

'Ellen Danica', *Codiaeum variegatum* var. *pictum* 'Norma', *Columnnea* spp., *Dieffenbachia* spp., *Ficus* spp., *Hebe* spp., *Hedera* spp., *Hoya* spp., *Nematanthus* spp. (syn. *Hypocyrtia*), *Impatiens* New Guinea Hybrids, *Kalanchoe blossfeldiana*, *Rosa* spp., *Schlumbergera* (syn. *Zygocactus*), and many herbaceous perennials. Two plants which have proved difficult are *Euphorbia pulcherrima* and *Hibiscus rosa-sinensis*.

A perforated or porous cover can also be used in conjunction with mist. This can help support a particular species on the bench or maybe for the first few days off, to prevent flagging during the hardening-off process.

So tuck your crops under a blanket and leave them to nature. Go have a holiday. When you return they will have rooted without you pulling one out every day for inspection.

The Propagation of *Hydrangea paniculata* with the Use of a Misting System

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INTRODUCTION

Bayliss Nurseries was established in 1899. I started working there as an apprentice in September 1987 and I was the first female apprentice that the nursery had seen for some time. One of my first success stories was with the propagation of *Hydrangea paniculata* 'Grandiflora'. The species is a bushy shrub that originates from Japan and China. It is one of the most spectacular plants I know. It produces lovely, long, deep-red stems and large panicles of white flowers in the spring continuing on into the summer. As the flowers age they get gently frosted with pink icing.

PROPAGATION

I was told to take cuttings of 'Grandiflora' in winter when I did all the hortensia types. Not one cutting rooted. I took mostly stem cuttings with a few tips and the odd heel cutting.

So the following season I decided to try these in the summer as I had heard that a lot of deciduous plants strike quite well in the summer months. At this time in the late 1980s there were no good regular supplies of *H. paniculata* as growing on lines and the demand from the garden centres was growing. I took my first batch in the middle of December. The growth was soft and the stock plant had only just started flowering. I used stem cuttings and a few tips and decided not to wound the cutting as the wood was so soft. The hormone was Seradix 2 mixed with a portion of Captan and water. I put the cuttings into our humidity tent and crossed my fingers. The results were not good. Everything in the tent collapsed after about 3 weeks. I decided the material must have been too soft.

Late in January I made a great discovery in a friend's garden, a large flowering *H. paniculata*. I managed to get about 50 cuttings from this plant and made the same type of cuttings as before but this time the wood was a lot harder than the previous batch.

Half of the cuttings were dipped in Liba 10,000—mixed with water (1 : 2, v/v)—for a few seconds. The other half of the cuttings I did in Seradix 2 mixed with Captan and water. I left the leaves intact on all the cuttings. The cuttings were put under mist with bottom heat set at 21C. In late March the *H. paniculata* cuttings were ready to tube. They all looked quite healthy but as the weather was cooling down the leaves had started to change colour. There was no obvious difference in the trays in regard to the hormones used.

We obtained 45 well-rooted cuttings out of 50 cuttings. The tubes were all overwintered in a coldhouse and potted up the following spring ready for sale in the autumn.

Next spring I kept a close eye on our stock plants to see how hard the growth was. When the material was at the right stage, I took cuttings. It was mid summer and the plant still had quite a bit of flower. Half the cuttings were treated with Liba 10,000, mixed diluted as above. The other half of the cuttings were dipped in Seradix 2 as a dry powder. The cutting was wet so the dry powder stuck.

The leaves on cuttings in one of the trays were cut, just to see what the results would be. The cuttings were all placed under mist with the bottom heat again set at 21C. As the summer progressed into autumn the leaves started to change colour. The cuttings with reduced leaves lost their leaves first. Tubing this year was done quite a bit later and all the leaves were off the cuttings.

The success rate of well-rooted cuttings was 85% and the strike was very even over all the trays. There was no difference between plants with reduced leaves and those with entire leaves. I concluded that if room was a factor, trimming of the leaves would be an advantage as more cuttings would fit in a tray. I feel that constant moisture in the air and on the plant was a major factor in the success of this propagation.