

LOUISIANA RICE RESEARCH VERIFICATION PROGRAM 2004

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Introduction

The Louisiana Rice Research Verification Program (LRRVP) began in 1997 in three parishes: Allen, Calcasieu and Jeff Davis. In 1998 the program was funded and expanded to ten parishes: Acadia, Avoyelles, Calcasieu, East Carroll, Evangeline, Jeff Davis, Madison, Morehouse, St. Landry and Vermilion. In 1999 the program was funded again and conducted in ten parishes with the absence of Morehouse parish and addition of Catahoula parish. In 2000 funding continued. Ten parishes participated but included Morehouse parish and discontinued Madison parish. Funded again in 2001, the ten parishes included Acadia, Allen, Avoyelles, Calcasieu, Concordia, Evangeline, Jeff Davis, Richland, St. Landry and Vermilion parishes. In 2002, the funding continued with the same ten parishes participating from the previous year with the addition of Beauregard parish. With the discontinuation of Calcasieu parish, the remaining ten parishes from 2002 participated in 2003 (Figure 1).

The fields were visited on at least a weekly basis by a Specialist, County Agent or the Extension Associate. Production practice recommendations were made by the Specialist or Agent. These recommendations included, but were not limited to: fertilization, weed control, disease control, insect control and water management to a limited degree. The fields were followed from planting to harvest.

Yield data were collected for each of the fields (Table 1). Yields of the first crop averaged lbs/acre (bu/acre or bbl/acre) at 12 % moisture. When the second crop yields are added, the yield averages increase to lbs/acre (bu/acre or bbl/acre).

Economic data continue to reveal large production cost differences, especially in water costs, between growers. It is also clear that more needs to be done to help farmers reduce production costs (Table 2).

The program continues to provide an accurate evaluation of current recommendations and provide insight into other areas of research. The educational value of the program to all concerned (farmers, researchers and extension personnel) increases each year.

¹ This project is supported in part by funding provided by rice producers through their check-off contributions to the Louisiana Rice Research Board.

Table 1. 2004 Louisiana Rice Research Verification Program Yield Summary

Parish	Acres in Verification Program	Verification Yield per Acre @ 12% Moisture		Verification Program			Average Parish Yield ¹	Parish Acreage	Total Parish Production
		1st Crop Alone	Second Crop	Total Yield per acre	1st Crop Production	Total Production			
Allen	53.2	5567		5567	296,164.4	296,164.4			0.0
Avoyelles	33.3	5307		5307	176,723.1	176,723.1			0.0
Beauregard	21.8	5338		5338	116,368.4	116,368.4			0.0
Concordia	82.3	5843		5843	480,878.9	480,878.9			0.0
East Carroll	54.8			0	0.0	0.0			0.0
Evangeline	30.7	5638		5638	173,086.6	173,086.6			0.0
Jeff Davis	42.3	4682		4682	198,048.6	198,048.6			0.0
Natchitoches	47.2	7144		7144	337,196.8	337,196.8			0.0
St. Landry	60.1	7760		7760	466,376.0	466,376.0			0.0
Vermilion	30.0	5459		5459	163,770.0	163,770.0			0.0
	455.7				2,408,612.8	2,408,612.8		0	0.0
Average yield (lbs./Acre)					5286	5286			#DIV/0!

¹ Estimated, Includes 2nd crop, and adjusted to 12% moisture.

Table 2. 2004 Louisiana Rice Research Verification Program Yield, Milling and Economic Summary

Parish	Variety	Yield @ 12% Moisture (cwt/acre)¹	Milling (% Whole / % Total)	Variable Costs (\$/acre)²	Cost of Production (\$/cwt)²	Return on Variable Costs (\$/acre)^{2,3}
Allen	Cheniere		60.9 / 71.2		#DIV/0!	0.00
Avoyelles	Cheniere	53.07	59.9 / 71.0		0.00	398.03
Beauregard	CL 161		62.1 / 70.8		#DIV/0!	0.00
Concordia	Cocodrie	58.43	64.6 / 71.8		0.00	438.23
East Carroll	Cheniere		66.7 / 74.1		#DIV/0!	0.00
Evangeline	CL 161		62.8 / 69.9		#DIV/0!	0.00
Jeff Davis	CL 161		59.1 / 73.9		#DIV/0!	0.00
Natchitoches	Cocodrie	71.44	67.5 / 73.4		0.00	535.80
St. Landry	Cheniere		63.7 / 71.4		#DIV/0!	0.00
Vermilion	Cheniere		59.4 / 71.7		#DIV/0!	0.00

1 - Figure includes ratoon crop yield of cwt/acre

2 - Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transporting, drying, storing or fixed costs.

3 - This value was obtained using a selling price of /cwt.

4 - Ratoon Crop

ALLEN PARISH

The field in Allen parish presented several challenges to all involved with the verification program. Uneven stands resulted from a combination of too great a difference in elevation within the paddies for the cooler than normal conditions at planting. Where water was too deep stand establishment was poor while the other areas where soil was exposed had a good stand, but additional weed problems.

One of the major weeds in this field and many in Allen parish is southern watergrass. This pest has resisted all attempts to control it with herbicides. Drs. Ron Strahan and Eric Webster have continued to screen new herbicides with disappointing results. Their predecessors had no better success with this grass which seems inconsequential at first only to become very competitive later in the season. The herbicide program we selected was clearly not the best one to deal with the problem.

Rice water weevil populations were heavy as was expected given the history of their presence in that area. The field was sprayed twice and a third was recommended, however the grower elected not to because of costs. In the deeper areas of the field where stands were already thin root damage was obvious by mid-season.

Cheniere, the variety planted in this field, looked very good by the end of the season despite the problems noted above. Yields were expected to be at least 800 pounds per acre higher than were harvested, a disappointment for all parties involved. We harvested 5567 lbs/A dry (34.4 bbls/A or 124 bu/A). The field was fertilized and flooded to produce a ratoon crop. Ratoon crop yielded 1050 lbs/A dry (6.5 bbls/A or 23 bu/A).

ALLEN PARISH

Cooperator: Hine Unkel

Agent: Eddie Eskew

Field Size: 53.2 Acres

CULTURAL PRACTICES

Variety: Cheniere

Method of Planting: Water Plant

Water Management: Pinpoint Flood

- Dry seed.

Seeding Rate: 110 lbs/Acre

Date of Planting: March 31

Date of Emergence: April 8

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	May 25	
PD	June 9	
50 % Heading	June 23	
Drain for Harvest	July 23	
Harvest	August 7	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	55.67	60.9 / 71.2	344.98	5.21	151.52
2 nd Crop	10.53				

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
180 # 46-0-0	April 17	190 # 0-20-30	March 22	LSU
140 # 46-0-0	May 27			
160 # 46-0-0	August 9 (2 nd Crop)			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Alligator, Smartweed, Sedge, Spikerush, Southern Watergrass	April 16	1 gal. Duet + 0.45 oz. Londax
Alligator, Smartweed	May 26	2 pts. 2, 4-D

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
None	-----	None

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	April 22	2.56 oz. Karate
Rice Water Weevil (Adults)	May 5	2 oz. Karate
Rice Stinkbug	June 29	0.5 lb. Methyl

AVOUELLES PARISH

At this location we faced several challenges. Following stand establishment the field was flooded by a three inch rain. This delayed herbicide application. Three quarts of propanil were applied to buy some time because rice plants were too small to tolerate a full flood. Another 3 inch rain followed the herbicide application. We intended to make a second herbicide in combination with an insecticide application, then apply nitrogen and establish permanent flood. Before we could accomplish this the field got 17 inches of rain in the course of a week which we decided to leave on the field because weed control to that point was excellent. This was a poor decision because only 100 pounds of ammonium sulfate per acre had been applied prior to the flood necessitating additional nitrogen applications into standing water. LSU AgCenter discourages applications of nitrogen into young flooded rice, a recommendation we should have heeded. Poor plant response to applied nitrogen was observed as research predicted it would be.

Other nutrient problems surfaced as an apparent phosphorus deficiency developed later in the season. An application of diammonium phosphate was made in an effort to avoid serious yield reduction. Without the ability to measure differences in yield in treated versus untreated areas it was impossible to distinguish between whether the response was cosmetic or real.

Insecticides were applied for both rice water weevil and rice stink bug as per AgCenter recommendations. No fungicide was required because no disease was picked up in scouting, probably as a consequence of a thin stand and low rainfall later in the season.

Yield was a disappointing 5307 lbs/A @ 12% (32.8 bbls/A or 118 bu/A).

AVOUELLES PARISH

Cooperator: Matthew Zaunbrecher

Agent: Carlos Smith

Field Size: 33.3 Acres

CULTURAL PRACTICES

Variety: Cheniere

Method of Planting: Drill Plant

Water Management: Delayed Flood

- Seed treated with Fungicide and GA.

Seeding Rate: 93 lbs/Acre

Date of Planting: March 27

Date of Emergence: April 11

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	June 9	
PD	June 23	
50 % Heading	July 10	
Drain for Harvest	August 4	
Harvest	August 18	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1st Crop	53.07	59.9 / 71.0	NR	NR	NR
2nd Crop	-----	-----	-----	-----	-----

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
100 # 21-0-0	April 22	None	-----	LSU
150 # 46-0-0	May 23			
150 # 18-46-0	June 10			
100 # 46-0-0	June 24			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Sesbania, Mexicanweed, Smartweed, Barnyardgrass, Junglerice, Balloon Vine	April 28	3 qts. Stam
Alligator, Smartweed, Mexicanweed	May 22	1.25 oz. Londax + 1% COC

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
None	-----	None

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	May 20	4 oz. Mustang Max
Rice Stinkbugs	July 15	0.5 lb. Methyl
Rice Stinkbugs	July 29	

BEAUREGARD PARISH

In Beauregard parish the verification field was planted with CL 161 which turned out to be fortunate. After the presprouted seed were flown in and the field drained it was obvious the seed bed lacked sufficient preparation. Because CL 161 was chosen, a delayed flood water management system was planned which permitted flushing rather than attempting to establish a shallow flood. The result was good seedling establishment where very poor results might have been obtained under either a pinpoint or continuous flood water management system as a means of red rice control. Some stand loss did occur where blackbirds fed on one side of the field. That area was reseeded a few days later.

Accompanying the second application of Newpath was Regiment herbicide and Karate insecticide. The ability to apply the insecticide in this manner also was a consequence of using the delayed flood water management which in this case was dependent on the use of Clearfield rice. Regiment was used in an effort to control alligatorweed and other broadleaf weeds not controlled by Newpath. It was able to suppress alligatorweed, but eventually the weed recovered requiring an application of 2,4-D.

CL 161 is extremely susceptible to sheath blight disease so it was not surprising to have to apply Quadris fungicide to control this disease. Even though the treatment was made early it held long enough to protect the crop.

By harvest the field had the appearance of a 6400 to 7000 lb/A (40 to 50 bbl/A; 142 to 155 bu/A) yield potential. It yielded a very disappointing 5864 lbs/A green. It was immediately fertilized and flooded to produce a second crop. Second crop yielded 1568 lbs/A (9.7 bbls or 35 bu/A).

BEAUREGARD PARISH

Cooperator: Ronald Habetz

Agent: John Harris

Field Size: 21.8 Acres

CULTURAL PRACTICES

Variety: CL 161

Method of Planting: Water Plant

Water Management: Delayed Flood

- Pre-sprouted seed.

Seeding Rate: 84 lbs/Acre

Date of Planting: March 22

Date of Emergence: March 30

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	May 18	
PD	June 3	
50 % Heading	June 19	
Drain for Harvest	July 16	
Harvest	August 2	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	53.38	62.1 / 70.8	434.91	6.30	82.51
2 nd Crop	15.61				

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
180 # 46-0-0	April 29	None	-----	LSU
120 # 46-0-0	May 28			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Alligator, Smartweed, Rush, Mannagrass	March 30	4 oz. New Path + 1% COC
Red Rice, Alligator, Rush	April 27	4 oz. New Path + 0.5 oz. Regiment + Surfactant

- The 4 oz. New path + 0.5 oz. Regiment + Surfactant on April 27 was tank mixed with 2 oz. Karate.

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	June 9	12.3 oz. Quadris

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	April 27	2 oz. Karate

CONCORDIA PARISH

Concordia parish began as in the past few years, with an application of Command herbicide at planting, followed by a flush to promote even germination. This year the applicator overlapped Command on both sides of the field killing some rice and severely reducing its growth in other areas. Rain flooded the field shortly after emergence requiring draining to prevent stand loss before other practices could be employed.

When the plants had recovered sufficiently to tolerate a permanent flood, Duet plus Londax followed by 200 lbs of urea per acre was applied and the field flooded. The use of fipronil treated seed precluded the need for any insecticide application for rice water weevil control.

At the one to two inch panicle stage of development sheath blight had progressed to the point of requiring treatment. The history of both kernel smut and false smut warranted the use of Quilt fungicide.

Stink bugs never reached threshold prior to the drain for harvest.

By season's end this was the most picture perfect rice field we ever had in the verification program. Yield was an extremely disappointing 5843 lbs/A dry (36.1 bbls/A or 129.8 bu/A) which given the yield potential was considered a crop failure.

CONCORDIA PARISH

Cooperator: Tommy Ellett

Agent: Glen Daniels

Field Size: 82.3 Acres

CULTURAL PRACTICES

Variety: Cocodrie

Method of Planting: Drill Plant

Water Management: Delayed Flood

- Seed treated with Fungicide, GA and ICON.

Seeding Rate: 85 lbs/Acre

Date of Planting: April 9

Date of Emergence: April 20

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	June 10	
PD	June 20	
50 % Heading	July 16	
Drain for Harvest	August 4	
Harvest	August 19	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	58.43	64.6 / 71.8	264.14	4.52	174.09
2 nd Crop	-----	-----	-----	-----	-----

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
100 # 21-0-0	April 9	None	-----	LSU
200 # 46-0-0	May 28			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Barnyardgrass	April 10	1.33 pt. Command
Ducksalad, Mexicanweed, Sesbania, Barnyardgrass	May 27	1 gal. Duet + 0.2 oz. Londax + 1% COC

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	July 7	34 oz. Quilt

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Larvae)	Seed Treatment	ICON

EAST CARROLL PARISH

In East Carroll parish the field was planted to Cheniere at the rate of 60 lbs per acre, lower than the recommended seeding rate. Minor errors in planter calibration caused the problem. On the lower end of the field where moisture was adequate the plant population was fine, but where moisture was marginal stands were uneven and the population reduced. By season's end tillering had accomplished what seeding had not so that plant population should not have had an effect on yield.

The recommended herbicide program had to be altered because of nearby crops resulting in a more expensive but safer option. Weed control was excellent.

Before plants in the field could reach panicle differentiation significant sheath blight was observed. The maximum rate of Quilt was recommended when rice reached the 1 inch panicle stage of growth. Quilt was selected because of its efficacy on sheath blight and the history of kernel smut in the area.

Stink bugs never presented a problem.

At harvest some rice had lodged in areas likely to have had fertilizer over lapped. An excellent yield of 7427 dry pounds per acre (46 bbls/A or 165 bu/A) was harvested.

EAST CARROLL PARISH

Cooperator: Donovan Taves

Agent: Donna Lee

Field Size: 54.8 Acres

CULTURAL PRACTICES

Variety: Cheniere

Method of Planting: Drill Plant

Water Management: Delayed Flood

- Seed treated with ICON.

Seeding Rate: 60 lbs/Acre

Date of Planting: April 17

Date of Emergence: May 1

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	June 10	
PD	June 26	
50 % Heading	July 18	
Drain for Harvest	August 9	
Harvest	September 1	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	74.27	66.7 / 74.1	285.82	3.85	271.21
2 nd Crop	-----	-----	-----	-----	-----

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
240 # 46-0-0 + 1 gal/ton Agrotain	May 20	None	-----	LSU

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Barnyardgrass, Red Vine, Sedge, Smartweed, Crabgrass, Johnsongrass	April 24	2.66 pt. Round Up + 1.33 pt. Command
Barnyardgrass, Morningglory, Sesbania, Nutsedge, Red Vine	May 19	0.5 lb. Facet + 1 oz. Permit

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	July 5	34 oz. Quilt

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Larvae)	Seed Treatment	ICON

EVANGELINE PARISH

The Evangeline field had been traditionally water seeded, but because it was seeded with CL 161 was prepared dry and drilled. So it was surprising to see the heavy alligatorweed pressure in the field. Sedges, sesbania, signalgrass, smartweed and dayflower were also present in significant amounts. To control this wide spectrum of weeds 1.25 ounces of Londax plus .25 ounce of Permit was added to the second 4 ounce application of Newpath. The result was the best alligatorweed control we have seen. Apparently there is some synergism in the combination of Newpath and Londax even though they are chemically related.

As soon as a permanent flood was established the field received 6 inches of rain in one event. The entire field was submerged for two days following this rainfall event.

Sheath blight was found late, when panicles were around 2 inches long. We recommended an application of a reduced rate of Quadris at 5% heading. The grower was unable to get the fungicide out on time because of weather, but did have it applied about a week later than was desired.

Like the field in Beauregard parish, this field appeared to have much better yield potential than was realized. We harvested 5638 lbs/A dry (34.8 bbls/A or 125 bu/A) when we thought we would harvest at least 6800 lbs/A. We recommended fertilizing and flooding to produce a second crop, but the grower elected not to.

EVANGELINE PARISH

Cooperator: Felix Morein

Agent: Keith Fontenot

Field Size: 30.7 Acres

CULTURAL PRACTICES

Variety: CL 161

Method of Planting: Drill Plant

Water Management: Delayed Flood

Seeding Rate: 65 lbs/Acre

Date of Planting: March 28

Date of Emergence: April 6

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	May 28	
PD	June 9	
50 % Heading	July 6	
Drain for Harvest	July 29	
Harvest	August 17	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	56.38	62.8 / 69.9	282.51	5.01	140.34
2 nd Crop					

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
180 # 46-0-0	April 29			LSU
125 # 46-0-0	May 27			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Alligator, Sedge, Barnyardgrass, Sesbania, Dayflower, Smartweed, Red Rice, Signalgrass	April 18	4 oz. New Path + 1% COC
Alligator, Sedge, Sesbania, Red Rice, Dayflower, Signalgrass, Smartweed	April 29	4 oz. New Path + 1.25 oz. Londax + 0.25 oz. Permit

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	July 1	10 oz. Quadris

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
None	-----	None

JEFF DAVIS PARISH

This field was planted to CL 161 much later than is desired in the southwest portion of the state, but within the recommended dates. Two days following emergence 4 ounces of Newpath per acre were applied. In an effort to control weeds other than red rice 1 ounce of Londax and .25 ounce of Permit was recommended with the second application of Newpath. Well problems resulted in a slower than recommended flood establishment and some weed escapes.

On May 18 the area received in excess of 10" of rain overnight causing complete submergence of nearly all of the field for several days and breakage of levees in several places. Hydrogen sulfide toxicity was diagnosed about two weeks later, when the crop was nearing internode elongation, necessitating an immediate drain. The farmer noted that he had experienced this problem before, but did not know the cause. Had the verification team known of the history of the problem the drain could have been anticipated and injury reduced.

Frequent rains and the susceptibility of CL 161 to sheath blight led to heavy disease pressure in late boot. A full rate of Quadris fungicide was applied when the crop was in the mid to late boot stage. Unfortunately a 2 inch rain occurred about 2 hours after the fungicide application probably reducing its effectiveness.

Stink bugs never reached a threshold level and the field was drained for harvest on the 27th of July. The yield history on this field was not especially good and given the problems with rainfall the low yield of 4682 lbs/A dry (28.9 bbls/A or 104 bu/A) was not as disappointing as it might have been had the season been better.

JEFF DAVIS PARISH

Cooperator: Donald Berken

Agent: Eddie Eskew

Field Size: 42.3 Acres

CULTURAL PRACTICES

Variety: CL 161

Method of Planting: Water Plant

Water Management: Delayed Flood

- Dry seed with no treatment.

Seeding Rate: 95 lbs/Acre

Date of Planting: April 10

Date of Emergence: April 19

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	June 8	
PD	June 16	
50 % Heading	July 11	
Drain for Harvest	July 27	
Harvest	August 16	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	46.82	59.1 / 73.9	308.65	4.95	159.13
2 nd Crop	15.55				

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
180 # 46-0-0	May 8	50 # 0-0-60	June 10	LSU
120 # 46-0-0	June 10			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Barnyardgrass, Jointvetch, Fall Panicum, Dayflower, Alligator, Ducksalad, Sedge, Red Rice, Brook Paspalum	April 21	4 oz. New Path + 1% COC
Barnyardgrass, Jointvetch, Dayflower, Alligator, Sedge, Red Rice	May 7	4 oz. New Path + 1 oz. Londax + 0.25 oz. Permit

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	June 23	12.3 oz. Quadris

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	May 15	2 oz. Karate

NATCHITOCHEs PARISH

In Natchitoches Cocodrie was dry broadcast onto a prepared seedbed covered lightly then flushed. When the rice plants were in the 2 to 3 leaf stage we recommended 3 quarts of propanil per acre with the intention of suppressing weeds until a second herbicide application could be made just prior to permanent flood. The herbicide was never applied because rain prevented the flying service from using a local strip. When herbicide could be applied large weeds and the spectrum dictated a high rate (.67 lbs of Facet plus 1 ounce of Londax) which might have been avoided if the first application had been made. Karate insecticide was included in the spray mix to control rice water weevils.

Rainfall also delayed the midseason fertilizer application because the local strip was unusable and ferrying costs were considered prohibitive. The frequent rains provided an ideal environment for sheath blight development which required an application of Stratego fungicide. Stratego was used because of the history of kernel smut. Stink bugs never reached treatable levels.

Considering the conditions throughout the growing season the yield was excellent. The grower harvested 7144 lbs/A dry (44.1 bbls or 159 bu/A).

NATCHITOCHEs PARISH

Cooperator: John Danley

Agent: Charles Johnson and Hubert Wilkerson

Field Size: 47.2 Acres

CULTURAL PRACTICES

Variety: Cocodrie

Method of Planting: Dry Broadcast

Water Management: Delayed Flood

- Dry seed.

Seeding Rate: lbs/Acre

Date of Planting: April

Date of Emergence: April 30

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	June 9	
PD	June 28	
50 % Heading	July 20	
Drain for Harvest	August 3	
Harvest	August 31	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	71.44	67.5 / 73.4	223.67	3.13	312.13
2 nd Crop	-----	-----	-----	-----	-----

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
100 # 21-0-0	May 7	None	-----	None
# 46-0-0	May 22			
# 46-0-0				

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Barnyardgrass, Signalgrass, Pigweed, Ducksalad	May 21	0.67 lbs. Facet + 1 oz. Londax + 1% COC

- The 0.67 lb. Facet + 1 oz. Londax + 1% COC was tank mixed with 2 oz. Karate on May 21.

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	July 2	16 oz. Stratego

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	May 21	2 oz. Karate

- The 2 oz. Karate was tank mixed with the 0.67 lbs. of Facet + 1 oz. Londax + 1% COC on May 21.

ST. LANDRY PARISH

The field in St. Landry parish had not been in rice for several. The heavy clay soil was precision leveled prior to planting so that straight levees separated the long narrow field into six paddies. Cheniere was drill seeded, sprayed with Command and flushed.

When rice had reached the 2 leaf stage we recommended an application of 100 lbs/A of ammonium sulfate in an attempt to “jump start” the crop. The fertilizer application was followed with a flush to incorporate the nitrogen.

At permanent flood we recommended 175 lbs/A of urea plus 1.25 oz/A of Londax and 2.56 oz Karate. The crop moved along so well that the mid season nitrogen rate was upped from the intended 120 lbs/A to 130 lbs/A.

In spite of the frequent heavy rains throughout the growing season (flow meter data later indicated only 11 acre-inches were pumped) sheath blight came on late. This allowed for a reduced rate of Quadris fungicide to be applied in early heading.

Lack of combine operators with rice experience resulted in significant harvest losses prior to our arrival at the field. We were able to make some adjustments to the equipment and provide instructions to the operators (mainly to reduce ground speed) to help prevent further harvest losses. Even with the losses we harvested 7760 lbs/A dry (47.9 bbls/A or 172 bu/A).

The field was fertilized and flooded for second crop. Second crop yielded an outstanding 2783 lbs/A (17.2 bbls/A or 62 bu/A) for a total of 10,543 lbs/A (65 bbls/A or 234 bu/A).

ST. LANDRY PARISH

Cooperator: Joey Olivier

Agent: Keith Normand

Field Size: 60.1 Acres

CULTURAL PRACTICES

Variety: Cheniere

Method of Planting: Drill Plant

Water Management: Delayed Flood

- Dry seed treated with Fungicide and GA.

Seeding Rate: lbs/Acre

Date of Planting: March

Date of Emergence: April 9

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	May 27	
PD	June 6	
50 % Heading	July 1	
Drain for Harvest	July 23	
Harvest	August 10	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	77.60	63.7 / 71.4	253.05	2.40	537.68
2 nd Crop	27.83				

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
100 # 21-0-0	April 14	None	-----	LSU
180 # 46-0-0	April 23			
0.5 lb. AI Zinc	May 1			
130 # 46-0-0	May 21			

- The 0.5 lb. AI Zinc was tank mixed with 1.25 oz. Londax + 2.1 oz. Karate on May 1.

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Mexicanweed, Sesbania	May 1	1.25 oz. Londax

- The 1.25 oz. Londax was tank mixed with 0.5 lb. AI Zinc + 2.1 oz. Karate on May 1.

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
Sheath Blight	June 26	9 oz. Quadris

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	May 1	2.1 oz. Karate

- The 2.1 oz. Karate was tank mixed with 1.25 oz. Londax + 0.5 lb. AI Zinc on May 1.

VERMILION PARISH

The Vermilion verification field was water seeded with Cheniere and drained with the intention of using a modified pinpoint flood. According to the grower red rice was not a serious problem in the field. When the seedlings reached the 2 leaf stage we recommended Clincher to control knotgrass followed by a mixture of Londax and Permit for sedges and broadleaf weeds. Urea was applied at the rate of 180 lbs/A and the field flooded.

One week after establishing the permanent flood Karate was recommended to control rice water weevils. When we inspected the field a week later portions of the field were completely dry resulting in a loss of weed control and fertilizer in those areas. The loss of fertilizer was particularly evident as the crop approached internode elongation so we recommending topdressing a little earlier than we would have under good conditions. We did not increase the rate substantially out of concern that we might cause lodging in those areas where nitrogen was not deficient. In hindsight this was a mistake.

A possible benefit of the lower nitrogen rate was the lack of sheath blight in an area where the disease is prevalent and climatic conditions were such that the disease should have been significant. No fungicide was recommended.

This was another field that appeared to have higher yield potential than was realized at harvest. We harvested 5459 lbs/A dry (33.7 bbls/A or 121 bu/A). The field was fertilized with nitrogen and flooded for second crop. We later harvested 1365 lbs/A dry (8.4 bbls/A or 30 bu/A).

VERMILION PARISH

Cooperator: Ted Girouard

Agent: Howard Cormier

Field Size: 30.0 Acres

CULTURAL PRACTICES

Variety: Cheniere

Method of Planting: Water Plant

Water Management: Pinpoint Flood

- Pre-Sprouted seed with Fungicide.

Seeding Rate: 110 lbs/Acre

Date of Planting: March 24

Date of Emergence: March 30

GROWTH AND DEVELOPMENT

Stage	Observation Date	DD50 Date
Green Ring	May 18	
PD	May 28	
50 % Heading	June 19	
Drain for Harvest	July 11	
Harvest	July 26	

YIELD, MILLING AND ECONOMIC DATA

	Yield @ 12 % Moisture (cwt./acre)	Milling Yield (% whole / % total)	Variable Costs (\$/acre) ¹	Cost of Production (\$/cwt.) ¹	Return on Variable Costs (\$/acre) ^{1,2}
1 st Crop	54.59	59.4 / 71.7	280.80	4.11	231.00
2 nd Crop	13.65				

Average Parish Yield (1st and 2nd Crop): cwt./acre

¹ Costs captured are from land preparation to getting the crop to the truck. They do not include land rent, transportation, drying, storage or fixed costs.

² This value was obtained using a selling price of \$/cwt.

FERTILIZATION

Nitrogen Rate	Nitrogen Timing	P & K Rate	P & K Timing	Soil Test Used
180 # 46-0-0	April 10			LSU
135 # 46-0-0	May 13			

WEED MANAGEMENT

Weeds Present	Date of Treatment Decision	Recommendation
Barnyardgrass and Knotgrass	April 9	15 oz. Clincher + 1% COC
Alligator, Sedge, Jointvetch, Ducksalad	April 10	0.75 oz. Londax + 0.25 oz. Permit + Surfactant

DISEASE MANAGEMENT

Diseases Present	Date of Treatment Decision	Recommendation
None	-----	None

INSECT MANAGEMENT

Insects Present	Date of Treatment Decision	Recommendation
Rice Water Weevil (Adults)	April 15	2.56 oz. Karate
Rice Stinkbugs		