

## PROPAGATION OF PLANTS IMPORTED FROM NEW ZEALAND

PETER CATT

Liss Forest Nursery,  
Petersfield Road, Greatham, Hampshire

I first bought liner stock from New Zealand in 1974. The plants arrived at London Airport on Sunday, were cleared by customs on Monday, and I collected them on Tuesday morning. That same afternoon they were potted.

This was only a small order consisting of: 25 *Abelia grandiflora* 'Francis Mason'; 25 *Yucca filamentosa* 'Variegata'; 10 *Pieris japonica* 'Pink Delight'; 10 *Pieris japonica* 'Scarlet O'Hara'; 10 *Pieris japonica* 'White Caps'; and 10 *Pieris japonica* 'White Cascade'.

It was the *Pieris* that most interested me at that time as I was specialising in ericaceous subjects. I bought the other plants out of interest. In fact, since that time, I have widened my field of production, and annually increase my production of *Abelia* and *Yucca* as they are beautiful plants and sell very well.

*Abelia grandiflora* 'Francis Mason' has a green and gold variegated foliage and should be grown in full sun to bring out the best colour.

We take cuttings in May or June using a peat/grit mix. They root in about 4 weeks and are then potted into 3½" pots and stood in a polythene tunnel to grow on. We pot from 3½" pots to 6¼" containers.

*Yucca filamentosa* 'Variegata' has a creamy yellow variegation with, at times, a pink edge. These we propagate by removing the small toes around the base of the plants we are potting from 3½" pots to 6¼" containers in the spring. The young bits are boxed up and kept shaded in a frost-free glasshouse until they show signs of activity when they are put outside to grow on. In the spring they are potted into 3½" for another year.

The *Pieris* cultivars are propagated mainly in the autumn under mist. No hormone is used as we get a good take without it. No problems were experienced with the establishment of this first batch of plants which were all potted into 3½" pots and placed in a glasshouse with some shade, where they stayed for the rest of that year and into the spring of 1975. The house we kept frost free.

The following year I bought *Cortaderia selloana* 'Aureolineata'; *Phormium cookianum* 'Tricolor'; *Phormium tenax* 'Bronze Baby'; *Phormium tenax* 'Radiance'; and *Yucca filamen-*

tosa 'Variegata'. These arrived on 21st July 1975 and all grew away well.

The Phormium were large plants and were potted into 6¼" containers. Unfortunately, a wet spell followed by a heavy frost killed many. The worst to suffer being *Phormium tenax* 'Bronze Baby'. I have never bought any more of this plant but one that did survive was divided up this year and made 13 nice plants. I think that *Phormiums* should be over wintered the first year after importation in a glasshouse or polythene tunnel. Home produced plants from seed are definitely tougher. I raise quite a few from seed each year and have no trouble.

*Cortaderia selloana* 'Aureo-lineata' is propagated by division in May or early June when we experience no problems.

In 1976 I received one consignment in March which consisted of: *Cordyline australis* 'Purpurea' (*C. australis* 'Atropurpurea'?); *Pittosporum tenuifolium* 'Irene Patterson'; *Pittosporum tenuifolium* 'James Stirling'; *Camellia sasanqua* cultivars; *Citrus limon* 'Meyer'; and *Aucuba japonica* 'Picturata'.

No problems were experienced with any of these plants, though the camellias took another season before they grew well.

Cutting of *Pittosporum tenuifolium* 'Irene Patterson' proved very difficult to root. We took the cuttings in the autumn, as we do with our other *Pittosporum* cultivars, but of 350 cuttings taken only 35 rooted. Cuttings of *Pittosporum tenuifolium* 'James Stirling' root like weeds and grow nearly as fast.

In September, 1976, I received *Cortaderia* 'Aureo-lineata' and these have been grown in two different ways. We potted them into 5" pots to carry them through the winter. All the young plants grew well but the old splits never grew and eventually died. This *Cortaderia* is a beautiful plant with gold variegation.

I also had some *Pieris japonica* 'Flamingo' which I had to look after very carefully during the following winter. This *Pieris* didn't flower properly until this year. It is an outstanding introduction having deep pink flowers.

*Magnolias* were the next subject I imported; these arrived in early June. This was the first deciduous plant that I had imported but no problems were experienced. They were potted into 3½" pots and put into a polythene tunnel which was shaded because of the heat of that summer. They came into leaf a few weeks later and grew well, making plants which were potted the following spring into 6¼" and 8¼" containers and were ready for sale the autumn of 1977.

The cultivars were: *Magnolia soulangeana* 'San Jose' which has large, fragrant, rose pink flowers; *M. Kobus* var *stellata*

'King Rose' which has pink buds opening blush pink; *M. kobus* var. *stellata* 'Royal Star' which has pure white flowers and is later than other cultivars; and *M. kobus* var. *stellata* 'Water lily', with its fragrant white star-shaped flowers.

Plants of *Pyracantha coccinea* 'Harlequin' did not travel well, and more than half of them rotted. They are, however, very easy to propagate by cuttings taken in October and placed under mist.

Because of a demand for *Photinia* × *fraseri* 'Red Robin', I bought in liners in April 1977, which we potted into 3½" pots and later the same year into 6¼" containers. Again, they grew well and all made saleable plants by autumn. This is another line that is easy to root, so once we have sufficient stock plants of our own there will be no need to import.

This year I received some *Magnolia grandiflora* 'Russet' having white flowers and bright russet on the underside of the leaf, and *M. grandiflora* 'Samuel Sommer' which has large creamy-white fragrant flowers, and produces flowers at an early age. These arrived in early April. They were potted into 6¼" containers and stood in a frost-free glasshouse. Plants of *Magnolia* 'Russet' are very tall, up to 2 ft. and so I cut them back to about 1 ft. So far (3 months later) they haven't grown any, but there is good root development. They were moved outside at the beginning of July. Plants of *Magnolia* 'Samuel Sommer' were not stopped, but they have not started growth yet either.

Because I experienced problems with rooting *Pittesporum* 'Irene Patterson' cuttings, I bought in another batch this spring. This has a very pretty mottled leaf, sometimes almost white. They were large plants for liners and I didn't like the look of the roots, which had, of course, been washed clean. We lost 200 of the 250 ordered.

The *Pieris*, too, arrived in a very poor condition and most of these died. The reason apparently was the very hot autumn (our spring) in New Zealand which caused the plants to grow very soft. Along with my June consignment was *Parrotia persica* which arrived with their autumn foliage. These were potted into 6¼" containers and stood outside where they are now breaking well and I think will make saleable plants by the autumn.

Another new line for me is *Wisteria sinensis*. These arrived in June, were potted into 6¼" containers and stood outside. So far they have not broken dormancy.

To sum up, I am very pleased with the plant material I have imported from New Zealand. It is beautifully packed, documentation is minimal, it is sent C.I.F. — Carriage/Insurance/

Freight to London Airport and the supplier always treats complaints sympathetically. There is duty to be paid which is between  $\frac{1}{5}$  and  $\frac{1}{6}$  of the quoted price, and there is delivery and dispersement from the airport to you. I always collect at the airport, however, as I then know there is a minimum delay before the plants are obtained.

## **PROPAGATION OF CONIFERS BY CUTTINGS AND GRAFTING**

ANTON THOMSEN

*Thomsens Planteskole*  
9200 Aalborg SV  
Denmark

### **PROPAGATION BY CUTTINGS**

Propagation of conifers by cuttings is the most common method used, but there are usually several different ways of treating cuttings of the same cultivar. More than once I have seen another nursery propagating a cultivar which we find difficult; they tell me how they do it, I go home and do exactly what they told me using the same peat, same hormones, at the same time and everything, but still I don't achieve the results as they do.

We have almost all our cuttings in our propagating glasshouse which is  $20 \times 61$  m and made of aluminum. All the cuttings are inserted in plastic flats  $30 \times 60$  cm with holes in the bottom so the compost can be in direct contact with the sand on the floor of the glasshouse. That way the capillary system can work so the compost does not get too wet. This also means that the flats are the furthest practical distance from the mistlines so the mist can cover the cuttings with the required minimum of water, in just a few seconds.

Almost all cuttings are inserted in a layer of sand with a low pH, about  $1\frac{1}{2}$  cm thick, upon a layer of peat mixed with a little sand in order to make it easier to separate the cuttings when they are lifted. A few years ago we used pure peat much more, but we feel that our results justify the greater effort of putting 2 separate media in the same flat; now we only use pure peat for a few cultivars.

We have plastic pipes 25 cm underground and 50 cm apart to heat the soil to  $22^{\circ}\text{C}$  in the summer and down to  $12^{\circ}\text{C}$  in the winter. During the winter we try to keep the temperature of the air at about  $5^{\circ}\text{C}$ . We have automatic shading controlled by a