

**Louisiana Rice Research  
Verification Program  
1999**

J. K. Saichuk and D. P. Dautreuil



# LOUISIANA RICE RESEARCH VERIFICATION PROGRAM 1999

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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 and addition of Catahoula parishes (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 6157 pounds per acre (at 12% moisture) in comparison to the state average of 5398 pounds per acre reported by the Extension Service (USDA figures differ). When the two second crop yields are added the yield averages increase to 6546 pounds per acre. The state average includes second crop yields. All first crop yields except Jeff Davis exceeded the parish yields, but when the second crop yield of the Jeff Davis field was included it exceeded the parish average.

Economic data were collected by Extension Specialist Gene Johnson. These 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).

In 1999 no major discoveries regarding necessary changes in recommendations were made, but this year subjected the program to severe evaluation as a “real world” test. One field was hit by herbicide drift, others had difficulty with water early and another had well failure at the end of the season.

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.

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

## **Acadia Parish**

The Acadia parish field was approximately two miles east and slightly north of the 1998 verification field. It was planted without incident by flying dry seed into a flooded field and then draining the field. The seeding rate was 120 pounds per acre of Icon treated Cypress seed.

A heavy population of ducksalad developed in the top paddy following herbicide application and then loss of flood in that paddy. The problem was evaluated by the personnel associated with the program and by the company representative of one of the herbicides. The decision was made to establish a deep flood and plan to apply 2,4-D at mid-season. In addition to the ducksalad problem scattered red rice and knotgrass were observed throughout the field.

Disease pressure remained light until panicles were averaging one inch in length. Quadris fungicide was applied for sheath blight control.

Stink bug pressure was heavy and required an application of methyl parathion for control.

Even though the second crop was not monitored on a weekly basis the grower communicated with the County Agent and Specialist, and very good second crop was produced.

## Acadia Parish

Cooperator: Thibodeaux Brothers

Agent: Ronnie Levy

Field Size: 31.1

### Cultural Practices

Variety: Cypress

Method Water

Water Pinpoint

Seeding Rate: 120 lb./A

Date of 4/1/99

Date of 4/7/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	5/12	5/18
<b>PD</b>	5/30	5/25
<b>50% Heading</b>	6/24	6/21
<b>Drain for Harvest</b>	7/15	-----
<b>Harvest</b>	8/3	7/26

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	60.59	68.0 - 72.9	248.76	4.106	145.075
<b>2<sup>nd</sup> Crop</b>	22.92	n/a	35.43	1.546	113.550
<b>Total</b>	83.51		284.19	3.403	258.625

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 56.00 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

### Fertilization

Acadia Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
160# 46-0-0	Preflood	GPS - Grid	Fall	Yes
100# 46-0-0	4/30			
100# 33-0-0-12	5/12			
150# 46-0-0	2 <sup>nd</sup> Crop			

### Weed Management

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Barnyard, Ducksalad, Alligator, Brooks, Sedges, Redstem, Fimbristylis, Rotala, Red	4/19/99	0.33 lb. Facet + 1 oz. Londax + 2 pt. COC
Ducksalad	5/10/99	2.0 pt. 2, 4-D

### Disease Management

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/7/99	12.3 oz. Quadris

### Insect Management

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon
Rice Stink Bug	6/28/99	0.25 lb. Methyl

## **Avoyelles Parish**

The Avoyelles verification field got off to a difficult start. The first field chosen had practices applied to it not recommended by the LSU AgCenter so we returned to the same field used in 1998. Water shortages complicated the picture further because the farmer had Cypress seed soaked and was then forced to fly presprouted seed into a dry field. The field was flooded as quickly as possible under the circumstances, but about five acres had to be sown again because an adequate stand was not obtained.

Having two ages of rice in the same field required two applications of propanil, the second accompanied by Londax for ducksalad control. Some ducksalad was not controlled adequately, but no additional treatment was made.

Adult rice water weevils were observed soon after establishing a permanent flood and a treatment of Karate was made. Core samples were taken later which verified excellent control of the water weevil.

Disease pressure remained light until late boot when sheath blight began to show up and stem rot became obvious. Quadris fungicide was applied.

Stink bug pressure was extremely heavy. An application of methyl parathion was made during flowering and again about 10 days later. The field was never completely rid of rice stink bugs, but a third application would have been within the 21 day preharvest interval.

In spite of a difficult beginning this field produced the second highest yields in the verification program.

## Avoyelles Parish

Cooperator: Phillip Lamartiniere

Agent: Carlos Smith

Field Size: 32.5

### Cultural Practices

Variety: Cypress

Seeding Rate: 135 lb./A

Method Water

Date of 4/20/99

Water Pinpoint

Date of 4/25/99

### Growth and Development

Stage	Observation Date	DD50 Date
Green Ring	6/2	5/31
PD	6/24	6/7
50% Heading	7/11	7/4
Drain for Harvest	8/5	-----
Harvest	8/24	8/8

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	75.49	66.4 - 72.2	230.76	3.057	259.925

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 56.70 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

**Fertilization**

Avoyelles Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
200# 46-0-0	Preflood	none used	-----	Yes
100# 46-0-0	Topdress			

**Weed Management**

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Ducksalad, Sedges, Spikerush, Barnyard	5/4/99	3 qt. Propanil
Ducksalad, Spikerush, Barnyard	5/11/99	3 qt. Duet + 0.38 oz. Londax

**Disease Management**

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/29/99	12.3 oz. Quadris

**Insect Management**

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	5/18/99	3.84 oz. Karate
Rice Stink Bug	7/19/99	0.38 lb. Methyl
Rice Stink Bug	7/27/99	0.38 lb. Methyl

## Calcasieu Parish

Early observations indicated lower than expected emergence. It was learned that the germination for this seed was only 70%. In spite of these early concerns the stand was judged to be adequate, and no replanting was recommended.

After draining the field and allowing seedlings to become established herbicides were applied to control alligatorweed, smartweed, knotgrass and other weeds. Four days after herbicide application only the top two cuts of the field were flooded. Water supply and distribution posed serious problems in this field throughout the year.

Even though the seed had been treated with Icon a few spots developed larvae counts of 5, 8 and 6 per core. Because the rice crop was near green ring and the problem area small the decision was made to leave the area untreated

Sheath blight developed enough to justify fungicide. Quadris was applied to rice that ranged from panicle differentiation to late boot in growth. Water problems resulted in uneven growth and later maturity.

Stink bugs followed requiring an application of insecticide. A couple of weeks later stink bug numbers had come up to nearly ½ threshold values, but the crop was within two weeks of harvest so no treatment was recommended.

In 1997 this field had been in the verification program. It had a history of lower than desired yields, but did fairly well that year. In 1999 yields were higher than they were in 1997.

## Calcasieu Parish

Cooperator: Mike Schultz

Agent: Jerry Whatley

Field Size: 49.3

### Cultural Practices

Variety: Cocodrie

Method Water

Water Pinpoint

Seeding Rate: 130 lb./A

Date of 4/8/99

Date of 4/17/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	5/27	5/21
<b>PD</b>	6/15	6/1
<b>50% Heading</b>	7/1	6/27
<b>Drain for Harvest</b>	7/23	-----
<b>Harvest</b>	8/14	8/8

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	55.57	n/a	296.38	5.333	64.825

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 49.41 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

**Fertilization**

Calcasieu Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
150# 46-0-0	Preflood	225# 0-18-36	Spring	Yes
150# 46-0-0	Topdress			

**Weed Management**

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Alligator, Smartweed, Sedges, Barnyard, Signal, Dayflower, Water Bermuda	5/3/99	3 qt. Arrosolo + 1.0 oz. Londax*

Remarks: \*Applied 1 gal. Arrosolo + 1.2 oz. Londax

**Disease Management**

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/21/99	12.3 oz. Quadris*

Remarks: \* Applied on 6/28/99

**Insect Management**

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon
Rice Stink Bug	7/5/99	1.6 oz. Karate Z*

Remarks: \*Applied 0.38 lb. Methyl

## **Catahoula Parish**

The Catahoula parish field provided its own set of interesting circumstances. The well and its associated pipeline was not operational at the optimum planting time. Fertility research plots were located in one corner of the field. On one side of the field was a soybean verification field and on another corn research plots. All of these factors came into play later in the season.

Ryegrass and curly dock populations were significant enough in the upper part of the field to warrant burndown herbicides. Command herbicide was applied at planting at a rate low enough to prevent crop injury on the lighter soil in the center of the field. This rate proved a little low for good control of grasses in the upper cuts which were located on heavy soil. Two flushes and a 1.1 inch rain in between contributed to a grass problem especially in the top cuts. A propanil recommendation was made, but because of unfavorable wind was not applied on time. Consequently, grass control was only fair to poor in the top two cuts. Later in the season Blazer was spot sprayed to control a few sesbania plants.

Sheath blight at levels warranting treatment appeared when the rice was in mid to late boot so Quadris was applied.

Before the crop could complete flowering rice stink bugs appeared in numbers several fold above threshold. Insecticide was applied. Follow up inspections indicated good control, but within 10 days threshold numbers and above were found again and treated again.

Approximately two weeks prior to reaching the stage at which the field would have been drained the well went out. The top cuts of the field were dry enough to walk with street shoes at least 10 days prior to the anticipated drain date. It is believed this caused severe yield reductions because the field had an overall excellent appearance prior to this event.

## Catahoula Parish

Cooperator: Black River Grain

Agent: David Neal

Field Size: 30.4

### Cultural Practices

Variety: Cypress

Method Drilled

Water Delayed

Seeding Rate: 120 lb./A

Date of 5/6/99

Date of 5/18/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	7/1	6/22
<b>PD</b>	7/15	7/2
<b>50% Heading</b>	8/5	7/23
<b>Drain for Harvest</b>	9/1	-----
<b>Harvest</b>	9/15	8/27

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	54.09	65.7 - 70.7	270.86	5.008	80.725

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 48.19 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

**Fertilization**

Catahoula Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
100# 21-0-0-24	Flushed in	100# 0-0-60	Spring	Yes
200# 46-0-0	Preflood			
100# 46-0-0	Topdress			

**Weed Management**

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Ryegrass, Annual Bluegrass, Signal, Barnyard, Morning Glory	4/13/99	3 qt. Round Up
Barnyard, Signal	5/6/99	1.1 pt. Command
Barnyard, Sesbania, Mexican Weed, Signal, Dayflower, Sprangletop	5/27/99	3 qt. Propanil*
Barnyard, Signal, Sprangletop	6/15/99	25 lb. Ordram
Sesbania	7/13/99	0.46 pt. Blazer + Surfactant

Remarks: \* Applied 4.0 qt. propanil + 0.5 pt. COC

**Disease Management**

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	7/28/99	12.3 oz. Quadris

**Insect Management**

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon
Rice Stink Bug	8/10/99	0.38 lb. Methyl
Rice Stink Bug	8/18/99	0.38 lb. Methyl

## **East Carroll Parish**

This field was drill planted with Cocodrie rice seed treated with Icon, fungicide and gibberellic acid and flushed to get emergence. Command herbicide was applied at planting.

About a month later Permit and Stam 80 EDF were applied to control sedges and escaped barnyardgrass. Then 225 pounds of urea was applied per acre and permanent flood established. Facet was spot sprayed to control escaped barnyardgrass in one corner of the field.

Sheath blight pressure was light to moderate and some stem rot was observed. Because the field was being grown for seed Quadris fungicide was recommended.

The only serious problem encountered in the field was rice stink bugs which reached threshold when the crop was 70% to 90% headed. At that time Karate was applied. About a week later stink bugs were at threshold again and methyl parathion was applied. Because this problem was observed in other areas of the state it is believed that a large population of insects was present and fields were being re-infested rather than control being ineffective.

This field produced the highest yields of any in the verification program.

## East Carroll Parish

Cooperator: Ed Patrick

Agent: Don Weston

Field Size: 36.1

### Cultural Practices

Variety: Cocodrie

Seeding Rate: 105 lb./A

Method Drilled

Date of 4/22/99

Water Delayed

Date of 4/28/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	6/11	5/30
<b>PD</b>	6/25	6/9
<b>50% Heading</b>	7/19	7/4
<b>Drain for Harvest</b>	8/13	-----
<b>Harvest</b>	8/26	8/8

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	76.19	63.9 - 71.3	253.87	3.332	241.365

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 58.00 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

### Fertilization

East Carroll Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
100# 21-0-0-24	Flushed in	none used	-----	Yes
225# 46-0-0	Preflood			
100# 46-0-0	Topdress			

### Weed Management

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sesbania, Sedges, Barnyard	4/22/99	1.6 pt. Command
Sedges, Smartweed, Barnyard	5/26/99	3 lb. a.i. Stam 80E DF + 1.0 oz. Permit + 1.0 qt. COC*

Remarks: \* Herbicide application was not recommended at this time

### Disease Management

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	7/8/99	12.3 oz. Quadris

### Insect Management

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon
Rice Stink Bug	7/21/99	0.025 lb. a.i. Karate
Rice Stink Bug	7/28/99	0.25 lb. Methyl

## **Evangeline Parish**

This field was seeded with dry, Icon treated Cocodrie seed flown into standing water. The field was drained then flushed a couple of times until seedling establishment. When the rice was in the 3 to 4 leaf stage it exhibited herbicide injury symptoms which were diagnosed as Command drift from an adjacent rice field. The field was flushed again and the seedlings recovered. This delayed normal herbicide applications because of fear of exacerbating injury.

On April 22, 4 pounds of propanil and 1 ounce of Londax was applied followed by 160 pounds of urea. A flood was established the next day. The primary weed targets were alligatorweed, broadleaf signalgrass, barnyardgrass and ducksalad. Some jointvetch was noted along the levees. At midseason 2,4-D was applied to the levees to correct this problem.

All except the top cut of the field was drained for straighthead control. The top cut was left flooded as a means of checking Cocodrie's susceptibility to straighthead because the field had a history of straighthead and Cocodrie is considered susceptible. Plants in the top cut never exhibited straighthead.

As heading began sheath blight began to move up in the canopy and Quadris fungicide was applied. This application was somewhat late but was based on the appearance of symptoms and progression of the disease rather than stage of growth of the crop. The product was applied within label parameters.

On June 29 one area of the field was observed to show either straighthead or herbicide injury symptoms. Subsequent investigations by the Specialist, farmer and Louisiana Department of Agriculture officials revealed Touchdown drift had occurred around mid-season. Darryl Rester was called in to delineate the area with GPS equipment. He determined 6.4 acres of the 22.3 acre field was damaged. Because the farmer was compensated for this injury as part of a larger settlement this area was not considered in calculating the average yield of the field.

At harvest the undamaged area produced 7792 pounds of green rice per acre. A portion of the damaged area was sampled, but the entire area could not be harvested because of excessive moisture. Grain quality was poor and yield was estimated at 2576 pounds of green rice per acre.

## Evangeline Parish

Cooperator: Steve Mayeux

Agent: Keith Fontenot

Field Size: 22.3

### Cultural Practices

Variety: Cocodrie

Seeding Rate: 125 lb./A

Method Water

Date of 3/31/99

Water Pinpoint

Date of 4/9/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	5/18	5/14
<b>PD</b>	6/1	5/25
<b>50% Heading</b>	6/20	6/20
<b>Drain for Harvest</b>	7/10	-----
<b>Harvest</b>	7/26	7/25

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	69.82	69.2 - 73.6	278.11	3.983	175.720

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 59.94 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

**Fertilization**

Evangeline Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
160# 46-0-0	Preflood	250# 0-25-25	Spring	Yes
160# 46-0-0*	Topdress			

Remarks: \* Additional nitrogen was applied at topdressing because the field was drained for straighthead

**Weed Management**

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Alligator, Redstem, Ducksalad, Signal, Barnyard, Jointvetch	4/20/99	4.0 lb. Propanil + 1.0 oz. Londax

**Disease Management**

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/15/99	12.3 oz. Quadris

**Insect Management**

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon

## Jefferson Davis Parish

The field in Jeff Davis parish was planted with dry, Icon treated Cypress seed flown into standing water. The field was drained then phosphorus, potassium and zinc fertilizer was applied ahead of a flush. Because of severe scum problems a flood could not be held early.

The primary weed problems observed were: barnyardgrass, dayflower, jointvetch, nutsedge, alligatorweed, broadleaf signalgrass, knotgrass and water Paspalum. The herbicide program was severely hampered because of the field's proximity to gardens and home sites. On April 23, 3.93 pounds of propanil plus 1.25 ounces of Londax plus 14 ounces of crop oil concentrate were applied to the field. One hundred and sixty pounds of urea was applied the next day and flood establishment begun. Nine days later some areas of the field still needed water, but the farmer had to move water to other fields at the same time resulting in some loss of nitrogen and herbicide activity.

At mid-season the field was topdressed with 120 pounds of urea.

Quadris fungicide was recommended to control sheath blight. Methyl parathion was applied to control rice stink bugs.

On August 2 a disappointing 4957 pounds (dry) of rice was harvested. The field was fertilized with nitrogen and flooded. A ratoon crop of 1928 pounds (dry) was harvested on September 23. The disappointing first crop yield is thought by the Specialist to be partially blamed on water problems in the early season which carried its effects through harvest. The second crop proved to be vitally important to success in this field.

## Jefferson Davis Parish

Cooperator: Greg Bourgeois

Agent: Eddie Eskew

Field Size: 26.6

### Cultural Practices

Variety: Cypress

Method Water

Water Pinpoint

Seeding Rate: 135 lb./A

Date of 3/31/99

Date of 4/6/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	5/15	5/17
<b>PD</b>	5/31	5/25
<b>50% Heading</b>	6/24	6/20
<b>Drain for Harvest</b>	7/14	-----
<b>Harvest</b>	8/2	7/25

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	49.57	70.6 - 73.5	283.37	5.717	38.835
<b>2<sup>nd</sup> Crop</b>	19.28	n/a	56.19	2.914	69.130
<b>Total</b>	68.85		339.56	4.932	107.965

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 55.08 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

### Fertilization

Jefferson Davis Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
160# 46-0-0	Preflood	225# 0-18-36	Fall	Yes
125# 46-0-0	Topdress	15# Zinc	Fall	
145# 46-0-0	2 <sup>nd</sup> Crop			

### Weed Management

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Alligator, Sedges, Signal, Dayflower, Barnyard, Mexican Weed, Jointvetch	4/12/99	4.0 lb. Propanil + 1.25 oz. Londax

### Disease Management

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/14/99	12.3 oz. Quadris

### Insect Management

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon
Rice Stink Bug	7/1/99	0.25 lb. Methyl
Rice Stink Bug	9/10/99 - 2 <sup>nd</sup> Crop	0.25 lb. Methyl

## **Madison Parish**

The Madison field got off to a late start. Cypress was drilled at 118 pounds per acre and Command applied behind the drill. Levees were pulled, and the field was flushed. A heavy population of several species of morning glories emerged with the rice accompanied by some nutsedge and sicklepod. Three quarts of propanil was applied followed by 100 pounds of ammonium sulfate per acre and the field flushed again.

A couple of weeks later another three quart propanil recommendation was made to be followed by 200 pounds of urea per acre then flooding then an application of Karate for rice water weevils. This recommendation was delayed for nearly 10 days resulting in poor control of morning glories in some areas of the field. Grandstand was recommended in the worst areas, but the window of timing was missed and the herbicide not applied.

Sheath blight pressure built up early, reaching a threshold level before panicle differentiation. Quadris fungicide was applied after the rice had reached panicle differentiation so that a single application might be effective.

Problems with leaking levees caused some cuts to be either low or without water at various times during the growing season. These problems were eventually solved, but not before some loss of nutrients and weed problems had occurred.

When the crop was about 75% headed rice stink bugs reached threshold levels and methyl parathion was recommended. Approximately two weeks later threshold levels were reached again and again methyl parathion was applied.

Surprisingly, this field produced 5562 pounds of dry rice per acre. It appeared the morning glories did not influence yield significantly. It is suspected that had there been less trouble with timing and water management this field would easily have produced 6000 pounds per acre.

## Madison Parish

Cooperator: Tom Bartholomew

Agent: Mike Rome

Field Size: 38.1

### Cultural Practices

Variety: Cypress

Method Drilled

Water Delayed

Seeding Rate: 118 lb./A

Date of 5/15/99

Date of 5/27/99

### Growth and Development

Stage	Observation Date	DD50 Date
Green Ring	7/6	6/30
PD	7/24	7/10
50% Heading	8/15	7/31
Drain for Harvest	9/3	-----
Harvest	9/27	9/4

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	55.62	n/a	218.48	3.928	143.050

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 53.00 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

### Fertilization

Madison Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
100# 21-0-0-24	Flushed in	none used	-----	Yes
200# 46-0-0	Preflood			
100# 46-0-0	Topdress			

### Weed Management

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Morning Glory, Sesbania, Sicklepod, Ducksalad	5/15/99	1.33 pt. Command
Morning Glory, Sesbania, Sicklepod	6/2/99	3.0 qt. Propanil
Morning Glory, Sesbania	6/17/99	3.0 qt. Propanil*

Remarks: \* Applied 4.0 qt. propanil on 6/29/99

### Disease Management

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	7/21/99	12.3 oz. Quadris*

Remarks: \* Recommended Quadris just prior to PD due to heavy disease infestation

### Insect Management

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	6/30/99	3.84 oz. Karate
Rice Stink Bug	8/18/99	0.38 lb. Methyl
Rice Stink Bug	8/24/99	0.38 lb. Methyl

## **St. Landry Parish**

The field was water seeded with dry Icon treated Cypress rice seed. After draining and emergence, weeds noted were: nutsedge, barnyardgrass, Spilanthes, broadleaf signalgrass, ducksalad and some alligatorweed.

When the rice was in the four leaf stage four quarts of Arrosolo plus one ounce of Londax per acre were applied followed by 150 pounds of 33% (half urea half ammonium sulfate blend). Flooding began the day after herbicide application but halted because of the likelihood of rain. The nitrogen amount was below the recommended amount because of an error in communication. Subsequent discussions also indicated the amount of potassium was low.

Flooding problems left some areas of the field exposed resulting in a second flush of barnyardgrass. After careful evaluation an application of Ordram was recommended to control this second flush of grass. At this time additional nitrogen and potassium were added to correct deficiencies.

Even though Icon treated seed had been used rice water weevil populations approached threshold levels based on core samples. However, by the time the crop had reached internode elongation numbers had not increased enough to cause concern and root systems appeared very good. No further weevil control was recommended.

Sheath blight infestation reached treatment levels, and Quadris fungicide was applied. Rice stink bugs never reached economic threshold levels in this field, the only field in the verification program where they did not require control measures.

This field produced 6286 pounds of dry rice per acre and would have been an excellent candidate for a ratoon crop, but because of the very low rice prices and the difficulty the farmer had in marketing his first crop he chose not to produce a second crop.

## St. Landry Parish

Cooperator: Mark Reiners

Agent: Keith Normand

Field Size: 30.1

### Cultural Practices

Variety: Cypress

Seeding Rate: 130 lb./A

Method Water

Date of 4/14/99

Water Pinpoint

Date of 4/25/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	6/2	5/31
<b>PD</b>	6/23	6/7
<b>50% Heading</b>	7/11	7/4
<b>Drain for Harvest</b>	8/2	-----
<b>Harvest</b>	8/19	8/8

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	62.86	61.9 - 72.1	289.52	4.606	119.070

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 51.84 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

**Fertilization**

St. Landry Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
150# 33-0-0-12*	Preflood	n/a	n/a	Yes
200# 20-10-10**	Topdress			
100# 46-0-0	Topdress			

Remarks: \* Not recommended - would have used more N preflood; \*\* Phosphorus was not recommended

**Weed Management**

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sedges, Barnyard, Signal, Rotala, Ducksalad, Alligator, Primrose, Spilanthes	4/30/99	4.0 qt. Arrosolo + 1.0 oz. Londax
Barnyard	5/27/99	20 lb. Ordram*

Remarks: \* Part of field lost water - some of initial herbicide activity was lost

**Disease Management**

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/29/99	12.3 oz. Quadris

**Insect Management**

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon

## Vermilion Parish

This field was planted with dry Cocodrie seed treated with Icon and fungicide and flown into standing water. Phosphorus and potassium fertilizer had been applied in the fall. Immediately after draining the field it was apparent that considerable seed drift had occurred in some areas of the field. At the time it was felt that the area affected was not large enough to justify any additional seeding. Additional damage to young seedlings was done by ducks during one of the flushes of the field.

When the rice had reached the two to three leaf stage a survey of weeds indicated the most important weeds were ducksalad, redstem, barnyardgrass and light populations of nutsedge and alligatorweed. Three quarts of Arrosolo plus one ounce of Londax was recommended. The herbicide application was followed by an application of 180 pounds of urea per acre.

Even after establishment of permanent flood some areas of the field remained exposed causing some concern regarding herbicide efficacy. Flooding also revealed the extent of seed drift that had occurred.

At midseason an application of 110 pounds of urea per acre was made. A final check of rice water weevil larvae detected no weevils. Root systems were excellent.

By mid June sheath blight had reached treatable levels and Quadris fungicide was recommended. Shortly afterward rice stink bugs also reached threshold levels and methyl parathion was applied.

This field produced 5913 pounds of dry rice per acre and like the field in St. Landry would have been an excellent candidate for second crop had not it been rutted in the process of harvesting. This was the only field in the verification program to be harvested in muddy conditions having received a rare (for 1999) rain a few days prior to harvest.

## Vermilion Parish

Cooperator: Mike Soirez

Agent: Howard Cormier

Field Size: 23.8

### Cultural Practices

Variety: Cocodrie

Seeding Rate: 125 lb./A

Method Water

Date of 3/30/99

Water Pinpoint

Date of 4/6/99

### Growth and Development

Stage	Observation Date	DD50 Date
<b>Green Ring</b>	5/12	5/11
<b>PD</b>	5/25	5/23
<b>50% Heading</b>	6/19	6/18
<b>Drain for Harvest</b>	7/12	-----
<b>Harvest</b>	7/31	7/23

### Yield, Milling and Economic Data

	Yield @ 12% Moisture (cwt./acre)	Milling Yield (% whole - % total)	Variable Costs (\$/acre) <sup>1</sup>	Cost of Production (\$/cwt.) <sup>1</sup>	Return on Variable Costs (\$/acre) <sup>1,2</sup>
<b>1<sup>st</sup> Crop</b>	59.13	67.3 - 73.8	274.32	4.639	110.025

Average Parish Yield (1<sup>st</sup> & 2<sup>nd</sup> crop): 53.62 cwt./A

<sup>1</sup> 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.

<sup>2</sup> This value was obtained using a selling price of \$6.50/cwt.

**Fertilization**

Vermilion Parish

<b>N Rate</b>	<b>N Timing</b>	<b>P &amp; K Rate</b>	<b>P &amp; K Timing</b>	<b>Soil Test Used?</b>
180# 46-0-0	Preflood	225# 0-18-36	Fall	Yes
110# 46-0-0	Topdress			

**Weed Management**

<b>Weeds Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Ducksalad, Redstem, Signal, Barnyard, Sedges	4/19/99	3.0 qt. Arrosolo + 1.0 oz. Londax

**Disease Management**

<b>Diseases Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Sheath Blight	6/17/99	12.3 oz. Quadris

**Insect Management**

<b>Insects Present</b>	<b>Date of Treatment Decision</b>	<b>Recommendation</b>
Rice Water Weevil	Prior to Planting	Icon
Rice Stink Bug	7/2/99	0.25 lb. Methyl