SUNDAY MORNING SESSION

October 6, 1963

This session convened at 8:30 A. M. with Moderator Joe Klupenger, presiding.

Moderator Joe Klupenger: I would like this morning to introduce one of the growers from this area of conifers and other nursery stock. He is one of the most progressive in the use of Plantainers and is doing a lot of experimental work on growing mediums. At this time, I would like to introduce Mr. Don Nuffer of Mt. View Nurseries.

MR. DON NUFFER: Thank you, Joe. I brought a few items with me. That is peat moss in the raw state. It came directly from one of the bogs up in Canada. We found that in getting our supply of peat moss it was advisable to go and see what we were getting. This is actually what our peat moss comes from. You'll note that in it there is very little wood or other material. This sample is perlite. It is in the raw state also. It is a rock. It has in it a good deal of moisture captured right in the molecules — in its molecular structure. When you heat it, it pops like popcorn and becomes extremely light. Now for my talk:

PEAT-PERLITE MIXTURES IN CONTAINER GROWING

Don Nuffer

Mountain View Nurseries, Inc. Aurora, Oregon

The mixture by volume consists of 50% sphagnum peat moss, 50% horticultural perlite, and a basic fertilizer mix.

Let us first list the advantage of this type of mix:

- 1. Good drainage: In an area of heavy winter rainfall, this is particularly important. It also provides a safeguard against overwatering, both of which brings on fungus problems.
- 2. Lightweight: This feature provides ease of handling of material and economizes in the shipping of the finished product to the customer.
- 3. Weed free: The fact that the material is for the most part free of weeds in its natural state eliminates (at least for most crops) the need for fumigation.
- 4. Stimulates a fibrous root system.
- 5. Materials relatively inert and chemically uniform. This is a desirable quality which enables one to use standard fertilizer formulae for all batches of mix.
- 6. Mix does not pull away from the sides of the container when dry.

7. It is adaptable to a wide range of plant material.

Next let's look at some of its problems:

- 1. Containers tip over easily.
- 2. Seems to require more water: This may be due in part to the vigorous growth the plant is making.
- 3. In the Portland area the supply of graded material is not constant.
- 4. Difficult to get wet.
- 5. Cost is high: 35c per cu. ft. as compared to 25c for sand-peat mix and 26c for sand-bark, and 5c for bark alone.

Cultural Practices

- 1. The mixture is mixed in a batch mixer capable of handling two yards at one time. It is mixed dry for three minutes and then the water is added and mixed for three more minutes.
- 2. From the mixer it goes to the canning machine. Being light and free from sand it causes little wear on the canner parts.
- 3. The plants are placed in the field where they are watered along with the other plants in the field.
- 4. Irrigation is all done by Rainbird #30 sprinklers with 3/32'' and 5/32'' nozzles at 40-60 foot spacings. We have tried other nozzles and spacings, but find these give the most even coverage.
- 5. Fertilizer is injected in all irrigation water. We also incorporate fungicides and insecticides in the irrigation water as needed. The amount of fertilizer to be used is determined by soil samples sent monthly to the Soil and Plant Laboratory, Inc., Orange, California.

Conclusions

We feel the peat-perlite mixture is a very satisfactory growing medium, but that it has some limitations and that the original cost, while not excessive by the can, becomes quite an investment when carried over a period of two or three years.

Moderator Joe Klupenger: Thank you, Don. A very interesting talk on mediums. Our next speaker on Soil Mixtures and Fertilizers is a man in our local area that has been progressing forward very fast and is doing a wonderful job of growing; he needs very little introduction. I think he is pretty well acquainted around here so we will now introduce to you Floyd Rigby of Rigby's Nursery!