FRIDAY AFTERNOON SESSION

September 8, 1967

VICE-PRESIDENT TICKNOR: Our second session this afternoon is on the subject of "Rhododendron Propagation". We have a most capable moderator whom you all know — Bill Curtis, of Wil-Chris Acres, Sherwood, Oregon. Bill, will you get the program underway again.

Moderator Curtis: Our first speaker is Mrs. Jean Whalley. When the rest of us fail to get something really tough rooted, we go to Mrs. Whalley and she roots it for us and does a real good job. It is my pleasure to introduce Mrs. Whalley to those of you who have not met her before. Mrs. Whalley:

ROOTING RHODODENDRONS IN PLASTIC BANDS

JEAN WHALLEY
J. B. Whalley Nursery
Troutdale, Oregon

We have always used electric bottom heat; many years ago we used lead cables — then the so-called "Roberson" cables — next General Electric, and we have now, for the past several years, used the type of electric cables which builders put in floors or walls of houses (which are about half the price of our former cables). By the way, I learned about using the building cables at one of our Propagators' meetings. We keep our bottom heat set at about 72° or 73° F and have automatic thermostats to control the temperature. We have laid ½" mesh hardware cloth over the cables as a protection and to keep them from getting out of place, although they are pegged down with wire loops at the ends of the beds. The cables are about 2" to $2\frac{1}{2}$ " apart in the beds.

Our first operation is to lay down the bands, which are made of $2\frac{3}{4}$ " plastic. The beds where we root our rhododendrons are all ground beds, so we lay down the bands in straight rows, anywhere from 17 to 28 bands across-depending on the width of the beds, which average between 4 and 6 feet. We have sponge rubber kneeling pads, which may be laid across the top of the bands in order to reach across the beds.

After the bands are laid down we fumigate the entire house, including the bands, which we often are able to use for several seasons. We fumigate with formaldehyde (1 part formaldehyde to 15 parts water) applied with a Syphonex on a hose. We leave the house closed for 24 hours or more, then air it well for several days, or until there is no odor.

At this time we fill the bands with heaped up piles of peatmoss, which has been thoroughly watered, then smooth it

over with a board until the rooting medium is even with the tops of the bands. After this we punch it down with a wooden punch which just fits into each band. We then put on more peatmoss, level it off and this time do not tamp it down but just water it well. This makes the moss compact enough to hold the cuttings in place. The peatmoss we prefer is called "Greenhouse Grind" and is medium coarse. We use straight peatmoss, with nothing else mixed with it. We have rooted rhododendrons with Hormodin #3 plus the same quantity of Captan mixed with it (also Jiffy Grow, usually 1 to 10 in strength). We have also used Hormodin #3 with half Captan and 1% indolebutyric acid added; we find this and the Jiffy Grow solution to give about the same results.

After the cuttings are made up and dipped in the hormone we stick them in the bands in the same manner in which we filled the bands, i.e. kneel on the paths or bands where necessary.

We use intermittent mist over the beds, from Flora Mist brass nozzles, 4 feet apart, on ½" plastic pipe. There is one line over the narrow beds and two over the wider beds. We have Intermatic clocks, which we have set to mist from 30 to 45 seconds every half hour. They may be adjusted to mist every 15 minutes if we wish. Each bed has a clock and there is a master clock, if we wish to use it.

After the rhododendrons are well-rooted, but before the roots have grown down into the cables, we take them up and put them in flats, 30 to a flat, leaving them in the beds but with the heat turned down to about 50° F — just high enough to help prevent frost if it should turn very cold. We try to keep the plants cool for six weeks or so, then hope the weather will turn warm, otherwise we may have to turn on our boilers to force out the top growth. During this time we fertilize about every 2 weeks with a water soluble fertilizer, 25-10-10 at half strength, or 1 lb. to a gallon of water through the Syphonex. As new growth develops we try to keep the shoots pinched to induce branching.

We are very unorthodox in that we find that cuttings made in October under our conditions give the best results, although we do stick them as early as July if our customers request it. We do quite a bit of "custom propagating" of rhododendrons as well as rooting our own cuttings.

The advantages of rooting directly in the bands are:

Saving on labor costs — less handling.

Roots are not disturbed, as in transplanting.

The disadvantages are:

More space taken up to start with, thus more electricity used.

If cuttings do not root well, space is wasted.

Last year we rooted between 100,000 and 110,000 cuttings and our overall rooting percentage was 75 to 80%. We had several varieties which did not root well last year— (both our

own cuttings and the same varieties from others) which reduced our percentage, but many lots rooted about 100%. This year we are not rooting the difficult varieties in bands but will transplant them after they are rooted.

Moderator Curtis: The next rhododendron grower-propagator on the program is Mr. Ranville Hart. Mr. Hart lives in Mt. Vernon, Washington. Mr. Hart.

THE PROPAGATION OF RHODODENDRONS

RANVILLE HART
Mount Vernon, Washington

I propagate my rhododendrons in a 100 by 25 ft. glass-house which is equipped with hot water heat. The pipes are located in the air beneath the benches. The temperature is kept at 75°F in the pot zone by thermostatic control. There is no top heat. One 42" two-speed fan provides forced air ventilation.

The benches are made of concrete slabs with a six inch sides. They are skirted with polyethylene. Monarch spray nozzles with a 5-ft. coverage set four feet apart adequately provide controlled mist. They are controlled by a clock with a 10 second every 5 minute cycle but are shut off nights and rainy days. Every few days I "spot water" to cover the dry areas.

I use square peat pots set on $\frac{1}{2}$ " of sand — 3" for standard varieties and $\frac{21}{4}$ " for dwarfs — firmly filled with a medium of 50% coarse sand and 50% peat by volume. These pots are well-watered after they are set and the heat is turned on before I begin taking cuttings.

I make my cuttings during the first part of November. I have tried taking cuttings earlier but have had best success with the early November ones. The cuttings are three inches long and have a heavy double wound. I quick-dip them in Jiffy Grow — one part per ten parts water — as I stick them in the bench. This is done as quickly as possible to prevent loss of moisture. I water them in immediately.

The cuttings are well-rooted by the first of May and are ready to be set out. I don't move them until I transplant them into the lathhouse. I had 95% rooting this past year using fifty varieties.

For greenhouse sanitation I have had success by leaving the benches open in summer and using Captan dust to control fungi if any appears during the winter.

I grow the plants in the lathhouse one year, then at least two years in the field, before sale. The year-old liners are planted in beds in sandy loam soil, sprayed with Casoron immediately, then mulched with two inches of alder sawdust.