

suffer from chronic sun scorch. Because of the very big leaves, the transpiration rate is such that the plant requires large amounts of water. I would still advise planting Chatham Island forget-me-nots in shade — not dense shade, however, as they do best with an high indirect light intensity. The main and only factor that appears to be important is the extra minerals they are picking up from seawater.

Nitrogen, phosphorus, potash, and magnesium we always used with no results, but this balanced fertiliser is now quite adequate after seawater treatment. It doesn't appear to be essential to treat these plants with seawater more than twice a year. I know many people will say they have been able to grow Chatham Island forget-me-nots without such treatment. However, after inspecting the plants of the other growers, it is my view that they would improve dramatically with this treatment. Some amateur growers are using proprietary-brand liquid seaweed fertilisers. These work just as well, but I feel it is an expensive way of buying seawater. Those of you who are fortunate enough to be able to grow this delightful plant without this treatment, probably have the missing mineral — which could possibly be sodium — in your soils.

We have found no disease problems appearing since this treatment. Slugs and snails are a major curse — the more lush you get your Chatham Island forget-me-nots, the more attractive they are to slugs and snails, which must be dealt with if you wish to have your plants looking their best.

As the Chatham Island forget-me-not is one of our most spectacular plants — and we always have a waiting list of customers wanting them — I hope this plant becomes more widely grown.

NEW ZEALAND CLEMATIS FROM CUTTINGS

TERRY C. HATCH

*Joy Plants Nursery
Pukekohe East, New Zealand*

It is strange that a large proportion of New Zealand plants are: (a) white-flowered, and (b) unisexual.

These two factors are well illustrated by the genus *Clematis* 'N.Z.' Of the ten species, two have white flowers and the rest have green-yellowish ones; all are evergreen. Bearing this in mind, we come to the reason for producing them from cuttings. The species most commonly grown is the showy *Clematis panicu-*

lata, bush clematis, or Pua-whananga. In spring the bush is lit with festoons of starry white flowers on woody vines climbing over the trees and shrubs; the large 10 cm. flowers in panicles of one hundred or more.

For years it has been the practice to dig seedlings from the bush; these do not always grow and then, more often than not, very slowly. Over the past seven years I have been selecting cutting material from the wild to produce a small number of large-flowered plants. The male plants have the largest flowers, often twice the size of the female.

The plants for cutting production are marked in spring while in flower; this is not always an easy task as most have climbed 10 or more metres up a tree. In early autumn when the current season's growth has hardened, about the end of March/early April (depends on the weather), the material is gathered and given a good wash. I have found that internodal cuttings with one or two nodes, according to the length of stem between nodes, are best. Nodal cuttings root, but not as well. It doesn't hurt to remove some leaf area and they will root without any leaf but the buds don't always develop.

I use Seradix No. 2 hormone powder and stick the cuttings in pumice sand up to the node. The trays are placed in a frame without any heat and covered with clear plastic — they are watered once or twice a week.

After three weeks roots have started growing; the cuttings produce masses of roots without wounding the stem. I have tried splitting the stems and removing part of the stem — these grow, but why waste time. I don't use any fungicide spray on the plants; Benlate seems to make the leaves drop off, so all dead leaves must be removed.

Some years I have had 95% success, but most about 60%, the lowest batch being 2%, but these were taken, I feel, too late. The success rate seems to depend a lot on the summer weather and the way in which the wood has grown. More control will come in time, I hope, with cultivated stock plants.

When the cuttings are well-rooted they are potted into a bark-peat-pumice mix; some of the plants flower the following spring.

Other species I have grown are *Clematis hookeriana*, sweet scented green flowers.

Clematis forsteri — large sprays of small sweet-scented white flowers.

Clematis afoliata — leafless tangled rock plant with greenish small flowers.

These have grown just as well using the same methods of propagation described above but are not sought after by the general gardening fraternity.