2008 Sweet Potato Research Verification Program
Economic Analysis Report

South Louisiana Field

The Louisiana Sweet Potato Research Verification Program (LSPRVP) is a multi-disciplinary program aimed at implementing and analyzing research recommendations in real world situations. Participating producers work closely with the LSU AgCenter Sweet Potato specialists in making production decisions throughout the growing and harvesting period. To determine if these production decisions result in greater profitability for the producer, cost information was collected on every activity conducted in each of the participating fields. The type of information collected includes:

- Time required to complete activity
- Number of acres covered in activity
- Tractor size and implement width
- Input rates and costs, and
- Custom application charges.

Using the information collected, estimates of costs per acre for conducting each activity were developed. Costs for each activity were separated into four broad categories: direct equipment costs, fixed equipment costs, input costs, and labor costs. Direct and fixed costs of tractors, implements, and other machinery were estimated using assumptions on performance rates, fuel use, repair and maintenance, interest expense, and depreciation from LSU AgCenter Enterprise Budgets. Irrigation costs were based data provided by the LSU AgCenter Enterprise Budgets along with producer information regarding fuel use and pumping rates per hour. Where possible, input costs were estimated using the data provided by the producer on the amount of the input used and the cost per unit of the input. In other cases, input costs estimates were based on producer's use rates and input price information from the LSU AgCenter Enterprise Budgets. Labor costs associated with operating equipment were based on the time required to complete the activity which is either supplied by the producer or determined using performance rates from the LSU Enterprise Budgets. Other labor costs were estimated based on information provided by the producer on the hourly wage rate and the time required to complete the activity.

While costs were estimated from planting of seed potatoes to harvesting, the costs associated with packaging lines and storage were not conducted as part of the verification program. Estimates provided for packaging lines are set at those estimated in LSU AgCenter Enterprise Budgets.

The remainder of this report provides the estimates developed regarding sweet potato production in 2008. The information provided summarizes costs estimates for both plant bed and production acres. In addition, the report provides an estimated cost and return associated with the production acres. Finally, a detailed cost analysis is provided for both the plant bed and production acres with costs estimated for each separate activity conducted.

This was the first year in the verification program for the South Fields. High input costs and low production levels highlighted the 2008 production and marketing year. Total direct costs were estimated at $1,911.52 per acre for the production field. When estimated packaging line costs were added, the total costs for producing sweet potatoes were $2,479.58 per acre for the production field.

Coupled with the high production costs were the difficult production environment created by two hurricanes in 2008. Total production was estimated at 201 bushels per acre. The percentage of No.1's was estimated at 51.24%. No Jumbo's were estimated for the field. Estimated breakeven prices per box to cover both direct and fixed production costs ranged from slightly higher than $19.00 per box to nearly $25.00 per box depending on packout percentage. When packaging line costs are added, these breakeven prices climbed to slightly over $32.00 per box.

2008 Sweet Potato Research Verification Program
General Program Information and Assumptions
South Louisiana Field

		Plant Bed	Field #1
Number of Acres In Verification Field	:	5	23
Variety Planted	:		Beauregard
Planting Date	:		June 18, 2008
Harvest Date	:		November 3 – 6, 2008
Yield (Bushels Per Acre)	:		
No. 1's	:		103
Jumbos			0
Canners	:		98
Total	:		201
Yield Percentages (% of Total Yield)	:		
No. 1's	:		51.24%
Jumbos	:		0.00%
Canners	:		48.76%

Economic Assumptions		
Diesel Cost Per Gallon[A]	:	$3.75
Electricity Cost Per Kwh[B]		$0.1154
Labor Wage Plus Fringe Benefits Per Hour[C]	:	
Regular Labor	:	$8.23
H2A Labor	:	N/A
Interest on Operating Loans [D]	:	8.00%
Interest on Intermediate Loans [D]	:	7.50%

[A] The estimate for diesel fuel was determined using the Department of Energy estimates for retail prices of on-highway diesel prices from March 2008 to November 2008 for the Gulf Coast. These prices were adjusted for federal and state taxes to approximate farm diesel costs.

[B] The estimate for electricity was determined using the Department of Energy estimates for prices for residential and commercial users from March 2008 to November 2008. .

[C] Estimates for labor costs were provided by cooperating producer

[D] Estimates for interest rates for both operating capital and intermediate debt (for example, equipment loans) was set at the levels assumed in the LSU AgCenter Enterprise Budgets.

2008 Sweet Potato Research Verification Program
Summary of Estimated Costs
South Louisiana Fields

Expense Item	Plant Bed Production[A]		Production Field
	---------------------- Costs Per Acre		----------------------
Seed	$824.67		$199.50
Fertilizer	$175.00		$220.81
Insecticide	$89.55		$199.01
Herbicide	$0.00		$51.67
Fungicide	$81.43		$0.00
Fuel and Repair & Maintenance	$162.16		$217.31
Labor	$281.86		$653.19
Other Inputs	$13.86		$154.15
Custom Application/Service	$0.00		$0.00
Interest Expense on Operating Loan[B]	$84.31		$44.23
Total Direct Cost	$1,712.84		$1,739.87
Total Fixed Cost[C]	$117.46		$171.65
Total Specified Costs	$1,830.31		$1,911.52
Estimated Packing Line Costs[D]	$0.00		$568.06
Total Production and Packing Line Costs	$1,830.31		$2,479.58

[A] Total direct and fixed costs associated with plant bed production are incorporated into the production field cost estimates as the estimated seed expense for both fields. Total costs associated with plant bed production are converted to production field estimates based on the assumed number of production acres that were planted with the plant beds.

[B] Interest expense on an operating loan is calculated using a 8 percent interest rate. Interest was calculated in the same manner as is calculated in the 2007 LSU Enterprise Budgets.

[C] Fixed costs are interest expense and depreciation on tractors and implements. An annual interest rate of 7.5 percent was assumed. Fixed costs were calculated in the same manner as is calculated in the 2007 LSU Enterprise Budgets.

[D] Packing line costs were set at levels assumed in LSU AgCenter Enterprise Budgets. Since 2008 Sweet Potato Enterprise Budgets were not developed by the LSU AgCenter, the packing line cost used the average of packing line costs from the 2007 and 2009 LSU AgCenter Sweet Potato Enterprise Budgets.

2008 Sweet Potato Research Verification Program
Estimated Cost Per Box Sold (No. 1's and Jumbos)
South Louisiana Field

Price To Cover:	---------------- Breakeven Price Per Box 70% Packout	65% Packout	---------------- 60% Packout
Direct Costs	$19.31	$20.79	$22.52
Direct + Fixed Costs	$21.21	$22.84	$24.74
Direct+Fixed+Packing Line Costs	$27.51	$29.63	$32.10

2008 Sweet Potato Research Verification Program
Estimated Costs and Returns
South Louisiana Field

		Production Field Per Acre		Production Field Total For Field
Costs				
Direct Costs		$1,739.87		$14,614.91
Direct + Fixed Costs		$1,911.52		$16,056.77
Direct+Fixed+Packing Line Costs		$2,479.58		$20,828.48
Revenue - @ 70% Packout				
No 1's @ $14.50/box		$1,306.81		$10,977.23
Jumbos @ $9.00/box		$0.00		$0.00
Canners @ $6.50/hundredweight		$318.50		$2,675.40
Total		$1,625.31		$13,652.63
Revenue - @ 65% Packout				
No 1's @ $14.50/box		$1,213.47		$10,193.14
Jumbos @ $9.00/box		$0.00		$0.00
Canners @ $6.50/hundredweight		$318.50		$2,675.40
Total		$1,531.97		$12,868.54
Revenue - @ 60% Packout				
No 1's @ $14.50/box		$1,120.13		$9,409.05
Jumbos @ $9.00/box		$0.00		$0.00
Canners @ $6.50/hundredweight		$318.50		$2,675.40
Total		$1,438.63		$12,084.45
Returns Above Costs - @ 70% Packout				
Direct Costs		-$114.56		-$962.28
Direct + Fixed Costs		-$286.21		-$2,404.15
Direct+Fixed+Packing Line Costs		-$854.27		-$7,175.85
Returns Above Costs - @ 65% Packout				
Direct Costs		-$207.90		-$1,746.37
Direct + Fixed Costs		-$379.55		-$3,188.23
Direct+Fixed+Packing Line Costs		-$947.61		-$7,959.94
Returns Above Costs - @ 60% Packout				
Direct Costs		-$301.25		-$2,530.46
Direct + Fixed Costs		-$472.90		-$3,972.32
Direct+Fixed+Packing Line Costs		-$1,040.96		-$8,744.03

2008 Sweet Potato Research Verification Program
Estimated Production Costs
Plant Bed Production – South Louisiana Field

Expense Item	Cost Per Acre	Percent of Total Direct Costs
Seed	$824.67	48.15%
Fertilizer	$175.00	10.22%
Insecticide	$89.55	5.23%
Herbicide	$0.00	0.00%
Fungicide	$81.43	4.75%
Fuel & Repair and Maintenance	$162.16	9.47%
Labor	$281.86	16.46%
Other Inputs	$13.86	0.81%
Custom Application/Service	$0.00	0.00%
Interest Expense	$84.31	4.92%
Total Direct Cost	$1,712.84	
Total Fixed Cost	$117.46	
Total Specified Costs	$1,830.31	

2008 Sweet Potato Research Verification Program
Breakdown of Direct Cost Category & Field Activity
Plant Bed Production - South Louisiana Field

Field Activity	Fuel and Repair/Maintenance	Labor	Inputs	Custom Service	Interest Expense	Total Costs
	----------	----------	Costs Per Acre	----------	----------	----------
Non-Harvest Activities	$162.16	$281.86	$1,184.51	$0.00	$84.31	$1,712.84
Irrigation Activities	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Harvest Activities	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Totals	$162.16	$281.86	$1,184.51	$0.00	$84.31	$1,712.84

2008 Sweet Potato Research Verification Program
Summary of Pesticide Applications and Costs
Plant Bed Production – South Louisiana Field

Pesticide	Number of Trips	Number of Pesticides Applied	Total Application Costs	Cost Per Trip
	----------	---------- Per Acre	----------	----------
Insecticide	10	10	$125.99	$12.60
Herbicide	0	0	$0.00	$0.00
Fungicide	3	6	$102.81	$34.27

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Plant Bed Production – South Louisiana Field

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Disc Plow - 4 Times - April 2008							
Tractor - JD 4840 - 190 HP	5	0.125	$12.97	$20.11		$0.00	$33.08
Disc - 12 Ft	5	0.125	$5.03	$2.02		$0.00	$7.04
Labor	5	0.125	$0.00	$0.00		$4.53	$4.53
Totals For Activities			$18.00	$22.13	$0.00	$4.53	$44.65
Do-All - Twice - April 2008							
Tractor - JD 4850 - 190 HP	5	0.125	$6.49	$10.05		$0.00	$16.54
Do-All - 19 Ft	5	0.125	$2.58	$0.52		$0.00	$3.10
Labor	5	0.125	$0.00	$0.00		$2.26	$2.26
Totals For Activities			$9.07	$10.57	$0.00	$2.26	$21.91
Rowed Up - 3 Times - April 2008							
Tractor - JD 4020 - 90 HP	5	0.240	$9.22	$15.90		$0.00	$25.12
Hipper - 4 Row	5	0.240	$4.20	$1.35		$0.00	$5.55
Labor	5	0.240	$0.00	$0.00		$6.52	$6.52
Totals For Activities			$13.42	$17.25	$0.00	$6.52	$37.19
Bed Rows - Twice - April 2008							
Tractor - JD 4020 - 90 HP	5	0.240	$6.15	$10.60		$0.00	$16.75
Hipper 4 Row	5	0.240	$2.80	$0.90		$0.00	$3.70
Labor	5	0.240	$0.00	$0.00		$4.35	$4.35
Totals For Activities			$8.95	$11.50	$0.00	$4.35	$24.79
Harrow - Twice - April 2008							
Tractor - JD 4020 - 90 HP	5	0.240	$6.15	$10.60		$0.00	$16.75
Harrow - 14 Ft	5	0.240	$0.64	$0.46		$0.00	$1.10
Labor	5	0.240	$0.00	$0.00		$4.35	$4.35
Totals For Activities			$6.79	$11.05	$0.00	$4.35	$22.19
Open Rows - April 2008							
Tractor - IH 140 - 20 HP	5	0.570	$0.94	$2.72		$0.00	$3.67
Middle Buster - 2 Row	5	0.570	$0.46	$0.32		$0.00	$0.78
Labor	5	0.570	$0.00	$0.00		$5.16	$5.16
Totals For Activities			$1.40	$3.05	$0.00	$5.16	$9.61

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Plant Bed Production – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Fertilizer							
Tractor - JD 4020 - 90 HP	5	0.043	$0.56	$0.96		$0.00	$1.52
Fertilizer Buggy	5	0.043	$0.23	$0.17		$0.00	$0.40
Labor	5	0.043	$0.00	$0.00		$0.39	$0.39
Fertilizer - 8-22-28			$0.00	$0.00		$0.00	$0.00
500 lbs/acre @ $700/ton	5		$0.00	$0.00	$175.00	$0.00	$175.00
Totals For Activities			$0.79	$1.13	$175.00	$0.39	$177.31
Apply Fungicide - April 2008							
Tractor - IH 1086 - 130 HP	5	0.120	$2.02	$3.30		$0.00	$5.32
Spray Boom - 20 Ft	5	0.120	$0.30	$0.28		$0.00	$0.59
Labor	5	0.120	$0.00	$0.00		$1.09	$1.09
Fungicide (Botran)			$0.00	$0.00		$0.00	$0.00
1.07 lbs/acre @ $34.80/4lb bag	5		$0.00	$0.00	$9.31	$0.00	$9.31
Fungicide (Mertect)			$0.00	$0.00		$0.00	$0.00
8.53 oz/acre @ $258/gallon	5		$0.00	$0.00	$17.19	$0.00	$17.19
Totals For Activities			$2.32	$3.58	$26.50	$1.09	$33.50
Plant Field - April 2008							
Tractor - JD 4020 - 90 HP	5	0.344	$4.42	$7.61		$0.00	$12.03
Bed Buggy	5	0.344	$5.01	$1.61		$0.00	$6.63
Labor	5	0.344	$0.00	$0.00		$3.12	$3.12
Seed (Seed Potatoes)			$0.00	$0.00		$0.00	$0.00
765 bushels/5 acres @ $5.39	5		$0.00	$0.00	$824.67	$0.00	$824.67
Totals For Activities			$9.43	$9.23	$824.67	$3.12	$846.45
Apply Fungicide - April 2008							
Tractor - IH 1086 - 130 HP	5	0.120	$2.02	$3.30		$0.00	$5.32
Spray Boom - 27 Ft	5	0.120	$0.46	$0.33		$0.00	$0.79
Labor	5	0.120	$0.00	$0.00		$1.09	$1.09
Fungicide (Botran)			$0.00	$0.00		$0.00	$0.00
1.07 lbs/acre @ $34.80/4lb bag	5		$0.00	$0.00	$10.27	$0.00	$10.27
Fungicide (Mertect)			$0.00	$0.00		$0.00	$0.00
8.53 oz/acre @ $258/gallon	5		$0.00	$0.00	$17.19	$0.00	$17.19
Totals For Activities			$2.48	$3.62	$27.47	$1.09	$34.66

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Plant Bed Production – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Fungicide - April 2008							
Tractor - IH 1086 - 130 HP	5	0.120	$2.02	$3.30		$0.00	$5.32
Spray Boom - 27 Ft	5	0.120	$0.46	$0.33		$0.00	$0.79
Labor	5	0.120	$0.00	$0.00		$1.09	$1.09
Fungicide (Botran)			$0.00	$0.00		$0.00	$0.00
1.07 lbs/acre @ $34.80/4lb bag	5		$0.00	$0.00	$10.27	$0.00	$10.27
Fungicide (Mertect)			$0.00	$0.00		$0.00	$0.00
8.53 oz/acre @ $258/gallon	5		$0.00	$0.00	$17.19	$0.00	$17.19
Totals For Activities			$2.48	$3.62	$27.47	$1.09	$34.66
Closed Rows -5 Times- April 2008							
Tractor - IH 140 - 20 HP	5	0.500	$4.14	$11.95		$0.00	$16.09
Hipper - 2 Row	5	0.500	$3.36	$2.37		$0.00	$5.73
Labor	5	0.500	$0.00	$0.00		$22.63	$22.63
Totals For Activities			$7.49	$14.32	$0.00	$22.63	$44.45
Apply Mulch Layer - April 2008							
Tractor - IH 140 - 20 HP	5	1.500	$2.48	$7.17		$0.00	$9.65
Plastic Layer	5	1.500	$5.16	$2.33		$0.00	$7.49
Labor	5	1.500	$0.00	$0.00		$13.58	$13.58
Input - Plastic			$0.00	$0.00		$0.00	$0.00
9.5 Rolls/5 Acres @ $5/roll			$0.00	$0.00	$9.50	$0.00	$9.50
Totals For Activities			$7.64	$9.50	$9.50	$13.58	$40.22
Apply Insecticide - April							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt/ac @ $6.88/qrt	5		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Plant Bed Production – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Insecticide - April							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Imidan 70-WP			$0.00	$0.00		$0.00	$0.00
1.31 lbst/ac @ $8.42/lb	5		$0.00	$0.00	$11.03	$0.00	$11.03
Totals For Activities			$1.20	$1.79	$11.03	$0.65	$14.67
Apply Insecticide - April							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt/ac @ $6.88/qrt	5		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52
Apply Insecticide - May							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Imidan 70-WP			$0.00	$0.00		$0.00	$0.00
1.31 lbst/ac @ $8.42/lb	5		$0.00	$0.00	$11.03	$0.00	$11.03
Totals For Activities			$1.20	$1.79	$11.03	$0.65	$14.67
Apply Insecticide - May							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt/ac @ $6.88/qrt	5		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Plant Bed Production – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Insecticide - May							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Imidan 70-WP			$0.00	$0.00		$0.00	$0.00
1.31 lbst/ac @ $8.42/lb	5		$0.00	$0.00	$11.03	$0.00	$11.03
Totals For Activities			$1.20	$1.79	$11.03	$0.65	$14.67
Apply Insecticide - May							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt/ac @ $6.88/qrt	5		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52
Apply Insecticide - May							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Imidan 70-WP			$0.00	$0.00		$0.00	$0.00
1.31 lbst/ac @ $8.42/lb	5		$0.00	$0.00	$11.03	$0.00	$11.03
Totals For Activities			$1.20	$1.79	$11.03	$0.65	$14.67
Apply Insecticide - June							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt/ac @ $6.88/qrt	5		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Plant Bed Production – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Insecticide - June							
Tractor - JD 4020 - 90 Hp	5	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	5	0.072	$0.28	$0.20		$0.00	$0.47
Labor	5	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Imidan 70-WP			$0.00	$0.00		$0.00	$0.00
1.31 lbst/ac @ $8.42/lb	5		$0.00	$0.00	$11.03	$0.00	$11.03
Totals For Activities			$1.20	$1.79	$11.03	$0.65	$14.67
Cut Slips - June 2008							
Tractor - JD 4020 - 90 HP	5	1.034	$13.25	$22.84		$0.00	$36.09
Mechanical Cutter	5	1.034	$1.93	$0.87		$0.00	$2.80
Labor	5	1.034	$0.00	$0.00		$9.37	$9.37
Additional Labor (23 @ 8.23/Hr)	5		$0.00	$0.00	$195.82	$0.00	$195.82
Boxes for Slips			$0.00	$0.00		$0.00	$0.00
55 Boxes/ 5 ac @ $1.26 per box	5		$0.00	$0.00	$13.86	$0.00	$13.86
Totals For Activities			$15.18	$23.71	$209.68	$9.37	$257.93

2008 Sweet Potato Research Verification Program
Estimated Production Costs
Production Field – South Louisiana Field

Expense Item	Cost Per Acre	Percent of Total Direct Costs
Seed	$199.50	11.47%
Fertilizer	$220.81	12.69%
Insecticide	$199.01	11.44%
Herbicide	$51.67	2.97%
Fungicide	$0.00	0.00%
Fuel & Repair and Maintenance	$217.31	12.49%
Labor	$653.19	37.54%
Other Inputs	$154.15	8.86%
Custom Application/Service	$0.00	0.00%
Interest Expense	$44.23	2.54%
Total Direct Cost	$1,739.87	
Total Fixed Cost	$171.65	
Total Specified Costs	$1,911.52	

2008 Sweet Potato Research Verification Program
Breakdown of Direct Cost Category & Field Activity
Plant Bed Production - South Louisiana Field

Field Activity	Fuel and Repair/Maintenance	Labor	Inputs	Custom Service	Interest Expense	Total Costs
	-----	-----	----- Costs Per Acre -----	-----	-----	-----
Non-Harvest Activities	$134.64	$224.23	$718.49	$0.00	$40.10	$1,117.47
Irrigation Activities	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Harvest Activities	$82.67	$428.96	$106.65	$0.00	$4.12	$622.40
Totals	$217.31	$653.19	$825.14	$0.00	$44.23	$1,739.87

2008 Sweet Potato Research Verification Program
Summary of Pesticide Applications and Costs
Plant Bed Production – South Louisiana Field

Pesticide	Number of Trips	Number of Pesticides Applied	Total Application Costs	Cost Per Trip
	-----	----- Per Acre -----	-----	-----
Insecticide	12	16	$250.89	$20.91
Herbicide	2	2	$64.69	$32.35
Fungicide	0	0	$0.00	$0.00

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Fertilizer - May 2008							
Tractor - JD 4020 - 90 HP	23	0.043	$0.56	$0.96		$0.00	$1.52
Fertilizer Buggy	23	0.043	$0.23	$0.17		$0.00	$0.40
Labor	23	0.043	$0.00	$0.00		$0.39	$0.39
Fertilzer/Nutrients			$0.00	$0.00		$0.00	$0.00
530 lbs 8-22-28 @ $700/ton			$0.00	$0.00	$185.50	$0.00	$185.50
Totals For Activities			$0.79	$1.13	$185.50	$0.39	$187.81
Disc Plow -3 Times - May 2008							
Tractor - JD 4840 - 180 HP	23	0.130	$8.71	$14.03		$0.00	$22.74
Disk - 20 Ft	23	0.130	$9.56	$3.84		$0.00	$13.40
Labor	23	0.130	$0.00	$0.00		$3.54	$3.54
Totals For Activities			$18.27	$17.87	$0.00	$3.54	$39.69
Do - All - 3 Times - May 2008							
Tractor - JD 4840 - 180 HP	23	0.109	$7.26	$11.69		$0.00	$18.95
Do-All - 19 Ft	23	0.109	$3.37	$0.68		$0.00	$4.05
Labor	23	0.109	$0.00	$0.00		$2.95	$2.95
Totals For Activities			$10.63	$12.37	$0.00	$2.95	$25.95
Row Up - May 2008							
Tractor - JD 4020 - 90 HP	23	0.261	$3.34	$5.76		$0.00	$9.10
Hipper - 4 Row	23	0.261	$1.52	$0.49		$0.00	$2.01
Labor	23	0.261	$0.00	$0.00		$2.36	$2.36
Totals For Activities			$4.86	$6.25	$0.00	$2.36	$13.47
Cleaned Ditches - May 2008							
Tractor - JD 4020 - 90 HP	23	0.174	$2.28	$3.85		$0.00	$6.13
Drain Cleaner	23	0.174	$0.32	$0.29		$0.00	$0.61
Labor	23	0.174	$0.00	$0.00		$1.57	$1.57
Totals For Activities			$2.60	$4.14	$0.00	$1.57	$8.31

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Applied PrePlant - June 2008							
Tractor - JD 4430 - 125 HP	23	0.174	$2.93	$4.78		$0.00	$7.71
Mississippi Middle Buster–4Row	23	0.174	$0.38	$0.12		$0.00	$0.50
Spray Tank	23	0.174	$0.27	$0.26		$0.00	$0.52
Labor	23	0.174	$0.00	$0.00		$1.57	$1.57
Insecticide - Sniper			$0.00	$0.00		$0.00	$0.00
19.2 oz/acre @ $1.47/oz			$0.00	$0.00	$28.22	$0.00	$28.22
Insecticide - Temik			$0.00	$0.00		$0.00	$0.00
17 lbs/acre @ $3.35 /lb			$0.00	$0.00	$56.95	$0.00	$56.95
Totals For Activities			$3.57	$5.16	$85.17	$1.57	$95.48
Pulled Rows Up - June 2008							
Tractor - JD 4020 - 90 HP	23	0.174	$2.23	$3.84		$0.00	$6.07
Hipper - 4 Row	23	0.174	$1.02	$0.33		$0.00	$1.34
Labor	23	0.174	$0.00	$0.00		$1.57	$1.57
Totals For Activities			$3.24	$4.17	$0.00	$1.57	$8.98
Bed Shaper - June 2008							
Tractor - JD 4020 - 90 HP	23	0.261	$3.34	$5.76		$0.00	$9.10
Row Shaper - 4 Row	23	0.261	$1.05	$0.74		$0.00	$1.79
Labor	23	0.261	$0.00	$0.00		$2.36	$2.36
Totals For Activities			$4.39	$6.50	$0.00	$2.36	$13.26
Applied Herbicide - June 2008							
Tractor – JD 4420 - 125 HP	23	0.109	$1.83	$2.99		$0.00	$4.82
Spray Boom - 27 Ft	23	0.109	$0.42	$0.30		$0.00	$0.71
Labor	23	0.109	$0.00	$0.00		$0.98	$0.98
Herbicide (Valor)			$0.00	$0.00		$0.00	$0.00
2.5oz/acre @ $4.31/oz	23		$0.00	$0.00	$10.78	$0.00	$10.78
Totals For Activities			$2.25	$3.28	$10.78	$0.98	$17.29
Applied Herbicide - June 2008							
Tractor – JD 4420 - 125 HP	23	0.109	$1.83	$2.99		$0.00	$4.82
Spray Boom - 27 Ft	23	0.109	$0.42	$0.30		$0.00	$0.71
Labor	23	0.109	$0.00	$0.00		$0.98	$0.98
Herbicide (Command)			$0.00	$0.00		$0.00	$0.00
3 pts/acre @ $13.63/pt	23		$0.00	$0.00	$40.89	$0.00	$40.89
Totals For Activities			$2.25	$3.28	$40.89	$0.98	$47.40

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Transplant - June 2008							
Tractor JD 4020 - 90 HP	11.5	1.000	$6.40	$11.04		$0.00	$17.44
Tractor - IH 1086 - 130 HP	11.5	1.000	$8.42	$13.74		$0.00	$22.16
Transplanter - 4 Row	11.5	1.000	$4.27	$1.27		$0.00	$5.53
Transplanter - 4 Row	11.5	1.000	$4.27	$1.27		$0.00	$5.53
Labor	23	1.000	$0.00	$0.00		$9.05	$9.05
Seed (Transplant Slips)			$0.00	$0.00		$0.00	$0.00
0.109 plant bed acres needed	23		$0.00	$0.00	$199.50	$0.00	$199.50
Additional Labor			$0.00	$0.00		$0.00	$0.00
23 Workers @ 8.23/hour	23		$0.00	$0.00	$189.29	$0.00	$189.29
Totals For Activities			$23.36	$27.31	$388.79	$9.05	$448.52
Apply Insecticide - June 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt/ac @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52
Apply Insecticide - July 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray - Layby	23	0.072	$0.38	$0.27		$0.00	$0.65
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Sniper			$0.00	$0.00		$0.00	$0.00
20 oz /acre @ $1.47/oz	23		$0.00	$0.00	$29.40	$0.00	$29.40
Totals For Activities			$1.30	$1.86	$29.40	$0.65	$33.22
Apply Fertilizer - July 2008							
Tractor - JD 4020 - 90 HP	23	0.043	$0.56	$0.96		$0.00	$1.52
Fertilizer Buggy	23	0.043	$0.23	$0.17		$0.00	$0.40
Labor	23	0.043	$0.00	$0.00		$0.39	$0.39
Fertilizer/Nutrients			$0.00	$0.00		$0.00	$0.00
100 lbs 0-0-60 @ $680/ton			$0.00	$0.00	$34.00	$0.00	$34.00
Totals For Activities			$0.79	$1.13	$34.00	$0.39	$36.31

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Insecticide - July 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Leverage			$0.00	$0.00		$0.00	$0.00
3.66 oz / acre @ $2.33/oz.	23		$0.00	$0.00	$8.53	$0.00	$8.53
Totals For Activities			$1.20	$1.79	$8.53	$0.65	$12.17
Apply Insecticide - July 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52
Apply Chemical - August 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Nutrient - Zinc Plus			$0.00	$0.00		$0.00	$0.00
1 pt/acre @ 10.50/gallon	23		$0.00	$0.00	$1.31	$0.00	$1.31
Totals For Activities			$1.20	$1.79	$8.19	$0.65	$11.84
Apply Insecticide- August 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Apply Insecticide - August 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Baythroid			$0.00	$0.00		$0.00	$0.00
3 oz/acre @ $2.22/oz	23		$0.00	$0.00	$6.66	$0.00	$6.66
Totals For Activities			$1.20	$1.79	$6.66	$0.65	$10.30
Apply Insecticide - August 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - Intreprid			$0.00	$0.00		$0.00	$0.00
7 oz/acre @ 2.03/oz	23		$0.00	$0.00	$14.21	$0.00	$14.21
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$21.09	$0.65	$24.73
Insecticide- September 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52
Insecticide- September 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Insecticide- October 2008							
Tractor - JD 4020 - 90 Hp	23	0.072	$0.92	$1.59		$0.00	$2.52
Spray Boom - 27 Ft	23	0.072	$0.28	$0.20		$0.00	$0.47
Labor	23	0.072	$0.00	$0.00		$0.65	$0.65
Insecticide - PenCap			$0.00	$0.00		$0.00	$0.00
1 qrt / acre @ $6.88/qrt	23		$0.00	$0.00	$6.88	$0.00	$6.88
Totals For Activities			$1.20	$1.79	$6.88	$0.65	$10.52
Barred Off - November 2008							
Tractor - JD 4020 - 90 Hp	23	0.500	$6.40	$11.04		$0.00	$17.44
Barred Off Equip - 2 Row	23	0.500	$1.56	$1.06		$0.00	$2.62
Labor	23	0.500	$0.00	$0.00		$4.53	$4.53
Totals For Activities			$7.96	$12.10	$0.00	$4.53	$24.59
Devined - November 2008							
Tractor - JD 4020 - 90 Hp	23	0.500	$6.40	$11.04		$0.00	$17.44
Shredder - 2 Row	23	0.500	$1.12	$0.43		$0.00	$1.55
Labor	23	0.500	$0.00	$0.00		$4.53	$4.53
Totals For Activities			$7.52	$11.47	$0.00	$4.53	$23.52
Harvest - November 2008							
Tractor - JD 4430 - 125 HP	14.375	1.565	$16.47	$26.88		$0.00	$43.35
Tractor - IH 1086 - 130 HP	8.625	1.565	$9.88	$16.13		$0.00	$26.01
Harvester - 2 Row	14.375	1.565	$4.73	$2.68		$0.00	$7.41
Harvester - 2 Row	8.625	1.565	$2.84	$1.61		$0.00	$4.45
Labor	23	1.565	$0.00	$0.00		$14.17	$14.17
Additional Labor			$0.00	$0.00		$0.00	$0.00
30 Workers @ $8.23 / hour			$0.00	$0.00	$386.45	$0.00	$386.45
Bins - 223 Bins for Field			$0.00	$0.00		$0.00	$0.00
Bins @ $55/bin (Prorated 5yrs)			$0.00	$0.00	$106.65	$0.00	$0.00
Totals For Activities			$33.93	$47.29	$493.10	$14.17	$588.50
Harvest - November 2008							
Forklift	23	1.000	$3.84	$0.00		$0.00	$3.84
	23	1.000	$0.00	$4.25		$0.00	$4.25
Labor	23	1.565	$0.00	$0.00		$14.17	$14.17
Totals For Activities			$3.84	$4.25	$0.00	$14.17	$22.26

2008 Sweet Potato Research Verification Program
Estimated Costs of Individual Field Activities
Production Field – South Louisiana Field (Continued)

Activity	Acres Covered	Hours Per Acre	Fixed Equipment Costs	Direct Equipment Costs	Input Costs	Labor Costs	Total Costs
Harvest - Transport – Nov 2008							
Truck (18-Wheeler)	23	1.000	$32.34	$31.13		$0.00	$63.47
Labor	23	1.565	$0.00	$0.00		$14.17	$14.17
Totals For Activities			$32.34	$31.13	$0.00	$14.17	$77.64
Check Off – November 2008							
LDAF Checkoff							
$17.50/acre	23		$0.00	$0.00	$17.50	$0.00	$17.50
Totals For Activities			$0.00	$0.00	$17.50	$0.00	$17.50
Land Rent - November 2008							
Cash Land Rent - $30 per acre	23		$0.00	$0.00	$30.00	$0.00	$30.00
Totals For Activities			$0.00	$0.00	$30.00	$0.00	$30.00