

Discovery • Innovation • Application

UT AgResearch focuses the combined expertise of more than 130 scientists and specialized staff to help the state's agricultural, forest, food processing and wholesale nursery industries improve the profitability of their businesses. The results of applied AgResearch improve the quality of life for all Tennesseans by providing plentiful and affordable food and fiber products as well as conserve soil, water, air and wildlife for the benefit of our society.

Faculty conduct world-class research programs in a variety of areas including crop breeding and genetics, soil conservation, agricultural policy, no-till crop production, food biopolymer chemistry, plant pathogens, cattle reproduction, wood product development, wildlife health, and many other areas. Most recently, UT AgResearch has established a strong position in cellulosic ethanol research along the continuum from farm to pump. This research is supported by a partnership with industry and various government agencies.

UT Institute of Agriculture

Since its founding in 1869, the University of Tennessee Institute of Agriculture has provided instruction, research and public service in agriculture and related areas to students, producers and consumers in Tennessee and around the world. UT AgResearch is one of the Institute's four units.

Classroom instruction takes place in Knoxville in the facilities of the College of Agricultural Sciences and Natural Resources and the College of Veterinary Medicine. UT Extension educational services are offered in all 95 Tennessee counties. UT AgResearch conducts basic and applied research at the agricultural campus in Knoxville in seven academic departments and at 10 AgResearch and Education Centers located across the state.

Some examples of how UTIA programs benefit the state include:

- The UT Biofuels Initiative – initially funded with state appropriations, this Initiative is the nation's only fully integrated program working with farmers and industry to produce plentiful, affordable and renewable fuels from locally produced energy crops.
- The UT College of Veterinary Medicine – one of only 28 veterinary colleges in the United States.
- UT Extension and UT AgResearch faculty and programs reach out to citizens of the state with more than 4.5 million face-to-face contacts annually.
- CASNR enrollment is more than 1,500 annually.



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UT AgResearch has 10 research and education centers located across Tennessee representing the state's diverse climatic and geographical regions.

These centers serve as outdoor laboratories where scientists can test their theories in real-world conditions.

They also serve as classrooms for the University's future scientists and for the state's producers who can see first-hand research results that can benefit their operations.

The research and education centers host the citizens of the state as sites for public field days, 4-H and Extension meetings, open houses, industry meetings and various other educational events.

UT AgResearch and Education Centers reflect the diversity of Tennessee agriculture.

Dairy AgResearch and Education Center (Lewisburg): home to one of the highest milk-producing herds of Jersey cattle in the world. Studies focus on improving dairy genetics, reproductive health and dairy management.

East Tennessee AgResearch and Education Center (Knoxville): known for its research on agronomic crop production (corn, soybeans, wheat and forages), organic production, beef and dairy production, and fuel crops.

Forest Resources AgResearch and Education Center (Oak Ridge): a leader in developing new best management practices for natural resource management.

The UT AgResearch and Education Centers each contribute between \$1 million to \$4 million annually to their local economies.

Highland Rim AgResearch and Education Center (Springfield): primary focus is corn, wheat, and soybean variety development and testing, forage systems, cow-calf management, and tobacco production efficiency.

Middle Tennessee AgResearch and Education Center (Spring Hill): home to research studies on beef and dairy cattle, commercial crops, fruit trees and forages. Also houses the Center

for Profitable Agriculture, which is a partnership between UTIA and the Tennessee Farm Bureau Federation committed to expanding and improving the processing and marketing of agricultural, aquacultural and forestry products in Tennessee.

Plateau AgResearch and Education Center (Crossville): site of research on the efficiency of livestock enterprises, fruit and vegetable production and marketing, greenhouse production, ornamentals, conservation research and hay production.

AgResearch and Education Center at Ames (Grand Junction): part of the privately owned and operated Ames Plantation, this center conducts large-scale research on agronomic production systems, forest management and wildlife studies.



Discovery • Innovation • Application

AgResearch and Education Center at Greeneville: hosts research on burley tobacco production, forage testing, and beef production.

AgResearch and Education Center at Milan: birthplace of Tennessee No-Till Crop Production. Current research projects address a broad variety of topics related to row-crop and fuel crop production management and efficiency. Also home to the West Tennessee Agricultural Museum.

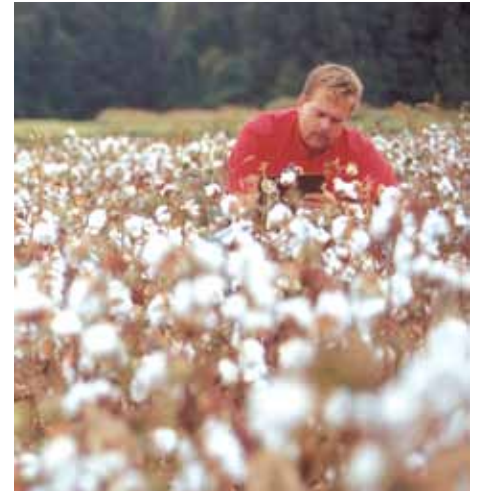
West Tennessee AgResearch and Education Center (Jackson): Established in 1907, research by UTIA and USDA-ARS scientists target the development of new agronomic, turf, and ornamental cultivars, new and improved technology for plant pest management, and more efficient crop production practices.

Some of the work taking place at the AgResearch Centers includes:

- Evaluating weed, disease and insect control methods in traditional and organic crops.
- Increasing efficiency in livestock and crop production.
- Developing switchgrass and other plants as energy crops.
- Improving Tennessee's forest industry.
- Enhancing reproduction technology in cattle.
- Improving milk quality.
- Researching alternative commodities for Tennessee producers.
- Improving feed for livestock.
- Determining best turf and ornamental varieties for Tennessee homeowners.
- Enhancing wildlife management strategies.

What does this mean for the average Tennessean?

- Access to safer, more nutritious foods.
- A cleaner environment.
- A plentiful and affordable food supply.
- Safer sports turf surfaces for athletes.
- Low-maintenance lawns and landscapes.
- Availability of locally grown, value-added agricultural products.
- Alternative fuel supply.
- Protection of our natural resources.



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Agriculture is vital to Tennessee's economy:

- Agricultural production generates more than \$3 billion annually in farm cash receipts and, typically, an additional \$300-\$500 million is generated by timber sales.
- Industries that depend upon agriculture, such as farm product retailers and manufacturers as well as food and beverage manufacturing, apparel and textiles, and forest products manufacturing, drive the state's economy with \$80 billion in revenues annually, accounting for 16 percent of Tennessee's economic activity.
- Agriculture and agri-business employ more than 502,000 individuals, or almost 14 percent of Tennessee's workforce.
- There are 10.9 million acres of farmland in Tennessee, which account for more than 41 percent of the state's total land area.
- Currently, there are 79,000 farms in the state. Tennessee's agricultural production is extremely diverse. The state's top agricultural commodities are cattle, broilers, soybeans, corn and greenhouse/nursery products.
- Agronomic row crops (corn, cotton, soybeans, wheat) collectively make up nearly 40 percent of Tennessee's farm cash receipts.

- Tennessee is among the top states in the nation for production of tobacco, meat goats, tomatoes, snap beans and hardwood timber.
- Tennessee is also a leader in the development of no-till farming, a soil conserving practice where the ground is not plowed before planting seed.
- More than 70 percent of Tennessee farmers use no-till methods that save time and fuel and reduce the harmful effects of soil erosion.

