There is a third "grim warning" (painful to record; readers will be aware how much I value *The Oxford Book of New Zealand Plants* as a source of morphological inspiration). I have already said that flax's nectaries escaped notice there. For *Xeronema*, the coloured sketches are, as usual, exquisite, but they do not show the nectar drops. Worse, a caption (Moore & Irwin 1978: 180 "2d") notes "prominent nectaries around base of style", and looking at the

sketch it is natural to think that reference is being made to the ovary's three, darkened, shoulder-like protuberances. But these are alternate with the nectar-concavities; their slit is not a nectar-channel but the future line of splitting down the middle of each locule. The similar orientation of the flower in Figs. 1 and 2 of the present article should make this clear; if not, study the Moore and Irwin page, and check out the flowers yourself early this summer.

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A tale of two types

Graeme Jane

While working on the *Coprosma parviflora* group I had a taxon *C. ciliata* "eastern SI" (Jane 2007). At the time, I needed to identify *C. parviflora* var. *dumosa* and perhaps exclude it as a possible name. After examining the type (AK 8868) and associated specimens at Auckland Museum herbarium, I felt I needed to locate and visit the type locality for *C. parviflora* var. *dumosa*.

The identification of *Coprosma parviflor*a var. *dumosa* has been quite confused (Jane 2003). In the course of three publications dating from 1886 to

1906 Cheeseman mentioned three different varieties. He formally described only two (var. *pilosa* and var. *dumosa*) in his *Man. N.Z. Fl.* (Cheeseman 1906: p.254). After his visit to the Auckland Islands Cheeseman (1909: p.410) acknowledged that his var. *pilosa* was in fact probably *C. ciliata.* In part this was due to confusion at the time between *C. ciliata, C. myrtilifolia* and *C. parviflora.*

Much later, *Coprosma parviflora* var. *dumosa* was assigned a type (Allan 1961) based on collections made by Cheeseman from the Red Hills at 2500



Fig. 1. *Myosotis laeta* plant. Jan 2015. Near Red Hills Hut, 780m altitude. All photos by author.



Fig. 2. Myosotis laeta flowers. Jan 2015.

feet (760 m). The specimen was in flower but lacked fruit. This taxon was rejected by most subsequent botanists as a possible name for *C. tayloriae* (then called *C.* (t)), perhaps because *C. tayloriae* normally has white fruit, whereas *Coprosma parviflora* var. *dumosa* was described by Allan as having red fruit.

By coincidence I remembered that Myosotis laeta had the same type locality and on cross-checking found that it was also collected by Cheeseman, in January 1882, probably on the same day. Cheeseman (1885) described Myosotis laeta. It was at first confused with *M. australis* and later with *M.* laingii and *M. eximia*, as explained by Allan (1961). The type locality was defined by Moore and Simpson (1973) as Red Hills, from a collection made by Cheeseman in January 1882 (AK 7531), although in his broader type locality description he also cites Mt Arthur and Mt Owen. The only specimens attributable to *M. laeta* by Moore and Simpson were from Cheeseman's Red Hills collection, "at 4000 feet (1220m) in wet red tussock grassland". Allan (1961) states that no recent collections had been made. The species had been sought for some time at this altitude by Shannel Courtney without success. In January 1993 Nelson Botanical Society came across Myosotis laeta near the Red Hills hut at 780 m. Plants were in prolific flower along the track in the sedge turf (Figs. 1 and 2). This was its only known location in 2005.

Hence, the broad "Red Hills" area of several thousand hectares as type locality for *Coprosma parviflora* var. *dumosa* was narrowed down to the Red Hills Hut area. Examination of the topographic map for the area showed an old stock route leading to the saddle where the hut is located at 760 m. The saddle offers easy access to the upper Motueka catchment and a very large area of alpine grassland on the utramafic area of the Red Hills. It may have appeared attractive for grazing by early settlers and easy alpine botanising, being close to the main route up the Wairau valley thence into the Buller and to Nelson.

On a fine February day in 2005, I decided to revisit the area. Today, access to the hut is by a much longer and easier route along a road leading from the old homestead, but I headed off up the ridge, since that was the likely early route. The route was initially tall dense kanuka (*Kunzea* sp.) but soon became somewhat open with low scrub. The old track was then well defined by a deep rut and cairns, and clearance suggested that it was still used. I was hopeful of finding plants similar to *Coprosma parviflora* var. *dumosa* in fruit. Until I reached the hut I found only *C. tayloriae*. Searching around the saddle on to the adjacent limestone to the west and north towards Maitland Hut also only revealed *C. tayloriae*, none in fruit (Figs. 3 and 4).



Fig. 3. Coprosma tayloriae near Red Hills Hut. April 2015.



Fig. 4. Close up of the leaves of *Coprosma tayloriae* near Red Hills Hut. April 2015.

Anyway, still determined to find *Coprosma parviflora* var. *dumosa*, and knowing I was more likely to find my *C. ciliata* "Eastern SI" at a much higher altitude at tree line, I continued above the hut in the hope of finding a different *Coprosma*. I went past the *Myosotis laeta* site, through the manuka (*Leptospermum scoparium*) and kanuka scrub to the open tussock along the main ridge (which was probably caused by burning and grazing). As the scrub became more sparse, the vegetation was dominated by *Chionochloa defracta*.

Then over the first knoll, a greywacke rock outcrop appeared with a few scattered mountain beech (*Fuscospora cliffortioides*) and scrub on it (Fig. 5). This was the sort of place to find an alpine *Coprosma*. Sure enough, there were densely divaricating plants resembling my *C. ciliata* "Eastern SI". They had dark green thick leaves with a prominent midrib below and generally elliptic shape. Some plants also exhibited the retained bright yellow



Fig. 5. Rock outcrop in tussock grassland at 1100 m altitude Feb 2014.



Fig. 6. *Coprosma parviflora* var. *dumosa* at the rock outcrop. Red Hills at 1100 m altitude. Feb 2014.



Fig. 7. Closeup of leaves of the *Coprosma parviflora* var. *dumosa* and male flower at the rock outcrop Feb 2014.

dying leaves characteristic of my *C. ciliata* "Eastern SI", now clearly the same as *C. parviflora* var. *dumosa* (Figs. 6 and 7). Unfortunately the plants were not in fruit. No other plants were discovered above this along the main ridge, as the vegetation higher up was sparse patches of kanuka or grassland. At 1160 m is a small plateau with many small tarns where Shannel had searched for *Myosotis laeta*, This marked the beginning of continuous grassland. In March 2014 I returned to the locality hoping to find fruit, again without success. A visit in January 2015 captured *Myosotis laeta* in flower and *C. parviflora* var. *dumosa* (now *C. dumosa*) in flower but still no fruit on either taxon. I even had a trip in April this year but still no fruits.

So did Cheeseman mix up the altitudes for these two plants? Early explorers had only crude devices for measuring altitude. Even so, that still did not solve the problem because *Coprosma parviflora* var. *dumosa* was supposed to have been found at a lower altitude than *Myosotis laeta*. So was it possible that the altitudes were swapped? At 760 m and 1100 m these two localities roughly match the respective species if reversed.

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