

**TECHNICAL SESSIONS**  
**Tuesday, November 29, 1977**

The second annual meeting of the Southern Region of the International Plant Propagators' Society convened at the Angus Restaurant Tuesday morning, November 29, 1977. The meeting was opened by President Charlie Parkerson, who introduced the Tennessee Commissioner of Agriculture, Edward S. Porter.

COMMISSIONER PORTER: We are pleased that the Society is meeting in Tennessee and want to welcome you to our state. Agriculture is the number one industry in Tennessee; nationwide, we rank 25th as far as agricultural production is concerned. Agricultural exports are becoming increasingly important in our state. We are among the top 10 states in production of tobacco, soybeans and cotton. The nursery industry also plays a very important role in our agricultural production. The sale of nursery products provides the fifth largest cash crop in our state and we are proud to be a part of this important industry. Enjoy your stay here!

**FIELD SEEDLING PRODUCTION OF *CORNUS FLORIDA***

DON SHADOW

*Shadow Nursery, Inc.*  
*Winchester, Tennessee 37398*

Seedling propagation of *Cornus florida* is essential to our total dogwood production, and I will give the procedure we use in the field propagation method.

The seeds are gathered from local native stands by collectors and brought to our nursery, where they are purchased by the pound. They are then placed in 55-gallon barrels to soak for several days prior to cleaning with a mechanical seed cleaner. The most effective method for determining whether the berries are well ripened is to press them between the thumb and forefinger; if the seeds press out freely, they are ready to be picked.

After the berries are cleaned, the seeds are air dried on burlap for several days, depending upon weather conditions, and then hung in lots of 25 pounds until ready for planting or storing. We find this is a convenient amount to handle easily.

During the months of October and November, when weather permits, the seeds are planted in the open field in 54 inch rows which have been ridged up to 6 to 8 inches, with a V-shaped furrow about 2 inches deep pressed into it. After this is done, an application of 20 to 25 pounds of 6-12-12 fertilizer

is applied to the furrow. The seeds are then covered with well-decayed hardwood sawdust, which is available in our area.

Germination usually begins between April 1 and 15, depending on weather conditions. This is the most critical time in the life of the germinated dogwood seed. It has been our experience that the embryo is lost if water puddles over it more than 24 hours. We ordinarily do not irrigate during germination unless conditions are extremely dry and topsoil begins blowing. Blowing soil damages seedlings.

Another method that has been used successfully in the past is the stratification of the seed by January 15 in equal parts of sand and sawdust. The seeds are mixed into this mixture and stored in steel barrels at 40°F for 60 to 75 days. The seeds are then removed by use of a 1/4 inch screen before germination begins. The seeds not used in the year of collection are stored in clean lardstands, sealed with heavy tape and placed in cold storage at 34 to 36°F, which insures seed for the next year in case of seed failure due to natural causes. Seeds can be stored up to 3 years without appreciable decrease in germination.

The tiny seedlings are then cultivated, sprayed, fertilized and hoed if necessary, according to good cultural practices. We apply Enide 50w after weeds have germinated. Paraquat can be used over the entire area prior to seed germination. Kerb and Princep, in combination, can also be used.

Seedlings that come up in the spring can be budded in early August.

## **PROPAGATION OF DOGWOOD SEEDLINGS IN CONTAINERS**

HENRY H. CHASE, JR.

*Chase Nursery  
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Recently we have experimented with growing dogwood seedlings in small tube containers, hoping to improve the percentage of livability by taking the seedling to the field in its own pot. Two types of container-trays were used. One is heavy black plastic with 101 round cavities 1/2 inch by 4 inches, with 4 holes in the bottom of each cavity. The same type is currently being made with ridges to prevent roots from spiraling, as was the case in our smooth round tubes. The second type tray is made of styrofoam and has square cavities with one hole in the bottom of each cavity.

The mix was 2/3 finely ground pine bark and 1/3 sand, fumigated prior to filling the containers. Flats were filled by hand and shaken down to get an even compaction of the mix.