NURSERY PRODUCTION OF YELLOW-POPLAR SEEDLINGS

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The demand for yellow poplar seedlings in Tennessee has increased tremendously during the last 10 to 15 years and we have been hard pressed to obtain sufficient quantities of seed to meet the seedling demand. Prior to the use of chemicals, all of our hardwood seedlings were grown in rows with eight rows of seedlings per bed. Since we started using chemicals, and at the present time we are using methyl bromide at the rate of 1 pound per 100 square feet of bed space, just about all hardwoods that are hand sowed are broadcast. We find that through broadcast seeding where no cultivation is required, we get more plantable seedlings per square foot 'and they are a more uniform size.

Our practice in the production of yellow-poplar seedlings the last few years has been as follows:

1. Seeds collected from late-August to early-October.

2. Dried thoroughly, then the seed pods or cones are run through a pea huller for tearing apart the seed pods.

3. Seeds with wings attached are placed in an enclosed area, made from old lumber, on top of the ground. The seed are thoroughly mixed with sand as they are placed in the stratification box.

4. A garden sprinkler is then placed on the heap in order to insure adequate moisture until winter rains provide sufficient moisture.

5. In early-March the stratified seed are removed from the box, sacked and placed in refrigeration at a temperature from 35° to 38° .

6. Seeding is usually done in early-May. The seeds are scattered as uniformly as possible over the seedbeds.

7. Immediately after seeding, sawdust is applied to the seeded area. This covering of sawdust is normally about $2\text{-}1/2\ to\ 3$ inches in depth.

We feel that the above depth or amount of sawdust is important in that it helps to maintain a more uniform condition conducive to early germination.