

**Thursday Morning, December 8, 1977**

The Thursday morning session convened at 8:30 a.m. with Kathleen Freeland serving as moderator.

## **DEEP PIT STORAGE OF NEWLY PROPAGATED PLANTS**

**CASE HOOGENDOORN**

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A couple of years ago we showed a few pictures of a deep frame we were building 6 ft in the ground. It was referred to as a "hole in the ground" at that time. Since then we have been able to come up with a suitable name, "Deep pit storage for newly propagated plants".

The deep pit storage is now completed and during 2 years of operation we have been able to work out the bugs that have cropped up and it is now working to our satisfaction. The purpose of the deep pit storage is to prevent the splitting of more sensitive cuttings and grafts, yet allowing the plants to receive a little frost to get the proper dormancy. On the ground where the plants are stored we maintain a temperature of 28°F. During the first winter the storage was in use, the temperature outside was 14°F and the temperature at the base of the pit, where the plants were stored, was also 14°F, which led us to believe that the whole project was a disaster. The blue hydrangea cuttings were as black as coal; when rubbed they were like mush. The plants started to show fungal growth so Victor kept spraying with fungicides. The people from the College advised us to throw the hydrangeas away to prevent the fungus from spreading throughout the pit. At this point I was disgusted and lost interest in them, so I just left them where they were. We were afraid that the cuttings and grafts were split even if we could not see it at the time. The spraying continued. When spring arrived, the plants started to grow, even the blue hydrangeas, right out of their terminal buds. I can attest that miracles do happen even though this was one of our mild winters. However, the experience was too close for comfort. At this point, I remembered a lecture given by G. Stroombeek a few years ago with reference to a blanket of heat in a poly storage house. It sounded like a good idea and I decided to try it out. We purchased a heater, overhead poly tube, thermostats, oil tank, etc., etc. to carry out our plans. This past winter was one of the most severe we have had for many years, which put the deep pit storage to a real test. We now know that it works and are glad to relate our experiences to you.

The pit is 16 ft wide inside, 100 ft long, 6 ft deep and it is 11 ft from the floor to the ridge. The roof is constructed of 4 × 10 ft Filon sheets. The walls are 1 ft thick with 5/8 inch steel reinforcing rod set on a 2 ft wide footing. A 3 ft fan set in one end provides ventilation when needed.

EDITOR'S NOTE: Mr. Hoogendoorn showed slides of how the plant materials are placed into the deep pit storage and what they looked like when removed. Plant materials which have been over-wintered in the deep pit are grafts of *Viburnum carlesii* 'Compactum', *Hamamelis* × *intermedia* 'Arnold Promise', *Cedrus atlantica* 'Glauca', *Cedrus atlantica* 'Glauca Pendula', *Cornus florida* 'Rubra', *Cornus kousa* var. *chinensis*, *Cornus* 'Rochester', *Magnolia* 'Balleriniana', and cuttings of *Acer griseum*, *Hydrangea macrophylla* 'Nikko Blue' and *Pyrus calleryana* 'Bradford'.

CLAY BERG: When do you take your 'Bradford' pear cuttings and how do you treat them?

CASE HOOGENDOORN: We take them in early July and treat them with Hormex #30 and stick them in sand.

## NEW AND NOVEL COLD HARDY RHODODENDRONS

DAVID G. LEACH

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I've done a lot of work for the handicapped — the nurserymen. You fellows who sell rhododendrons are a unique industry dealing in living antiques. My colleagues and I have been producing 1977 style rhododendrons for cold climates, and I'm here to persuade you to give up your horticultural Stanley Steamers for new Buicks, whether they come from my production line or somebody else's. Nearly all of the rhododendrons you are selling were introduced in England just as our Civil War was ending 110 years ago. They were designed for spacious estates and large gardens, for mansions and three-story Victorian houses. They were intended to be grafted, and to bloom only within a 10-day period at the end of May. They were not produced for American growing conditions. All told, they're about as well suited for the last quarter of the 20th century as the spinning wheel is for the production of nylon. Times have changed.

I joined the Plant Propagators' Society either the year it was founded, or the year after, because I was then doing some experiments with rhododendron propagation. I have continued my membership through the years but in some ways I feel like an illegitimate son at a family reunion. It seems to me that nurserymen are busily grinding out the great gray world of 1984 whereas the industry professes to be dedicated to the amenity of the living environment, to the addition of a varied grace and