

29. PROGRESS REPORT FROM IDA CASON CALLAWAY FOUNDATION

Aaron Jordan
Ida Cason Callaway Foundation, Hamilton, Ga.

The program of the Ida Cason Callaway Foundation at Hamilton, Georgia for the development of superior southern pines, is now in its fifth year. During the first four years a wide selection of plus trees was made, and the progeny of some of these mother trees have had several years of field testing. A small number of inter-species and intra-species crosses have been made and the progeny of these crosses have been outplanted under field conditions as the seedlings resulting from these crosses have become available.

Beginning with this fifth year, we feel that results so far have been sufficiently indicative to warrant more concentrated attention to a selected group of the plus trees, and to the initiation of seed orchards. The Foundation project has been carried on with studies of the four southern pines found in its locality--loblolly, slash, shortleaf, and longleaf pine. Out of the hundreds of plus trees selected among these four species, a few of each will be the basis of future activities. We expect to work with these species in the percentage ratios of 40 for loblolly pine; 40 for slash pine; and 10 each for shortleaf and longleaf pines. The number of plus trees on which this work will be concentrated is about six or eight of each species.

The selection of these plus trees will be the ones forming our seed orchards which have been based on performance of the progeny in the seed beds and in the outplantings. Growth measurements have been carefully kept. As might be expected, these figures have shown that some plus trees have produced progeny which, after an initial superiority in the seed beds and outplantings, have not kept up their advantage over the full period. The progeny of other plus trees have also developed superiority that did not show up in the first year or two.

Seed was collected this past fall from only those trees which showed the best promise so far. Cone count and seed quantity was kept for each mother tree. These seeds will form our nursery production for 1955.

We will have some surplus seedlings from last year's nursery production. The seedlings from the select group of plus trees will

be planted this winter to start the seed orchards with open-pollinated seedlings. Next year's production, and that for a few following years, will be used to extend the acreage of seed orchards. The proper combinations of progeny will be worked out so that natural cross-pollination within the seed orchards will produce the superior type of seedlings for commercial use for which we have been striving. We expect that eventually we will have certified seed, as well as seedlings, to offer the tree-planting public.

Concurrently with this program will be the continuation of testing progeny in the outplantings, and the keeping of records as to their growth, health., form, and other characteristics.

Vegetative propagation will also be on the program. Working in cooperation with other agencies engaged in this problem we will be active in trying to work out techniques of grafting, rooting, and air-layering, but we do not expect to make this a major part of our program.

We believe that we have reached a corner in our project, and that by turning this corner in the direction of practical application of what we have learned so far, we will bring closer the realization of our goal. The goal, of course, is to improve the economic situation of the South, with our contribution being the supplying of superior pines to build up the forest lands of the South.