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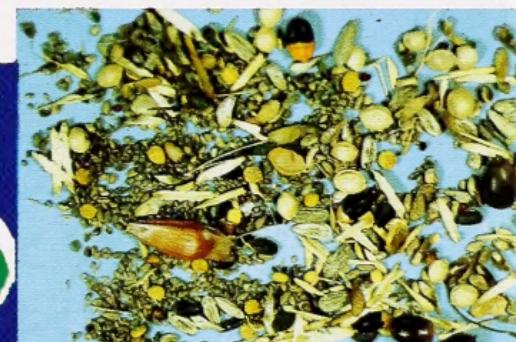
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A Quality Start For  
Global Reforestation



## **THIS STATE-OF-THE-ART FACILITY HAS THREE AREAS OF ACTIVITY:**

1. Testing for seed quality
2. Providing technical assistance
3. Maintaining an international seed bank



### **TESTING FOR SEED QUALITY**

The National Tree Seed Laboratory provides seed testing services to both small and large private firms, state governments, national forests and other federal agencies. The results of these tests are used in forest nurseries to determine sowing rates, in seed conditioning plants to evaluate product quality, and by seed dealers to determine price.

The National Tree Seed Laboratory measures seed quality with the following tests: germination, purity, moisture content, and seed per pound. Rapid estimates of viability are made by using



*Seeds are examined carefully to avoid mixing species and to detect contaminants.*



**Pure seeds are germinated under ideal conditions in a controlled environment.**

chemical stains, embryo excision and x-rays. All tests for domestic use are performed according to the rules of the Association of Official Seed Analysts (AOSA).

The National Tree Seed Laboratory is the only laboratory in the United States approved to issue International Seed Testing Association (ISTA) seed analysis certificates. These certificates report seed test results required for international sales.

As members of AOSA and ISTA, the laboratory's specialists develop the official seed testing criteria and procedures for U.S. native tree and shrub species.

## **T E C H N I C A L   A S S I S T A N C E**

### **Technology Adaptation**

The National Tree Seed Laboratory is at the forefront in developing new forest seed technology. The latest equipment for seed conditioning and seed testing is



evaluated and adapted for use with tree seed. New ideas to improve the seed-to-seedling ratio in forest nurseries are evaluated cooperatively with nursery and reforestation personnel.

### Troubleshooting

Tree seed users are assisted in solving their collection, conditioning, handling, testing, and other seed-related reforestation problems. Short-term studies are conducted to determine what corrective action is needed.



*Outside groups visit the lab for training in proper seed sampling techniques.*

### Training

The National Tree Seed Laboratory is a model for other organizations testing tree seed. Individual and group training is provided on testing procedures and the interpretation of the seed test results. Such training also extends to agencies in other countries. Foreign scientists and practitioners frequently spend short training periods at the lab to study the latest techniques in analyzing tree seed. Seed workshops are now organized for other countries as part of the Tropical Forestry Program of the Forest Service.

**Laboratory personnel discuss the latest technologies relating to hardwood seed.**

## INTERNATIONAL SEED BANK

In 1972, the U.S. Department of Agriculture appointed the National Tree Seed Laboratory to serve as the National Seed Coordinating Center for the Exchange of Forest Tree Germplasm among countries participating in the Food and Agricultural Organization (FAO) of the United Nations.

Laboratory personnel assist embassies and other agencies in locating tree seed and in avoiding duplication of effort in filling international requests.

The seed bank provides small lots of native tree and shrub seeds to forest researchers outside the United States. The seed is available in quantities of either 200 or 2,500 seeds, according to customer preference. More than 150 species have been shipped to 95 countries since 1972.

***Seeds are packaged and shipped to forestry researchers and other clients around the world.***



***Hundreds of varieties of seeds are catalogued and stored in the NTSL seed bank until they are needed.***



# T H E M I S S I O N

Worldwide and national interest in planting trees is at an all-time high. Cam-

paigns carried out by such groups as American Forests (Global

ReLeaf), the National Arbor Day Foundation, and the America

the Beautiful National Tree Planting Program are signs of this

high interest. The success of these and other planting pro-

grams depends on high-quality seedlings—and good seedlings

start with high quality seeds. **The mission of the National**

**Tree Seed Laboratory is to assist in providing a quality start**

**for global reforestation.**

The National Tree Seed Laboratory, operated by the USDA Forest Service, is

the only facility of its kind. It began as a regional facility in

1951 and now serves the entire nation and many international

clients. Laboratory personnel are recognized experts on forest seed testing,

seed conditioning, and maximizing tree seed performance.





# L O C A T I O N

The National Tree Seed Laboratory is located at the Georgia Forestry Center, a complex including offices of the Georgia Forestry Commission and the USDA Forest Service. The map below shows how to reach the lab.



Visitors are welcome at the laboratory between 8:00 a.m. and 4:30 p.m., Monday through Friday. Please call 912-751-3551 before you visit.

***For further information, write to:***

**USDA Forest Service  
National Tree Seed Laboratory  
Route 1, Box 182B  
Dry Branch, Georgia 31020-9696  
USA  
Fax: 912-751-3554**



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