

Dean Lee Research Station Profile



Report to Stakeholders

February 2010

About the LSU AgCenter

The LSU AgCenter is dedicated to providing innovative research, information and education to improve people's lives. Working in a unique statewide network of parish extension offices, research stations and academic departments, the LSU AgCenter helps Louisiana citizens make the best use of natural resources, protect the environment, enhance agricultural enterprises and develop human and community resources.



Research Highlights

Agronomy Research and Variety Testing

The goal of the Agronomy Project is to increase yield and profit potential for Louisiana cotton, corn, soybean, and grain sorghum producers. Research evaluating row widths and planting methods are important to validate and improve upon the practices currently used by producers. Official variety trials for cotton, corn, and soybean are conducted to evaluate the yield potential and adaptation of new varieties before producers risk planting them on large acreages.



Breeding Corn for Resistance to Aflatoxin

Efforts are underway to introduce aflatoxin-resistance genes from tropical corn lines into inbred lines that are adapted to Louisiana growing conditions. Genetic resistance to aflatoxin accumulation would be extremely valuable to Louisiana producers because there are no chemical control methods to reduce aflatoxin to acceptable levels in contaminated grain.



Performance Bull Testing

The purpose of the bull testing program is to compare the gain potential of bulls under uniform environmental conditions. The performance bull testing program conducted at the Dean Lee Research & Extension Center began in 1958 and is one of the oldest programs in the United States.

Weed Science Research

Research responsibilities include the evaluation of weed control and crop response to new and currently registered herbicides, development of weed management systems, herbicide resistance, and programs utilizing genetically modified crops for corn, cotton, grain sorghum, soybean, and wheat in the Lower Red River Valley of Louisiana. Identification and documentation of herbicide resistant weeds and the development designed to evade or mitigate weeds that could or have developed resistance to herbicides.

Beef Cattle

Studies are being conducted investigating specific genetic factors impacting disease resistance / susceptibility in growing beef cattle. Other studies are also being conducted exploring genetic influences for improved heat tolerance in Louisiana's sub-tropical environment.



Dean Lee Research Station Office

Address:

8105 Tom Bowman Drive
Alexandria, LA 71302

Location: 6 miles south of Alexandria on Hwy 71 adjacent The LSUA campus

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Web site:

LSUAgCenter.com/DeanLeeStation

Office Hours:

7:30 a.m.—4 :30 p.m.
Monday-Friday

Danny Coombs

Research Station
Coordinator/Professor
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Size: 3155 acres including 900 acres of pasture, 650 acres row crops and 1200 acres of hardwood timber.

Research focus:

- Production Agronomy
- Beef Cattle Production
- Performance Bull Testing
- Weed Science
- Corn Improvement

Significance of Research

—Research on agronomic practices can make Louisiana producers more competitive in a global market.

—Over 200 varieties were tested in the 2010 soybean variety trials. These tests provide important information to farmers for variety selection.

— Over 8000 bulls owned by Louisiana beef cattle producers have been tested in two 112-day feedlot test that have been conducted since the bull Performance Testing program began.

—Research findings will result in healthier, more heat-tolerant cattle being produced and ultimately increased productivity for both cow-calf and stocker production systems.

2009 Industry Facts

-34 million bushels of soybeans were produced on 1 million acres in Louisiana by 2,300 producers with a value of \$369 million dollars.

-602,000 beef cattle are located on 11,500 farms/ranches in Louisiana with a total value of \$365 million dollars.

-388,000 bales of cotton were produced by 510 producers with a total value of \$130 million dollars.

-1,700 producers grew 82 million bushels of corn, grain sorghum and wheat on 705,000 acres with a total value of \$363 million dollars.

Data from the Louisiana Ag Summary
Web site: LSUAgCenter.com/agsummary

Louisiana Agricultural Experiment Station

Louisiana's unique combination of crops — ranging from corn, cotton, rice and sugarcane to extensive forestry, poultry, cattle and fisheries industries — presents challenges for providing research-based information to ensure sustainable agricultural production systems.

To address the needs of these industries, the Louisiana Agricultural Experiment Station operates 11 departments shared by the LSU AgCenter and the LSU College of Agriculture, as well as 20 research locations across the state. To fund the basic and applied research, scientists compete for federal and state grants and checkoff dollars provided by some farmers' groups, along with state and federal dollars. Many of the facilities also sustain their research operations through the sale of agricultural commodities produced on the stations.

The LSU AgCenter has the most successful record of commercialization of intellectual property in the LSU System. Since 2000, nine new companies have been started based on licensed technology from LSU AgCenter. The income is distributed among the LSU System, the inventors and more research.



Future Plans

Agronomy Research

Research efforts will continue to address the changing landscape of crop production methods and techniques. The commodity markets will continue to influence Louisiana crop production and new crops and rotations, including bio fuel crops, will be researched as needed.

Up-to-date research on newly released varieties will be a focus area of the program in the future. As higher-yielding varieties are continually introduced, research on their management and adaptation will be needed to optimize production and profitability for Louisiana farmers. In cotton, corn, and soybean, complex combinations of genetic technologies are now included in the seed. Management of these genetic technologies, and information such as when and where they are needed, will be an important part of variety testing in the future.

Weed Science

Research efforts will continue to address crop and weed response to herbicides and to develop economical and environmentally feasible weed management strategies for the betterment of crop producers in the Louisiana Lower Red River Valley.

Beef Cattle

Research will continue on studying various genetic considerations as well as management aspects for improved beef cattle production in central Louisiana.

