

EARLY FLOWERING SEEDLINGS OF A PLUS TREE

H. C. Buckingham¹

What started all of this was that in working with Ernie over the years you do get some of his enthusiasm rubbed off on you and we did find that our troubles were in getting good seed. We had a strain of white pine in Garrett County, which as all of you know is in the western part of the State at 2,500 feet elevation, and we noticed that the seed from this particular area was better than that from the other sections of the State, both in the number of seeds per cone and the germination percent, and that the seed produced better seedlings. We tried to get as much seed as we could from this area.

A few years ago a tree was discovered in the southern part of the State, in Montgomery County, near Baltimore, that appeared to be just head and shoulders above everything else of the same age around it. It was a plantation tree. I believe the tree was about 26 years old, 71 feet tall, and 21 inches in diameter. We like to think that its better than average. One year this tree produced a large number of cones with good seed. We planted them in the nursery. When the seedlings showed remarkable growth we graded these into three classes and tried to distribute them around the state, but unfortunately we gave away all of the better ones; we only kept the poorer ones in the nursery. I believe that they have been tested and people may not really think that it's a superior tree, but I don't know whether we have the right to say whether a tree is superior or not in such a short space of time. I think we've got to wait to see what's going to happen, At any rate, one of the plantations we made in the field shows absolutely no difference from other seed sources after a few years of growth. Another plantation, however, shows a great deal of difference; the trees are much thicker and considerably taller than the other trees planted around it.

¹State Forester, Maryland Dept. Forests and Parks, Annapolis, Md.

In regard to the stand at the nursery, I cant tell much about it because all the other trees planted around the nursery were the largest trees in the seedbeds, These trees have made wonderful growth. So, we're comparing this Montgomery tree with the best of the seedbed which may be a good test. This seed orchard has been established on a northern exposure with a very slight grade. The soil is sandy on the upper half and heavy clay on the lower part. This stand is now 6 years old (total age) with a variation in height of 4 to 10 feet. I doubt if it is correct to say that the 11-foot trees are poorer than those trees that are 9 or 10 feet tall because we have found that the birds break these leaders off when they are in the tender stage. Doves and blackbirds are responsible for most of the leader breakage.

It was discovered this year that a number of these 6-year-old trees were bearing cones (see cover photos). An inspection of the area showed that there were trees that produced 14 cones in 1961, 19 trees producing 92 cones in 1962, and 28 trees that have 257 conelets to mature in 1963. Thus, it appears that we have the beginning of a good seed orchard. Plans call for cuttings to be secured from the Montgomery County parent tree for grafting in the field on some of these seedlings and also on some of the large (jumbo) seedlings from unknown parents.