are some differences in the overall climatic factors between the three areas and, no doubt, the other two nurseries have much higher summer temperatures than we do at Summer Hill, and an early unusual freeze would be a bit more likely in Connecticut.

Another factor is that Conard-Pyle and Summer Hill have been growing rhododendrons in containers for a number of years whereas the Wells Nursery, although growing other items in containers for quite some time, are only now getting into full scale production of container-grown rhododendrons and, therefore, perhaps have a little different outlook on things at this time.

As to our original methods of setting up container operations, keep in mind that Conard-Pyle is an old established nursery with larger capital resources than the other two nurseries; that can make a big difference on how things are done initially. Also, at the Wells Nursery, rhododendron is King, being the major part of their production and they are treated a bit differently than at Conard-Pyle or Summer Hill, which produce many other species of plant material, and where rhododendrons sometimes have to be worked in around another crop.

The first speaker will be Dick Vanderbilt from the Conard-Pyle Company, followed by Jeremy Wells from the James S. Wells Nursery— and I will speak last. After the presentations we will open the floor to discussion.

RHODODENDRON PRODUCTION SYSTEM AT THE CONARD-PYLE COMPANY

RICHARD T. VANDERBILT

The Conard-Pyle Co. West Grove, Pennsylvania 19390

Our rhododendron production system was discussed in detail at the 1967 meeting. We have made some changes since and I am sure that our system is about to undergo more changes in the near future. We maintain a separate, but unequal, stock block for cutting material. We aim for good growth, but a low level of nitrogen in the cutting when it is stuck. We are using both single and multiple cuttings depending on available stock.

Cuttings are stuck in peat pots, 2½" extra deep. When we transplant we are very careful to remove this pot completely. We have found that peat pots can cause a lot of grief later on if we do not do this. Even when the rhododendrons appear to be aggresively rooting out of the peat pot, they are making a circular root system that causes them to be pot bound and most reluctant to go into a new medium. The reason we stick with peat pots is to do away with hauling medium in and out of the houses.

We transplant in December or January into a 48 fluid ounce plastic container. It is actually a container made for Riccota cheese which you may have seen in supermarkets. It is 7" deep and the roots use all of it.

After transplanting, we chill the plants for 40 days, trying to stay under 40° F but taking what we get in the way of sun heat. After the chilling period, we raise the heat to 65° F night and use cyclic lighting. We begin constant feeding at this time. In the transplanting mix of 75% peat and 25% perlite we add 3 lbs. of dolomitic limestone. This helps prevent an ammonia build up by enabling nitrifying bacteria to go to work because of the rise of the pH.

We can the plants in June, into a 3 gallon Swiss cheese pot. We are now using a mix of 60% peat moss, 40% sand. It is in this area that I believe we might change our system. Impressive work is being done by Dick Bosley, and separately by Drs. Hoitink and Gardner, in the use of hardwood bark as the major component. Bark is producing fantastic root systems for these people, better than anything I have ever seen with peat moss. Dr. Hoitink is filling a 3 gallon Swiss cheese pot with roots in 3 months. It looks to me that a 55 gallon drum would be the logical container for a 2 year old! We maintain our feeding at 100 ppm N P K until the plants are sold a year from the next spring. We are using Benlate and Truban as drenches and find them useful. Our spray program includes Manzate D, Phaltan, Diazinon and Kelthane. The rest of our system is the same as I described at the 1967 meetings.

A SYSTEM FOR PRODUCING RHODODENDRONS

JEREMY WELLS

James S. Wells Nursery Inc. Red Bank, New Jersey 07701

As we are a specialist grower, our problems are unique. We have three major cash crops: rhododendrons, deciduous azaleas and evergreen azaleas; 95% of our income comes from these crops. Thus, it is imperative to keep certain production procedures definite in our planning:

- 1. The plants must be alive, healthy and in good salable condition at the end of the growing season.
- 2. The crops must be sold at a variety of ages and sizes.
- 3. Management must carefully plan to see that the first two criteria are met with the least amount of expenditure in labor, time and money.