

FRIDAY EVENING SESSION

December 4, 1964

The evening session convened at 8:00 p.m., President John Roller, moderator.

PRESIDENT ROLLER: We will begin the evening session with summaries of the roundtable discussions. We will hear first from Harvey Gray who recorded the session on Storage of B and B Plant Materials.

STORAGE OF B & B PLANT MATERIALS

ARIE J. RADDER, *Moderator*

HARVEY GRAY, *Recorder*

The material which I will offer for your recognition are the high lights of the discussions on the storage of B and B Plant Materials. There seemed to be an overall thread or feeling that the presence of light is apparently not a factor in winter storage, if the temperature is maintained at 35° F. or less, and number two, the humidity is kept close to 100% at all times.

In the discussions that developed this humidity factor was approached from a number of different angles, such as syringing, misting, wetting, and a variety of other details but primarily as I visualize it, and recognize it, it was a matter of some how or another of maintaining a humidity factor close to 100% at all times. Now the structures that came out in this discussion by and large were vapor proofed and they varied considerably. A good deal of emphasis developed out of the area of the Connecticut River Valley where tobacco industry for some reason or other has moved into the production of nursery stock good, bad, or otherwise. Nevertheless, this is an area of concern. As far as the nursery industry and the storage of plant material, they have a large number of tobacco curing or drying sheds. It is quite possible that they can put these drying sheds into use for storage of the variety of material that is grown on what was tobacco growing land. So a good deal of emphasis was placed on this type of structure, a shed that was made by one devise or another, vapor proofed to major extent, and dark to a high degree. Two other areas of concern and interest in this area of wintering material were such things as the conventional shade structures, shade houses with plastic placed over them. There also appeared in our discussion a fact that some areas were used for wintering over B and B material where the only protection that plants received was from a barrier such as a lath or snow fencing device around the plants with full sunshine. That is the composite picture. Do with it what you will, think of it as you will. However, emphasis was put on the fact that a tightly closed structure is a prime requisite for success where you are attempting to approach a vapor barrier with the

idea of maintaining a good quality stock over this winter storage period.

Then we got into the area of the fact that fine plant material will come out of storage in the spring if number one, the root ball has good moisture content during storage (there are number of suggestions of how this might be brought about by watering them much or little, and using rot proofed burlap) but basically point number one is the root ball has a good moisture content during storage. Number two, a high nutrient content should exist in the plant when it goes into storage and evidence seems to indicate that this is best accomplished by a late October application of a fertilizer with emphasis on nitrogen. Number three as far as the prime plant material coming out of storage in the spring, is that we protect the roots from exposure to deep cold. Now I didn't quite get the specific temperature in this overall discussion so I can only report it as being a deep cold. And this I think you will recognize by the following comment. This is accomplished by using mulches, such as sawdust, wood chips, shredded sugar cane and various gradations of this sort of thing down to the plunging of the balls in soil.

Winter protection varies according to the statements that were made during the discussion from the wind barrier in full sun to placing plants in total darkness with a high percentage of humidity.

In the development of this discussion the subject of anti-dessicants came up and two points were rather strongly brought to the floor — number one it is most important when using the various anti-dessicants that this material should be applied on the underside of the leaf if it is hoped to get any value or advantage out of its application, for the simple reason that your stomates are predominantly present on the underside and almost absent on the upper side of the leaves. And also another point was developed in this area, had to do with the duration time, when this coating or these applications were efficient. It was pointed out that these materials are rather short lived. This is a point that needs further discussion. Dr. Snyder's work on this and others of course will reveal further information.

The final point was a point that I developed at the close of the meeting and that was a fact that no one mentioned, and it is worthy of some consideration, to give recognition to the fact that fungi of certain sorts such as *Botrytis* can become a problem. *Botrytis* can be activated and is liable to be active at low temperatures. So therefore it would be wise to give consideration to an application of fungicidal material that will be effective in the control of an organism such as *Botrytis* which can very readily cause defoliation of your material in storage. I submit this as the recorder for this particular area of discussion.

PRESIDENT ROLLER: Next we will have the report on the roundtable discussion on Viruses — their importance to the plant propagator. [*Editor's Note:* Zophar Warner presented