

by the formation of small and influential pressure groups (which our society does tend to become), but no matter how much we are on the watch, nor even if our preventative efforts are 100% successful wherever applied, certain instances will escape our notice. It is therefore most essential, wherever we go as a society or as botanically-minded individuals, that exact records of plant locations be kept, for posterity's sake if not for our own satisfaction.

The study of certain European plants would be considerably facilitated if only their past distribution on the Continent could be more exactly known. Already it is greatly regretted that more exact notes were not kept about plant locations on Banks Peninsula during the last century, before the burning was completed and the widespread grazing begun. To my mind, this is one of the most important works that our Society can do - to record what grows where - now. The need is right at our doorsteps, as Christchurch pushes out onto sand, swamp, river-bed and hill; or we can go a little further afield, along the foothills, where the bush continues to be pushed back, and the valleys to be further farmed.

Our members have the knowledge; let us put it to this common use.

GROWING NATIVE PLANTS IN POTS.

by Daphne A. Banks.

The honorary editor has asked me to give some details of my experiences in the growing of native plants in pots. I hope that these very brief notes on my failures and successes will prove of interest to members.

Pseudopanax arborea - Seed sown in $\frac{1}{2}$ sand and compost in a pot outside with glass on top. Potted from 3 to 5 inches, planned as a tub plant but eventually planted in garden so that it would not die from drought.

Pseudopanax colensoi - Kept in a pot in frame shaded from hottest sun.

Dracophyllum traversii - In 5 inch pot 2'6" tall surrounded by large plastic bag for humidity on hot dry sunny days. Plenty of soil taken from natural habitat with river sand added when potted.

Phyllocladus alpinus - From 1 inch seedling kept potted in 2 inch pot until 4 inches; then planted out in border away from hottest sun and growing well.

Hebe species - Cuttings rooted in sand in polythene bags, then potted into mixture of soil from compost bin plus sand and old cow manure. Kept until 4 inch pot size and then planted out into garden. Most died this Winter after doing well for two years because of wet feet since the garden was under water four times.

Parahebe lyallii - This survived the wet as did *Hebe hagleyensis*, *lavaudiana*, *hulkeana*, *armstrongii*, *lycopodioides* and *pimeleoides*.

Myrsine salicina - As seedling from the West Coast, now 2'6" in large 5 inch pot kept sheltered from drying winds in frame.

Podocarpus ferrugineus - Collected as seedlings and now in 6 inch pots. Possibly use one as tub plant and one in the garden where it will need to be trimmed eventually.

Pachystegia insignis - Seed from cultivated plant; extra lime in soil; doing well in 5 inch pot.

Rhopalostylis sapida - Seedlings from North-West Nelson where wekas were mowing them down at ground level. Have done well in up to 5 inch pots ready for returning to their original home.

Earina mucronata, *autumnalis* and *Dendrobium cunninghamii* - from felled trees at Te Kinga; all doing well after four years in large plastic bags, roots packed with moss. Flowered first two years but not since.

Bulbophyllum pygmaeum - Succumbed to drought after two years.

Corybas macranthus - Did well lifted with its forest humus and packed in moss until overexposed to the sun.

Pterostylis banksii - Flowered first and third year and then disappeared.

Thelymitra - has done well for several years and flowered. It seems to need the sun.

Myosotis colensoi, *macrantha*, *pygmaea* var. *minutiflora*, and *traversii* - *M. colensoi* seed now growing well in 5 inch pot with crumbled limestone

rock added to usual mix. It has died off in the centre and spread to the edges. *M. macrantha* and *traversii* after 2 years in 4 inch pots died from wet feet this winter. *M. pygmaea* var. *minutiflora* scattered its seeds into most of the other pots for several years but last year failed to appear anywhere.

Euphrasia cuneata - Survived nearly a year. I have decided it needs a particular association after several attempts with this genus.

Ourisia macrophylla var. *lactea* and *macrocarpa* var. *calycina* - Both in 4 inch pots collected as plants with sand added to soil from habitat, kept shaded and moist. Both flowered last year.

Nertera depressa - From cuttings. Flowers and seeds each year and rooting into neighbouring pots, kept shaded and moist.

Lobelia linnæoides - Pink form from Mt. Peel, Sth. Canterbury. Kept cool and moist. Now in 5 inch pot with *Epilobium* and grass with which it was growing. Flowered well during two Decembers. Missed two years, I think from being allowed to dry out too often and being exposed to the sun during the hottest part of the day on several occasions.

Pratia angulata - Watered too much in frame, so put into garden, flowered last year.

Selliera radicans - Pieces from Ferrymead started in sandy mixture, then planted out in garden along with *Samolus repens* from Brooklands Lagoon, and *Triglochin striata* and *Plantago coronopus* between a patch of *Cotula pyrethraefolia* and *Parahebe lyallii*.

Arthropodium candidum - Seeds sown in sand, then sandy leafy compost before planting in garden where it shifts about by up to 2 inches a year. This year single leaf seedlings have also put in an appearance, showing in the fronds of *Blechnum procerum*.

Libertia peregrinans? - Seed from Malborough Sounds germinated in a mixture of sandy (sea sand) soil from habitat and planted in garden in the same mixture when nearly 1 inch high. As with the *Arthropodium*, it must be kept circled by slug killer.

Caltha novae-zealandiae - Kept alive in pot of sandy leafmould set in

a dish of water for 2 years, didn't flower and finally died - probably from drought - should think it difficult to flower under cultivation as it seems to flower naturally just as the snow blanket starts melting.

Astelia - 3 clumps which may or may not be different species now planted in garden after filling their 4" pots - each has at least 6 separate divisions - so far I've not tried to divide them as it apparently is difficult. They would probably need the sphagnum moss plastic bag treatment and more attention than I've time for just now.

Celmisias - including *dallii*, *coriacea*, *sessiliflora*, *lyallii* and *traversii* and others, began either as seed or plants in pots and after flowering (except *sessiliflora*) were planted out. Poor drainage and too much rain this year and probably because no sun reaches their position, all but *spectabilis* and *gracilentia* have died.

Mimulus repens - *Cotula coronopifolia* - *Lilaeopsis orbicularis* - *Triglochin* and *Gunnera arenaria* are all mixed up in an old plastic basin packed with moss kept wet.

Cotula haastii, and *pyrethrifolia* - now in the garden and *dioica* and *squalida* are confined to the gaps between the concrete slabs of the drive.

Clematis - *paniculata*, *petriei*, *australis* and *afoliata*, have been planted from 4" pots into the garden - *Clematis paniculata* from seed, *petriei* and *australis* - cuttings and *afoliata* - rooted stem.

Asplenium flaccidum, *lucidum*, *Cyathodes smithii* and *Paesia scaberula*, are in pots in a frame as is *Polystichum cystostegia*. *Polystichum vestitum* and *richardii* and *Blechnum procerum* var. *minor*, and *Pyrrosia serpens*, are now planted out. Several *hymenophyllums* are in plastic bags doing well in the company of the orchids.

These are some of the natives I've tried in pots; a lot of alpiners have failed apparently from too much heat, lack of water and, this winter, too much water. Many attempts with cuttings have failed because of my lack of attention. Just forgetting to keep the humidity right seems to be a main reason, and this is difficult to impossible in a boarded-up

corner of the garden.

Comments: Native plants in our garden or in pots were obtained either, as seed, cuttings, rooted stems, e.g. *Pratia*, or occasionally as entire plants - usually seedlings where they were found in abundance. Seeds were sown in a mixture of river sand and leafy compost or soil from their habitat, in clay pots covered with glass and plunged in sawdust. Cuttings were hormoned if woody, inserted in sand, in clay pots and placed in plastic bags held almost closed by a rubber band. Rooted pieces were first put in a fairly sandy leafy mixture in 2"-3" pots in plastic bags for about a week, then plunged. They were moved on either into a stronger mix and larger pot, or else placed in the garden.

BOOK REVIEW - L.H. Kyle

"A BUNCH OF WILD ORCHIDS" by SHEILA NATUSCH.

This is a small book about New Zealand orchids; it is of little use as an identification manual, partly because the common names which the author uses are not those most widely used. Obviously, though, it is not intended for such use, being a welcome addition to our much needed body of well produced, prettily illustrated and popular native botanical literature, of which we have too little. Sheila Natusch's style of writing is appealing, and any well intentioned beginner can make sense of it and learn from it, for there are no long descriptions, but accounts of her own personal experiences with our native orchids.

The amateur week-end botanist will find the illustrations to be the chief practical value of this book, though the sketching is a trifle too heavy to be quite accurate. However, the colouring of the paintings is most correct, and gives a very good impression of most of our more common species.

Published by Pegasus Press, at 50c. retail.
