

## EASTERN TREE SEED LABORATORY<sup>1</sup>

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The old saying that "nothing succeeds like success" is well illustrated by the story behind the Eastern Tree Seed Laboratory at Macon, Ga., formerly the "Region 8 Tree Seed Testing Laboratory." From humble beginnings as a small laboratory at the Ashe Nursery in Mississippi, testing seed for the U. S. Forest Service nurseries in the area, it has grown to a facility capable of handling the seed testing and research needs of the entire Eastern United States.

Nursery production in the South almost ceased during World War II, after a period of expansion during the conservation upswing of the Civilian Conservation Corps program.

By 1950, seedling demand was soaring as more and more landowners realized that forestry was a profitable business in the South. A critical shortage of pine seed developed because of poor seed years and because collecting and processing agencies failed to anticipate the magnitude of the seedling demand.

Seed became a precious commodity. None could be wasted. Information on viability and quality of existing stocks of seed and of seed hurriedly gathered and processed was necessary for the efficient operation of the expanding nurseries.

This was the golden opportunity for the U. S. Forest Service seed testing laboratory to prove its value. However, facilities and equipment at the Ashe Nursery were inadequate. Furthermore, the laboratory was not located at a major seed collecting and processing center. At this point in 1954, the Georgia Forestry Commission offered to underwrite the cost of operation of the laboratory and provide office and testing facilities at the Georgia Forestry Center near Macon. This move was made in time for the testing season that started in November 1954.

The growth of the laboratory, measured by the number of service tests, was phenomenal, reaching a peak of 1,100 tests during the 1957-58 season. Because of poor seed years, the number of service tests dropped somewhat in 1958-59 and 1959-60. The current season tests will be around 800.

Variations in seed crops and seedling demands will cause fluctuations in the service tests but the laboratory as now organized can handle with ease approximately 3,000 service tests a year.

The Southeastern Forest Experiment Station and the Georgia Forest Research Council recognized the need for research information on tree seed and the opportunity that the seed laboratory afforded to carry on all kinds of studies on seed problems. The potentiality of the laboratory for seed research is graphically illustrated by the progressive increase in the number of research tests during seven testing seasons. The number of research tests increased from approximately 100 to over 1,400.

<sup>1</sup>This article was first published in FOREST FARMER, 20(9): 14-16. May 1961.

The combination of service and research tests keeps the laboratory in full operation throughout the year. Service tests give nurserymen data whereby they can adjust their sowing rates to obtain predetermined bed densities. Research tests furnish information on optimum storage temperatures, stratification periods, and best methods of collecting, handling, and storing seed of different species to protect viability and quality. Most of the service tests are made from October through March and the research tests are most numerous through the summer season.

The laboratory was first housed in one room of a small building built by the Georgia Forestry Commission and the Georgia Forest Research Council. These facilities soon proved inadequate and a new seed testing building was built in 1957-58. These quarters likewise proved insufficient to cope with the demand for service and research tests.

Finally, as the result of joint action by the Forest Service and the Georgia Forestry Commission, a completely modern laboratory was designed and built with adequate space for the seed testing and research needs of the Eastern United States. This building now named the "Eastern Tree Seed Laboratory," contains offices, research laboratories, specially designed germination, stratification, and -seed storage rooms, and represents planning based on 20 years of seed testing experience. This facility has the versatility and flexibility needed to take care of the testing and research needs of all kinds of tree seed.

An indication of the far-reaching influence of the laboratory can be had by reference to nursery production. For example, during the 1956-57 season 65 percent of the seedling production in the South was based on information supplied by service tests. During the 1959-60 season, 70 percent of the seedling production of the entire United States was served by tests made in this laboratory.

The Eastern Tree Seed Laboratory is a monument to the joint cooperative efforts of the U. S. Forest Service, the Georgia Forestry Commission, and the Georgia Forest Research Council. The Forest Service provides the technical and research staff, the Commission handles the operational costs and collects the reimbursements on the basis of cost per test, and the Council provides funds to supplement the research program.

The laboratory is in position to test seed for State nurseries, Forest Service and other government-operated nurseries, timber-growing industries and seed dealers.

Anyone desiring these services should contact the Eastern Tree Seed Laboratory, P.O. Box 1077, Macon, Georgia. Details of testing service and approximate costs will be furnished on request.