

a hundred thousand pots of our F-1 hybrid petunias, our F-1 hybrid snaps inbreds. We purchased the spaghetti tubing from the Plexton Specialty Company, Glendale, California. It can be purchased in large lots for a dollar fifteen per thousand feet. You can get it in a smaller lots. The most economical way to buy it is in five hundred thousand foot lots. The average nursery would use five hundred thousand foot. It's the cost of extruding this plastic and the amount of plastic they extrude that sets the price. We can set this system up for eleven dollars a seventy-five foot bench. Now a seventy-five foot bench in our greenhouse would hold between three and four hundred seven inch pots. The entire cost of all the material and all the labor costs us thirty-seven hundred and fifty dollars for a hundred thousand pots. We saved the labor of twelve women doing our watering.

We use $\frac{1}{2}$ inch lines and $\frac{3}{4}$ inch headers. We use 200 mesh stainless steel strainers on all lines when fertilizing or, using insecticides. All may be used in the same proportioner at the same time. We cut our spaghetti tubing with a sharp razor blade on a diagonal to make it easier to insert. All spaghetti tubing must be the same length on the entire line; otherwise shorter tubes would get more water. In our watering we let as much run through the pot as stays in or thoroughly drench every time we water. This eliminates salt buildup from use of fertilizers in every watering. We use a 4-inch plastic plant label to hold the tube in the pot. We use a sharp finishing nail $\frac{1}{10}$ inch in diameter inserted in a small piece of dowel for punching the holes for the spaghetti tubing. Tubing must be inserted as soon as hole is made as they gradually push out again.

FOLIAGE PLANTS

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Propagation of Foliage Plants

To start with — all our propagating material and containers are steam sterilized.

Propagating Material — Olympic sand, peat moss. 50% peat moss and sand, and a modified soil containing peat moss, Colma sand (which is a very sandy loam) with a little superphosphate added.

Propagation of Philodendron Cane — The cane is cut up into pieces, single eyes. These are potted in Olympic sand and placed in benches with bottom heat and a temperature of 65° maintained. After the plants are placed they are then covered to a depth of about $\frac{1}{2}$ inch with peat moss, which is kept damp at all times.

Dieffenbachia and Chinese Evergreen — These are cut in pieces with one eye and placed in benches with about two inches

of peat moss with eyes facing up if possible, especially the *Diefenbachia*. If they are *not* placed this way they have a tendency to develop a curve in the cane when mature.

Dracaena Cane — The cane is cut into short pieces of about 3 inches long and laid on sand and covered with a light layer of peat moss and sand, nor more than $\frac{1}{2}$ or $\frac{3}{4}$ inch. As soon as the eyes develop and get long enough to handle, they are cut off and potted in peat moss and sand and set out on benches; or they can be left on the cane until roots form and then potted into soil.

Unrooted Cuttings — Most of these can be rooted easily in peat moss and sand with or without bottom heat. With some experimenting we find that a lot of these can be potted in our propagating soil mixture; but of course care must be used in watering until they are rooted.

A partial list of plants we grow in this way are: *Aphelandra*, *Hoya*, *Fittonia*, Aluminum plants, *Sansevierias*, *Maranta*, almost any of the *Peperomias*, *Dracaena godseffiana*, *Dracaena sanderiana* and others. *Ficus* can be easily grown by air layers.

Bromeliads are finally becoming popular and can be propagated from divisions and also grown from seed, although this is a very slow process.

Schefflera and *Tupidanthus*

These are mostly propagated from seed sown in a light mixture of peat moss and sand which has been sterilized. When the seed is sown, it is given a drench of Dexon Terraclor. These can also be raised from cuttings provided the cane is light enough.

Ferns

Ferns are becoming very popular again and are more and more in demand. Of course, the so called *Pteris* ferns have been used right along for dish gardens but are now being sold in larger containers to the retail nurseries. Most of these ferns have to be grown from spores. Care must be used in doing this as it is very easy to have fungus develop just as the prothallium starts to cover the surface. A drench of Dexon seems to stop it immediately. Some varieties of ferns can be propagated by division. The *Nephrolepis* can be grown in benches, well spaced. When the runners develop, the little plants are cut off and potted in a light soil in $2\frac{1}{4}$ or 3 inch pots.

Polystichum capensis is better when divided from mature plants. Some ferns make terminal buds which can be removed and laid on damp peat moss and covered with glass until they take root, such as *Asplenium bulbiferum*.