Dean Lee Research and Extension Center

ABOUT THE LSU AGCENTER

The LSU AgCenter provides innovative research, information, and education to improve people's lives. Working in a 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

The Dean Lee Research and Extension Center is one of the most diverse research stations in Louisiana with research efforts in beef cattle, corn, cotton, forages, grain sorghum, soybean, sugarcane, sweet potato, and wheat.

Beef Cattle and Forages

Interactions between nutrition, reproduction, and the environment are evaluated utilizing Brangus and Brangus-cross cattle. The effects these interactions have on cattle performance, as well as best management practices, are assessed. Forage research is concentrated on determining the productivity and evaluation of winter and summer annual forages under grazing conditions and their inclusion in sustainable year-round forage systems. Evaluation of management practices to increase profitability of the beef herd is continuously warranted.

Agronomy

The goal of the Agronomy Program is to increase yield and profitability of Louisiana corn, cotton, grain sorghum, soybean, sugarcane, and wheat. Agronomic research efforts include fertility, crop row widths, planting methods, and crop growth efficiency. Official variety evaluations for cotton, corn, grain sorghum, soybean, and wheat are conducted to evaluate yield potential and adaptation of new varieties. These efforts are important to assist in validating crop production techniques and to help improve upon the best management practices currently utilized by producers.

Field Crops Entomology

Research is focused on optimizing insect control strategies while minimizing environmental impact. This involves evaluating new and existing insecticides, developing and updating economic thresholds for field crops, characterizing and quantifying insecticide resistance in target insects, identifying and documenting invasive insect species, and creating integrated pest management (IPM) programs. In addition, research also aims to investigate management strategies to evade or mitigate insects that could develop or have developed resistance to insecticides. Focusing on these key areas will contribute to long-term sustainability and effective insect pest management in agriculture.

Field Crops Plant Pathology

Research is conducted to evaluate and develop effective plant disease management programs in cotton, corn, grain sorghum, small grains, and soybean. The goal is to develop effective strategies for our stakeholders utilizing cultural practices, genetic resistance, and fungicides. Some of these efforts are directed toward assessing the impact of planting date, identifying disease resistant varieties, and evaluating fungicides for disease development. Other research is aimed toward monitoring for pathogen resistance to fungicides. The unbiased results from this research is used by stakeholders to optimize their production systems and maximize profits.

Weed Management

Research efforts focus on development of strategies to manage weedy pests in corn, cotton, grain sorghum, soybean, and wheat that are economically and environmentally feasible.

Dean Lee Research and Extension Center

8105 Tom Bowman Drive
Alexandria, LA 71302

Location:
The station is located six miles south of Alexandria on Hwy. 71, adjacent to the LSU - Alexandria campus.

Phone:
(318) 473-6520

Email:
dstephenson@agcenter.lsu.edu
tsmith@agcenter.lsu.edu

Website:
https://www.lsuagcenter.com/portals/our_offices/research_stations/deanlee

Office Hours:
7:30 a.m.-4:30 p.m.
Monday-Friday

Research Station Coordinator/Professor
Daniel O. Stephenson, IV
dstephenson@agcenter.lsu.edu

Director – Central Region
Tara Smith
tsmith@agcenter.lsu.edu

Size:
3,000 acres, including 560 acres of field crops research and 820 acres in pasture and beef cattle research. The station also 1,360 acres of timber and wetlands.

Research focus:

- Agronomy and hybrid/variety testing
- Insect, Plant Disease, and Weed Management in field crops
- Beef cattle and Forage research

SIGNIFICANCE OF RESEARCH

- Research evaluating agronomic and pest management practices that can make Louisiana products competitive in a global market.
- Beef cattle research provides information to the stakeholders to improve cattle health and increase productivity.
- Forage research is aimed at suitability for year-round grazing systems with improved efficiencies.
- Each year, over 50 cotton varieties, 50 corn hybrids, 25 grain sorghum hybrids, and 100 soybean varieties are evaluated in the LSU AgCenter Official Variety/Hybrid Trial. These studies provide important information to farmers for variety/hybrid selection.
- Disease resistant crop varieties/hybrids have been identified in the Official Variety/Hybrid Trials and Plant Introduction tests. These varieties can be utilized by stakeholders which reduces the need for fungicides for disease management. This also reduces the pesticide load in the environment.
- Evaluation of insect and weed management programs to provide Louisiana crops producers with strategies that can increase productivity while being economically and environmentally feasible.

2020 LOUISIANA AGRICULTURAL STATISTICS

- Total gross farm value generated by beef cattle was approximately $363 million.
- Gross farm value of corn, cotton, grain sorghum, soybean, sugarcane, sweet potato, and wheat in Louisiana was $1.65 billion.
- Statewide acreage of crops researched at the Dean Lee Research and Extension Center are:
    - Corn – 488,000
    - Cotton – 164,000
    - Grain sorghum – 7,800
    - Soybean – 966,000
    - Sugarcane – 496,000
    - Sweet potato – 6,900
    - Wheat – 12,000.

Data from the Louisiana Ag Summary at www.LSUAgCenter.com/agsummary.

FUTURE PLANS

- 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 will be researched as needed.
- Research on newly released varieties/hybrids that contain tolerances to various herbicides, insects, and diseases will be a focus area of the program in the future. As higher-yielding varieties/hybrids are continually introduced, research on their management and adaptation will be needed to optimize production and profitability for Louisiana farmers.
- With the growth of sugarcane acreage in Central Louisiana, research focusing on sugarcane agronomy will continue to provide Central Louisiana producers with regionally based information.
- Research will be initiated to determine best management practices for blackberry, mayhaw, and pecan.
- The LSU AgCenter is committed to providing our stakeholders with unbiased information on disease, insect, and weed management. Therefore, research will continue in the future and evolve with the changing agricultural landscape to address stakeholder needs and keep them profitable.

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 14 departments shared by the LSU AgCenter and the LSU College of Agriculture, as well as 15 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, 18 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.

LSU AgCenter
Research · Extension · Teaching

For the latest research-based information on just about anything, visit our website:
LSUAgCenter.com

Dr. Matthew Lee, LSU Vice President for Agriculture, Louisiana State University Agricultural Center, Louisiana Agricultural Experiment Station, Louisiana Cooperative Extension Service, LSU College of Agriculture. The LSU AgCenter and LSU provide equal opportunities in programs and employment.