24. SOUTHERN INSTITUTE OF FOREST GENETICS

Berch W. Henry, Officer in Charge
Southern Institute of Forest Genetics
Southern Forest Experiment Station, Gulfport, Miss.
Forest Service, U. S. Department of Agriculture

The Southern Institute of Forest Genetics, established but a few months ago, is certainly one of the newer members of the group engaged in forest tree improvement research in the South. As a juvenile member, we realize our dependence upon those of you in this group for ideas and guidance, and the need for all of us to work together in this relatively new field of forestry.

It would be presumptuous of me to even consider talking of accomplishments by the Institute per se, during the few months of its existence; they can be summed up by saying: We were established.

I think it might be more appropriate for me to state our objectives as we see them, to outline our current status, and to say a few words about our proposed future program.

We see our general objective as being three-fold in nature and limited at present to the southern pines in substance:

1. To concentrate our efforts upon fundamental genetical and closely related problems, the solution of which would be useful region-wide.

2. To carry out tree improvement studies of an applied nature particularly adapted to our local clime, i.e., southern Mississippi and southeastern Louisiana.

3. To keep ourselves abreast of developments in forest genetics research and application in the South through a repository of published and unpublished information, and through frequent contact with other individuals and agencies involved in this line of endeavor; thus, on a give and take basis, to do our utmost to augment full cooperation in the field of forest tree improvement.

This three-fold general objective, in part or wholly, is possibly quite similar to some of your own. There is nothing particularly new or individualistic about aiming a research program toward fundamental problems, and at the same time having some phases that would be particularly applicable to ones immediate area; in fact it is difficult to devise projects that fall strictly into one category or the other. As to the third phase of our purpose, I believe we all

agree that no research project is a well-balanced one if the researchers concerned are not continually cognizant of the progress in their field. In this respect, we shall do our utmost to maintain the standards set by this group in regards to the free interchange of ideas and formation, including but far exceeding that presented in published data.

Now as to our current situation and planned program. The Southern Institute of Forest Genetics replaces the former Gulfcoast Research Center of the Southern Forest Experiment Station, Forest Service, U. S. Department of Agriculture. Our office is in Gulfport, Mississippi, and our field headquarters, including laboratories, greenhouse, nursery, workshops, etc., are on the 4,000-acre Harrison Experimental Forest about 20 miles north of Gulfport.

Our permanent staff consists of four technical men (two foresters, a plant geneticist, and a forest pathologist), three sub-professional technicians, a clerk, and two laborers. We expect to add another forest pathologist next month.

We are financed solely by Congressional appropriations made to the Forest Service, U. S. Department of Agriculture.

Our planned program consists of selected regeneration and tree improvement studies already underway by personnel transferred to the Institute, plus such new studies as can be carried by our current and proposed staff.

The carry-over projects consist of such things as inter- and intra-species hybridization aimed at exploring the compatability of our southern pines; effects of nursery treatment on early height growth of longleaf seedlings; field testing of slash and loblolly pines of known seed source for possible resistance to fusiform rust; field testing of longleaf pine of known seed source for possible resistance to brown spot needle blight; the occurrence of pests in the Southwide Pine Seed Source Study (in cooperation with the Gulfport Forest Insect Laboratory, Southeastern Forest Experiment Station, National Forests, U. S. Department of Agriculture, and State and private agencies); the control of flower and cone insects (in cooperation with the Gulfport Forest Insect Laboratory); and a southern pine species-site study (in cooperation with industrial, private, and State and National Forest Service agencies).

Our proposed new program will include such studies as the artificial testing of selected slash and loblolly pines for resistance to fusiform rust; the testing of selected longleaf pines for resistance to the brown spot needle blight; the development of desirable pine phenotypes through selection and breeding; the variation between and within species; and the mechanism of inheritance in the southern pines.