

# H. Rouse Caffey Rice Research Station Profile



## Report to Stakeholders

May 2019

### 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

#### Rice Varieties

Rice varieties developed at the LSU AgCenter's H. Rouse Caffey Rice Research Station are grown not only in Louisiana but throughout the southeastern United States. Rice variety development research includes work on long grains, medium grains, and specialty-grain types. Variety development focuses on different (non-GMO) herbicide systems, including conventional, Clearfield, and Provisia. The station released the first specialty-grain type variety that incorporates Clearfield resistance in 2018. This variety (CLJ01) is a Jazzman (Jasmine) type for use in the Clearfield Production System.



#### Clearfield Rice

The technology that has led to the advent of the Clearfield Production System for rice was derived from research conducted at this LSU AgCenter facility. The technology allows for the control of rice weeds, including weedy (red) rice. Clearfield rice currently is grown on more than 48 percent of the southern U.S. rice acreage. Most of this acreage is seeded with Clearfield varieties that also were developed at this research station.



#### Foundation Seed Rice

One of the most important functions of the LSU AgCenter's H. Rouse Caffey Rice Research Station is the production of foundation rice seed. Foundation seed is the first step in the commercialization of a rice variety.



#### Puerto Rican Connection

Because of its Puerto Rican connection, the H. Rouse Caffey Rice Research Station's breeding program squeezes three growing seasons out of a year, accelerating the process of developing new rice varieties. Without the nursery program at LaJas, Puerto Rico, the breeding program would only be able to grow one generation of rice a year.



### H. Rouse Caffey Rice Research Station

**Address:** 1373 Caffey Road  
Rayne, LA 70578

**Location:** The main unit is 1 mile east of Crowley off U.S. 90 on Caffey Road just north of I-10. The south unit is 1 mile south of Crowley on LA Highway 13.

**Phone:** 337-788-7531

**Fax:** 337-788-7553

#### **Website:**

[LSUAgCenter.com/RiceStation](http://LSUAgCenter.com/RiceStation)

#### **Office Hours:**

8:00 a.m. - 4:30 p.m.  
Monday-Friday

#### **Donald Groth**

Resident Coordinator  
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**Size:** 1,040 acres, including  
720 acres in the main unit and  
320 acres in the south unit

#### **Research Focus:**

##### • Rice

- All aspects of rice production improvement
- Rice variety development
- Marker-assisted breeding
- Agronomics and management
- Insect, disease, and weed control

##### • Rotational Crops

- Soybeans, grain sorghum, wheat, and sweet sorghum management, variety evaluation, and disease control

## Significance of Rice Research

- Rice varieties developed at the LSU AgCenter's H. Rouse Caffey Rice Research Station are grown not only in Louisiana but throughout the southeastern United States.
- Over the past 109 years, the H. Rouse Caffey Rice Research Station has developed 54 varieties that have increased rice yields, quality, disease resistance, and the overall economic viability of the Louisiana and southern U.S. rice industry.
- Research conducted on agronomic practices at the H. Rouse Caffey Rice Research Station increases production and contributes to the state's economic development.
- Production of foundation rice seed developed at the H. Rouse Caffey Rice Research Station provides commercial rice for rice producers.
- Support of rice and crawfish production provides essential habitat for wildlife species and increases earning potential for rice producers.

## 2018 Rice Industry Facts

- More than 3.1 billion pounds of rice produced in Louisiana.
- 436,000 acres of rice in production and 859 producers in 2018.
- On average, 71.3 ctw of rice produced per acre.
- Rice is produced in 31 parishes.
- Total farm-gate value of rice production was \$375.2 million, and value added to rice production was \$124.9 million, for a total economic contribution of \$500.1 million.
- Rice is one of the most durable crops in Louisiana, where hurricanes can be an issue during the growing season.

**Data from the Louisiana Ag Summary**  
[www.LSUAgCenter.com/agsummary](http://www.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 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.

## Future Plans

Rice variety development will continue to be a mainstay of the research program at the LSU AgCenter's H. Rouse Caffey Rice Research Station. While two research projects focus specifically on variety and hybrid development, most other projects contribute to these efforts through collaborative research. Future variety development will be facilitated through increased use of techniques, such as marker-assisted breeding.

The H. Rouse Caffey Rice Research Station continues to expand research into the development of rice hybrids. This program is being conducted in cooperation with the Guangxi Academy of Agricultural Sciences in Nanning, China and the Tianjin Academy of Agricultural Science in Tianjin, China. The Puerto Rican nursery will continue to be critical to variety development efforts, and plans are to increase the size of the nursery to accommodate the rice hybrid-development efforts.

Rice diseases, insects, and weeds are major constraints for Louisiana rice production, and research will continue in these three critical areas.

Research will continue in all rotational crops which are grown in rotation with rice in southwest Louisiana.

The H. Rouse Caffey Rice Research Station conducts an annual field day. The next field day will be on **June 26, 2019**, and will highlight current breeding, production, disease, and pest research projects.



For the latest research-based information on just about anything, visit our website:  
[LSUAgCenter.com](http://LSUAgCenter.com)