

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Field Crops (Global Food Security & Hunger)

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	5%		4%	
102	Soil, Plant, Water, Nutrient Relationships	5%		11%	
103	Management of Saline and Sodic Soils and Salinity	0%		2%	
111	Conservation and Efficient Use of Water	0%		7%	
136	Conservation of Biological Diversity	0%		2%	
201	Plant Genome, Genetics, and Genetic Mechanisms	0%		4%	
202	Plant Genetic Resources	0%		3%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		5%	
204	Plant Product Quality and Utility (Preharvest)	5%		5%	
205	Plant Management Systems	50%		10%	
206	Basic Plant Biology	0%		1%	
211	Insects, Mites, and Other Arthropods Affecting Plants	10%		8%	
212	Diseases and Nematodes Affecting Plants	5%		18%	
213	Weeds Affecting Plants	5%		8%	
215	Biological Control of Pests Affecting Plants	0%		1%	
216	Integrated Pest Management Systems	10%		7%	
405	Drainage and Irrigation Systems and Facilities	0%		2%	
601	Economics of Agricultural Production and Farm Management	5%		2%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	35.0	0.0	45.0	0.0
Actual Paid	13.5	0.0	38.2	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
770809	0	993746	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
770809	0	993746	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1405214	0	7693133	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The LSU AgCenter strives to serve a very diverse food and fiber sector in the state of Louisiana. With the farm gate value of plant-based enterprises in the state exceeding \$7.34 billion in 2013, the importance of agriculture as an economic driver in the state is evident. This is particularly evident in regions of the state where production agriculture, and more specifically, row crop agriculture, is the single largest segment of those rural economies. To ensure the economic well-being of the agricultural industry and its ability to continue to be a major contributor to the state's economy, the LSU AgCenter provides a variety of educational opportunities and research based information to row-crop operations to assist them in making better production, environmental, and financial decisions. Additionally, the LSU AgCenter continues to lead the way in developing best management practices to ensure the environmental impact from production agriculture is minimized. Educational opportunities and information in the areas of financial management, risk management, and marketing are also offered.

Educational activities utilize group and individual methods; mass media; research studies; BMP demonstrations; field days and social media tools such as Facebook, blogs, Twitter and YouTube. Decision support tools such as Smart Phone apps and spreadsheets have sparked interest among producers. Each component of the program is designed to provide producers with valuable information to help them make decisions that will result in increased yield, reduced costs, increased revenues, and to mitigate environmental impacts. During this reporting period, 1,198 group events such as classes and workshops were conducted. In addition, 32 grower field days and 85 result field demonstrations were conducted.

This year, the **rice program** was evaluated during our four-year base program evaluation process. The data from that evaluation is included in the Outcomes Section of this report.

2. Brief description of the target audience

Approximately 6,500 growers with slightly over 3 million acres of land in production:

- **Cotton**--287 producers with 124,415 acres in production produced 187.4 million pounds of cotton.
- **Feed grains**--1,977 producers with 754,717 acres in production produced 131.1 million bushels of feed grains, including corn, grain sorghum and oats.
- **Rice**--1,023 producers with 410,902 acres in production produced 3.1 billion pounds of rice.
- **Soybeans**--2,394 producers with 1.10 million acres in production produced 53.8 million bushels of soybeans.
- **Sugarcane**--479 producers with 439,256 acres in production produced 1.6 million tons (3.21 billion pounds) of raw sugar and 96.5 million gallons of molasses.
- **Sweet potatoes**--35 producers with 7,322 acres in production produced 3.5 million bushels of sweet potatoes.
- **Wheat**--506 producers with 232,813 acres in production produced 14.7 million bushels of wheat.

3. How was eXtension used?

The use of eXtension was limited in this program to pest management education for parish ANR agents, ag consultants and crop advisors.

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	20359	384642	12567	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2014
Actual: 3

Patents listed

Rice Cultivar Designated CL261
Rice Cultivar Designated CL111
Rice Cultivar Designated CL131

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	28	96	124

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Web page visits
Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of Web page views

Year	Actual
2014	2969361

Output #3

Output Measure

- Number of field demonstrations

Year	Actual
2014	85

Output #4

Output Measure

- Number of grower field days

Year	Actual
2014	32

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increased profitability and sustainability of Louisiana crops and cropping systems.

Outcome #1

1. Outcome Measures

Increased profitability and sustainability of Louisiana crops and cropping systems.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Rice is one of the most economically important agricultural crops grown in the state of Louisiana annually. In 2014, rice was grown on approximately 456,047 acres by 1,040 producers. Average yield in 2014 was 7,539 pounds per acre, slightly lower than the record yield of 7,600 pounds per acre set in 2013. The gross farm value of the state's rice crop was \$515.7 million for 2014, \$21 million (4 percent) more than the previous year. The 2014 rice crop value added estimate of \$154.7 million, when combined with farm-gate value, brought the total economic value of rice production in Louisiana to \$670.4 million. The higher acreage, combined with high yields, accounted for the significant increase in overall farm-gate value in 2014. Extension education programs for rice focus on providing producers, seedsmen, agricultural consultants, and other industry personnel with research established best management practices. The extension program for rice is an important infrastructure component and educational arm of the Louisiana rice industry.

What has been done

The rice educational program of the LSU AgCenter is comprehensive involving both extension and research personnel on the state and local level. A strong stable working relationship exists between research rice scientists, extension specialists and county agents. Educational methods include, but are not limited to producer meetings, newsletters (at both the state and local level), field result demonstrations, electronic mail, social media, newspaper articles, radio and television interviews, advisory committees, and individual farm visits.

Results

An on-line Qualtrics survey was distributed to Louisiana rice producers by e-mail modified from

existing county agent e-mail distribution lists. A total of 90 surveys were completed that were representative of 8.6% of Louisiana's 1040 rice producers. Approximately 75% of respondents indicated that their yields increased over the last four years. Respondents also indicated that LSU AgCenter extension education programs influenced their selection of rice variety, fertilizer best management practices (BMP), herbicide selection, fungicide selection and use, and insect management practices. Approximately 75% of respondents indicated that they use the LSU AgCenter resources when they seek information to assist them in making decisions regarding their rice farming operation. Responding producers also had a preference for some educational materials (Rice Handbook, RVMT, Field Notes newsletter, and LSU AgCenter website) as compared to others (RiceScout application, DD50% program, and blogs). E-mail was the preferred distributional method of educational information while Twitter, Instagram, and Facebook were used less frequently.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
102	Soil, Plant, Water, Nutrient Relationships
136	Conservation of Biological Diversity
201	Plant Genome, Genetics, and Genetic Mechanisms
202	Plant Genetic Resources
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
206	Basic Plant Biology
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Diseases and Nematodes Affecting Plants
213	Weeds Affecting Plants
216	Integrated Pest Management Systems
601	Economics of Agricultural Production and Farm Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation

{No Data Entered}

V(I). Planned Program (Evaluation Studies)

Evaluation Results

See Results section of qualitative impact statement.

Key Items of Evaluation