

difficult trees and shrubs could possibly be successfully propagated by taking large hard wood cuttings after the winter chilling period, giving a heavy hormone dip, placing in a temperature of 70° — 75°F for one month and then planting out in the field.

THE FUTURE OF MIST AND CAPILLARIES

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It was five years ago that a day visit to the Pershore College was arranged by the Bristol branch of the Horticultural Trades Association. On that day there were three displays there that were to alter my growing methods more than anyone could have imagined at the time — especially as I was not there! These displays featured

1. The Bloxer*.
2. Various rooting media.
3. Capillary beds.

We now have nearly two acres of capillary beds in and out of doors using the N.I.A.E. method, this way we have a tank and ball valve maintaining water level in channels spaced five feet apart, 3 inches below the surface of the sand.

We have had three main problems to solve:—

(i) Removal of rain water. This, we have overcome by laying a land drain beside each bed.

(ii) Wind blowing plants over. This, we have only partially solved by caning and then supporting the tops of canes in strips of netlon held between two wires. For lower plants we sometimes use wind-breaks of some sort. This, must be a bigger problem when a soil-less compost is used.

(iii) The sand we use, obtained from Rockbear, Devon is inclined to pack hard and needs to be loosened between each crop. I hope we shall find a better sand to overcome this.

The biggest problem of mist propagation was weaning. I am sure the Bloxer and use of a high proportion of peat to sand in the rooting media has solved this with a few exceptions; these are *Skimmias*, *Loniceras*, *Osmanthus* and *Daphnes* which will only root successfully in pure sand. Why do these not root in peat-sand mixtures? Is it timing which I have found to be the case with *Eleagnus*, or is it that the peat remains too wet?

Now in what other ways can we improve and widen the use of mist?

With extra light at the beginning or end of the season and correct hormones I can see no reason why most hard wood trees should not root with worthwhile results. We have heard today about Birch and I have rooted *Acer Wisley Red*.

The way Cherries root with such speed and ease under mist in August as quite hardwood points to another avenue to explore. This technique was discovered when bud wood was healed in under mist and forgotten; when found, rooting was well advanced.

Another development in recent years to help us in hard water areas has been the "Water-witch"*** on *Cupressocyparis leylandii*. It has made all the difference from failure to real success. I am also trying a mid-winter crop with extra light. I am hoping it will help in rooting deciduous Azaleas, this is a plant I have not grown before, I am doing so as I hate to see the suckers on imported ones.

To end with, has anyone tried rooting subjects which are normally layered or grafted by the root-stock method developed at East Malling? We are trying *Laburnum vossii*.

* This refers to a patented machine, made of aluminium alloy, the action of which is to insert a continuous strip of polythene film into a standard seed tray so as to divide the tray into individual compartments. The plants when ready for moving take the shape of the cells and have grown into small rectangular blocks. The machine was designed by Mr. J. H. Beacon, Tewkesbury Road, Eckington, Pershore, Worcs. (Ed. note).

***"Water-witch" is a self-contained automatic water treatment unit for horticultural water supplies in hard water areas. It is manufactured by the Wansdyke Engineering Co. Ltd., Hillworth, Devizes, Wilts. (Ed. note).

COMPOSTS AND CONTAINERS

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What is the ideal compost?

A compost is an attempt to simulate an ideal rooting medium for a particular plant.

One of the first recorded studies of plant growth and nutrition was by Woodward in 1699 when; on growing vetch, potatoes and mint in water obtained from various sources, he concluded that water was merely a carrier of terrestrial matter.

Our aim as nurserymen is to produce a compost suiting the particular plant in question so as to provide the correct amount of water, nutrients and aeration. As a result of this coupled with a favourable climate and light intensity we should achieve maximum plant growth.

The practical qualities of this ideal compost should be:—

1. cheap to produce,
2. standardised quality,