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

Entomology

This project is involved in integrated pest management (IPM) research to determine optimum strategies to reduce the destructive impact of insect pests on most agronomic crops while minimizing environmental risks. Significant effort has been focused on evaluating transgenic technology to determine the impact on overall strategies for insect pest management in row crop production. Research is also conducted to develop IPM strategies that minimize the potential for pesticide resistance in crop damaging insects.

Plant Pathology

Research in plant pathology is focused on evaluating strategies to control or minimize the impact of plant diseases on crop production and profitability. Input is provided to plant breeders to assist with development of varieties with resistance or tolerance to many of the prevalent diseases of row crops. Fungicide efficacy and potential benefit are routinely evaluated. Results from this program are used extensively by county agents, producers and agricultural consultants to determine needs for disease control in most agronomic row crops.

Row Crop Agronomy

There has been a significant research effort in conservation tillage for agronomic crops grown in northeast Louisiana. Results from these studies have led to widespread utilization of reduced tillage in crop production in the area. Other agronomic practices, such as plant population, planting date, row spacing, and fertilization are also evaluated. Varieties of most agronomic crops are evaluated at the research station and strategies are developed for producing multiple crops on a given land area within the same year.

Weed Science

The research basis is to develop weed management strategies for rice, corn, soybean, cotton and grain sorghum. There are four main areas of work: 1) preplant, 2) in-season, 3) post-harvest and 4) fall weed management. Crop and weed response to new and existing herbicides and herbicide resistance management are important components of the research effort.
Significance of Research

- Pest management strategies developed at this location are widely adopted and reduce the incidence of resistance in insect pests.
- Agronomic research has been instrumental in widespread adaptation of conservation tillage practices in row crop production in Louisiana.
- Research conducted in plant pathology provides information and solutions to minimize the effects of potential disease outbreaks.
- Effective weed management programs have been developed through research to protect yields of all major agronomic crops in the area.
- Research at the Macon Ridge Research Station is focused on improving profitability of agriculture through the use of environmentally sound production practices.

2014 Industry Facts

- Total economic contribution of crops researched at the Macon Ridge Research Station to Louisiana was more than $2 billion in 2014.
- Total economic contribution of $2 billion represented over 49% of the total contribution of all crop enterprises.
- The twelve-parish Northeast Region served by the Macon Ridge Research Station accounts for approximately 77, 79, 43, 65, 18, and 58 percent of the cotton, corn, grain sorghum, soybean, rice, and wheat, respectively, produced in Louisiana.

Data from Louisiana Ag Summary
http://www.lsuagcenter.com/agsummary/

Future Plans

Agriculture production is a mainstay of the Louisiana economy and personnel at the Macon Ridge Research Station are dedicated to providing research information important to continuing profitability in agriculture production. Research efforts will continue to focus on evaluating new technologies available in agriculture to determine the potential benefits when utilized in production fields. New crop varieties and pest control technologies will be a part of these evaluations. Research with crop rotations, tillage, fertilization and management effects on disease, insect and weed impacts will be conducted.

Weed science efforts will continue to focus on resolving known and anticipated weed problems in northeast Louisiana. Research has been initiated and will continue with crops potentially useful in the emerging biofuels industry. All research efforts will focus on providing information to sustain long term agriculture production in an environmentally sound manner.

2015 Northeast Region Rolling Crops Field Tour
The LSU AgCenter will host a “Rolling Crops Field Tour” on Thursday, July 23, 2015. The tour will travel to demonstration plots in Concordia, Catahoula and Franklin parishes highlighting irrigation, weed management, and cotton varieties. The tour will end at the Macon Ridge Research Station, highlighting insect pest & disease management, soil fertility, and soybean varieties.

April 2015

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 10 departments shared by the LSU AgCenter and the LSU College of Agriculture, as well as 17 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, fifteen 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.

For the latest research-based information on just about anything, visit our Web site: LSUAgriculture.com