THE BOTANICAL BLOCK, PAPAKURA.

Progress Report

The weather gave a somewhat clammy welcome to the faithful fifteen who gathered at the Botanical Block for their working bee on Saturday, May 24th. But it failed to damp our enthusiasm which was just as well, as there was much clearing to be done. Our efforts made a great difference to the place, and in spite of some casualties, we are glad to report that many of our trees are well grown and sturdy. Our specimens are still unlabelled, as in the early days this was decided against, lest small well-labelled rarities might be a temptation to those with fingers not only green but light. But now many plants are so well established that we might pause to take stock.

We have a number of species of Pittosporum, the common P. tenuicaulis and P. crassifolium and as well, P. umbellatum, P. obtusatum, P. eugenioides and P. kirkii. We have rimu, totara, kahikatea, matai and kauri as well as some fine specimens of native cedar (Librocedrus doniana).

Corokia buddleoides X, Corokia buddleoides is flourishing, so is Corokia cotoneaster, though three specimens ably rescued by Mrs. Millener from beneath a layer of pumkin vines from across the fence looked a little depressed. Our ribbonwood (Plagianthus betulinus) is well grown, and so is that odd little Myrtus, Myrtus obcordata. Small leaved coprosmas are flourishing, including the dainty leaved C. areolata, which grows naturally on the section.

The daisy family is well represented by two good specimens of native holly (Olearia ilicifolia) and the beautiful Chatham Island Senecio, S. huntii. This list, which is not complete, gives an indication that our little plantation is in good shape and we hope as time goes on to add further treasures to our collection.

Now, what of the casualties? Our worst losses are among plants growing in a damp hollow near the gate. The soil here becomes waterlogged in bad weather. It will be necessary to replace with plants which enjoy such conditions, such as pukatea (Laurelia novae-zelandiae) kahikatea, and similar trees and shrubs. These should be brought in and hardened off before the spring planting. Mr. Farnell has kindly said he would deal with any suitable plants members care to bring in for this purpose.

DIFFICULT TO KNOW

During the next few months the Society, weather permitting, will be making trips to places where divaricating shrubs are to be found. It occurs to the Editor that members might like a little preparatory ammunition.

Divaricating shrubs are a long standing headache to New Zealand botanists. Divaricating means "widely spreading". Many of our divaricating shrubs have branches tending to interlace. When in fruit and flower things are much easier, but often one has only leaf and branch to guide one, and that is when the trouble begins. The genus Coprosma provides us with many instances of divaricating shrub forms, but I shall say nothing of these since they have been very ably dealt with by Miss Dingley in a discussion on local Coprosma spp. in the Society's Bulletin, No.1V, obtainable from the secretary. Comment will be confined to three species.

Nothopanax anomolum. This little tree is well named, for it is indeed an anomolous member of its genus. In this part of the world, one tends to think of Nothopanax in terms of the "five finger" (Nothopanax arboreum), and indeed out of our ten species of the genus five have compound leaves, while four more are three to five-foliate leaved in the juvenile form. Actually N. anomolum starts life with a three-foliate leaf, which soon gives place to the simple small variable leaf of the adult stage. The mature shrub is a typical much branched divaricating form. The leaves are roundish to somewhat ovate with toothed or lobed margins, variable and easily confused with those of quite a number of other divaricating shrubs.

Now when one is confronted with a plant liable to be confused with other similar but quite distantly related plants, the thing is to look for a "spotting point", that is some single characteristic the other plants lack. Fortunately this is not difficult in the case of our wauwaupaku. First you will notice at the base of the petioles (leaf stalks) several very tiny narrow stipules - you really need a hand lens to see them clearly.

A second spotting point is provided by the fact that the petiole is jointed on to the leaf blade, with, at any rate in some species, a few fine hairs at the point of junction. Cheeseman does not mention these hairs, so I do not know whether or not they are invariable. Perhaps some of the members might have information on this point? A further striking characteristic, though not an invariable one, is that the plant, in addition to its normal leaves also produces some very long extremely narrow ones, quite strikingly different in appearance.

Another little tree that has leaves trifoliate in the juvenile state and simple when mature, is Melicope simplex, a member of the rue family. Like N. anomolum it has its leaf blades jointed on to the petioles, but it lacks hairs and there are no minute stipules at the petiole base. The spotting point? I would suggest the very marked wing or flattened outgrowth running along the petiole. This wing is very distinct. Another point worth noting is the presence of pellucid dots in the leaf. Hold the leaf up to the light and you will see them distinctly. These dots mark the position of oil glands, and are characteristic of the rue family. Often the oil glands contain aromatic oil, as in the case of mairehau (Phebalium nudum), Melicope's close relative, and our most attractive member of the rue family.

Our third botanical worry is Paratrophis microphylla, the milk tree or cow tree as it is sometimes called. This little tree has a very simple spotting point, one not surprising in a member of the Moraceae, or fig family. That fascinating group is characterised by the presence of milky juice - indeed some of its members provide us with rubber. Our tree possesses this milky juice hence its popular name. If you make an incision in the stem, the milky fluid will gradually ooze out. But give it time. The old farmer who first introduced me to turepo did not get an immediate response to his cut and remarked disgustedly "Must have gone dry".

As mentioned before there are quite a number more of divaricating shrubs, but these three descriptions should at least smooth the path for our next few excursions.

PLANTS UNUSUAL AND BEAUTIFUL

Mrs. Wood has kindly brought to our notice records that should be of interest to all members, who will, one hopes, keep on the alert for further ones.

The Yellow Rata.

While in Rotorua at Anzac week end we were driving along the shores of Lake Rotoiti and were admiring the orange-red creeping rata which occurred frequently along the edge of the cliff. Suddenly I saw some which was quite different for the flowers were a brilliant canary yellow. Thanks to an agile husband, specimens were obtained and photographed. On consulting Cheeseman's Manual I found that this plant is an "accidental sport" of Metrosideros florida.Sm. the name of which is now altered to M. scandens. (Forst) Druce. W. Colenso called it M. aurata but it is not now recognised as a separate species. The yellow-flowered form is fairly rare, but has occasionally been reported from Auckland to Collingwood. Seeds gathered from the L. Rotoiti plant will be propogated but there is no guarantee that they will produce plants with yellow flowers, however some experiments are to be made by grafting young shoots on to plants of the usual red-flowered variety, and an attempt will be made to grow it from cuttings.

K. Wood.

(I have just heard of a yellow rata reported from the King Country. I hope to have details available for the next News Letter.

Ed.)

Recently Mr. Sherwood of Wellington found in the vicinity of Gore some small plants with blue flowers. These he pressed and posted to Mrs. W. Mays who consulted me for identification. These proved to be specimens of Claytonia australasica, a plant that is more common in