii.*

The third find was a spin-off from research on the distribution and ecology of whipcord hebes. Records indicate that there is a "Westland whipcord gap" coincident with the "Westland beech gap"; no whipcord hebes have been reported west of the Alps between the Haast River and the Paparoa Range. But the mountains behind Harihari and Whataroa have been poorly collected. After being thwarted several times last summer by the persistent fog and drizzle that plague these mountains, we were able to spend two nights on the Wilberg Range before being driven down by snow. As well as checking for whipcord hebes (negative!), we tried to make a complete voucher collection of vascular plants between 100m and 1500m above sea level.

With one conspicuous exception, the flora proved typical of central Westland mountains. Representing the large speargrasses at the top of the scrub belt, we expected to find *Aciphylla horrida*, a plant with green, fleshy leaves that is frequent from Franz Josef Glacier southwards, though with scattered occurrences to at least as far north as Walker Pass in Arthurs Pass National Park. Instead, we found *A. colensoi*, unmistakable through its waxy grey-green leaf surfaces and reddish margins and midribs. *A. colensoi* grows above Lake Brunner and widely through Nelson province, northward to as far as Mt Hikurangi near East Cape. Its range east of the Alps is uncertain because it is not easy to distinguish from small plants of the giant speargrass *A. scott-thomsonii.* Possibly, as Tony Druce has indicated in his lists, the latter should revert to the early name of *A. colensoi* var. *maxima.* A good project for armour-plated botanists.

[*Aciphylla colensoi* occurs at Harpers Pass, at the northernmost tip of Arthurs Pass National Park. It is common on the tops above the Lewis Pass in snow tussock, often well above treeline. *A. scott-thomsonii* seems distinctive in form, distribution and altitudinal range. Colin Burrows].