UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

2005

SAMPLE COSTS TO PRODUCE

Daikon

ORIENTAL RADISH

SAN JOAQUIN VALLEY - SOUTH

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UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

SAMPLE COSTS TO PRODUCE DAIKON

San Joaquin Valley - South 2005

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INTRODUCTION

Sample costs to produce daikon in the San Joaquin Valley are shown in this study. The study is intended as a guide only, and can be used to make production decisions, determine potential returns, prepare budgets and evaluate production loans. The practices described are based on production operations considered typical for this crop and region, but will not apply to every farm. Sample costs for labor, materials, equipment and custom services are based on current figures. "Your Costs" columns in Tables 1 and 2 are provided for entering your farm costs.

The hypothetical farm operations, production practices, overhead, and calculations are described under the assumptions. For additional information or an explanation of the calculations used in the study call the Department of Agricultural and Resource Economics, University of California, Davis, California, (530) 752-3589 or the local UC Cooperative Extension office.

Sample Cost of Production Studies for many commodities can be downloaded at http://coststudies.ucdavis.edu, requested through the Department of Agricultural and Resource Economics, UC Davis, (530) 752-4424 or obtained from the local county UC Cooperative Extension offices. Some archived studies are also available on the website.

ASSUMPTIONS

The assumptions refer to Tables 1 to 7 and pertain to sample costs to produce daikon in the San Joaquin Valley. The cultural practices described represent production operations and materials considered typical for a small farm in the region. Costs, materials, and practices in this study will not apply to all farms. Timing of and types of cultural practices will vary among growers within the region and from season to season due to variables such as weather, soil, and insect and disease pressure. The study is to be used as a guide only. **The use of trade names and cultural practices in this report does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products or cultural practices.**

Farm. This report is based on a hypothetical 10 contiguous acre farm. The land is rented and planted to Asian vegetables. Two acres are planted to daikon and the remaining acres to other Asian vegetables. The grower and family do the majority of the labor for the operations, but a labor cost (opportunity cost) is shown for each operation.

Production Operating Costs

Land Preparation. A custom operator plows the land one time, discs two times and lists the beds in February. After listing, the bed peaks are flattened using the grower's tractor and a nine-foot pipe (3 rows) towed behind the tractor.

Plant. Daikon seed (April Cross variety) is planted in the field at one-pound (48,000 seeds per pound average) per acre on 36-inch beds, 2-rows or lines per bed, 3 to 6 inch in-row spacing, with the grower's tractor and planter. Daikon is a Chinese radish crop, mostly white in color, and can be planted year round, but the best crops are planted in early spring or early fall. For the local or farmers market, the grower plants several rows every two weeks and it takes one-hour per acre. For the wholesale market, one to several plantings are made, preferably one in March and /or one in August. In this study we are using a single planting in mid-March. Rows are usually 250 to 300 feet long.

Irrigation. Irrigation includes the water costs per irrigation and irrigation labor. Lay flat vinyl pipe is laid at the end of the rows and the water is run down the furrows. Irrigation begins in March two to three days after planting. The field is irrigated twice a week from mid-March through May. Water at $2.50 per irrigation is assumed to be a typical cost. Water costs were provided from the growers pumping charges for the summer months. Data on total water use in acre-inches was not available. Water costs will vary by pumping setup and irrigation district. A typical water cost in the area is $4.83 per acre-inch. Irrigation labor is calculated as one-half hour per acre per irrigation.

Fertilization. Prior to planting, 15-15-15 fertilizer is broadcast on the field by the grower with a tractor and fertilizer applicator at 300 pounds per acre. The crop is fertilized four times over two months with UN32 and/or CAN 17. The fertilizer is mixed with the irrigation water and application labor is included with the irrigation labor. For this study UN32 is applied once at 10-gallons (110 lbs per application) per acre in March, twice in April, and once in May.

Pest Management. If insects or diseases appear, contact your local farm advisor or pest control adviser.

Weeds. Due to the short season, no weed control costs are allocated in this study. Hand weeding or herbicide applications may be needed in some fields.

Insects. Whiteflies and aphids may be a problem in late summer planting, but most of the time growers do not spray. Wireworms can cause cosmetic damage on the roots and are occasionally treated. Costs for insect control are not shown in this study.

Diseases. Alternaria leaf blight and turnip mosaic virus are an occasional problem.

Pickup/ATV. Costs for a 1/2-ton pickup are included in the study. The pickup and a trailer are used for hauling the harvested daikon to the packing shed and is included in that cost. In addition, the grower drives another 250 miles per acre for farming purposes including trips to a farmers market.

Harvest. The daikon roots (radishes) are harvested by hand beginning approximately 60 days after planting and harvested each week over a three-week period. The roots are harvested at about 12-14 inches in length for the processing market and 2.5 inches for the oriental vegetable market. Daikon can be sold with or without the tops attached; usually a better price is paid for tops left on the roots. Two people pick, wash, and pack 100 boxes of daikon per 8-hour day. Time from planting to harvest can vary from 30 to 90 days, depending upon size desired, planting month, and variety. As the field is picked over, the crop is thinned which allows the remaining plants to grow in size. Growers having several plantings will harvest over several weeks.

Haul. The grower delivers the product to a packer or farmers market. It is assumed that the grower makes one trip per day for each pick and takes approximately one-hour per roundtrip.

Yields. The crop yields based on grower input averages 650 forty-pound boxes per acre.

Returns. The average returns used in this study are approximated at $8 per box and used to calculate returns over a range of yields. It is assumed 70% are sold wholesale and 30% through farmers markets. Participating growers reported returns ranging from $8 to $20 per 40-pound box. Farmers market gross returns range from $15 to $20 per box and the 2004 USDA Wholesale Market reports show a range from $8 to $15. Assuming that 70% of the wholesale price is the net return to the grower, the grower returns range from $5.60 to $9.10 per box.

Labor. Labor rates of $12.42 per hour for machine operators and $9.32 for general labor includes payroll overhead of 38%. The basic hourly wages are $9.00 for machine operators and $6.75 for general labor. The overhead includes the employers' share of federal and California state payroll taxes, workers' compensation insurance for truck crops (code 0172), and a percentage for other possible benefits. Workers' compensation costs will vary among growers, but for this study the cost is based upon the average industry final rate as of January 1, 2005 (California Department of Insurance). Labor for operations involving machinery are 20% higher than the operation time given in Table 1 to account for the extra labor involved in equipment set up, moving, maintenance, work breaks, and field repair.

Equipment Operating Costs. Repair costs are based on purchase price, annual hours of use, total hours of life, and repair coefficients formulated by American Society of Agricultural Engineers (ASAE). Fuel and lubrication costs are also determined by ASAE equations based on maximum Power Take Off (PTO) horsepower, and fuel type. Prices for on-farm delivery of diesel and gasoline are $1.51 and $2.05 per gallon, respectively. The cost includes a 2% local sales tax on diesel fuel and 8% sales tax on gasoline. Gasoline also includes federal and state excise tax, which are refundable for on-farm use when filing your income tax. The fuel, lube, and repair cost per acre for each operation in Table 1 is determined by multiplying the total hourly operating cost in Table 6 for each piece of equipment used for the selected operation by the hours per acre. Tractor time is 10% higher than implement time for a given operation to account for setup, travel and down time.

Interest On Operating Capital. Interest on operating capital is based on cash operating costs and is calculated monthly until harvest at a nominal rate of 7.65% per year. A nominal interest rate is the typical market cost of borrowed funds. The interest cost of post harvest operations is discounted back to the last harvest month using a negative interest charge.

Risk. Production risks should not be minimized. While this study makes every effort to model a production system based on typical, real world practices, it cannot fully represent financial, agronomic and market risks, which affect the profitability and economic viability.

Cash Overhead

Cash overhead consists of various cash expenses paid out during the year that are assigned to the whole farm and not to a particular operation. These costs include property taxes, interest on operating capital, office expense, liability and property insurance, and investment repairs.

Property Taxes. Counties charge a base property tax rate of 1% on the assessed value of the property. In some counties special assessment districts exist and charge additional taxes on property including equipment, buildings, and improvements. For this study, county taxes are calculated as 1% of the average value of the property. Average value equals new cost plus salvage value divided by 2 on a per acre basis.

Insurance. Insurance for farm investments varies depending on the assets included and the amount of coverage. Property insurance provides coverage for property loss and is charged at 0.690% of the average value of the assets over their useful life. Liability insurance covers accidents on the farm and costs $429 for the entire farm.

Office Expense. Office and business expenses are estimated at $10 per acre. These expenses include office supplies, telephones, bookkeeping, accounting, and legal fees. The cost is a general estimate and not based on any actual data.

Land Rent. The 10 acres are rented for cash at $300 per acre. The rented land includes the irrigation system that is maintained by the landlord. The owner also pays the land property taxes. Land rents range from $250 to $350 per acre.

Investment Repairs. Annual maintenance is calculated as two percent of the purchase price.

Non-cash Overhead

Non-cash overhead is calculated as the capital recovery cost for equipment and other farm investments.

Capital Recovery Costs. Capital recovery cost is the annual depreciation and interest costs for a capital investment. It is the amount of money required each year to recover the difference between the purchase price and salvage value (unrecovered capital). It is equivalent to the annual payment on a loan for the investment with the down payment equal to the discounted salvage value. This is a more complex method of calculating ownership costs than straight-line depreciation and opportunity costs, but more accurately represents the annual costs of ownership because it takes the time value of money into account (Boehlje and Eidman). The formula for the calculation of the annual capital recovery costs is ((Purchase Price – Salvage Value) x Capital Recovery Factor) + (Salvage Value x Interest Rate).

Salvage Value. Salvage value is an estimate of the remaining value of an investment at the end of its useful life. For farm machinery (tractors and implements) the remaining value is a percentage of the new cost of the investment (Boehlje and Eidman). The percent remaining value is calculated from equations developed by the American Society of Agricultural Engineers (ASAE) based on equipment type and years of life. The life in years is estimated by dividing the wear out life, as given by ASAE by the annual hours of use in this operation. For other investments including irrigation systems, buildings, and miscellaneous equipment, the value at the end of its useful life is zero. The salvage value for land is the purchase price because land does not depreciate. The purchase price and salvage value for equipment and investments are shown in the tables.

Capital Recovery Factor. Capital recovery factor is the amortization factor or annual payment whose present value at compound interest is 1. The amortization factor is a table value that corresponds to the interest rate used and the life of the machine.

Interest Rate. The interest rate of 6.01% used to calculate capital recovery cost is the USDA-ERS's ten-year average of California's agricultural sector long-run rate of return to production assets from current income. It is used to reflect the long-term realized rate of return to these specialized resources that can only be used effectively in the agricultural sector.

Tools. This includes shop tools, hand tools, and miscellaneous field tools. The tools are an estimated value and not taken from any specific data.

Irrigation. The grower owns 1,732 feet of vinyl flat pipe to deliver the water to the furrows. The pipe was purchased for the farm and the cost is allocated among the various crops.

Equipment. Farm equipment is purchased new or used, but the study shows the current purchase price for new equipment. The new purchase price is adjusted to 60% to indicate a mix of new and used equipment. Annual ownership costs for equipment and other investments are shown in the Whole Farm Annual Equipment, Investment, and Business Overhead Costs table. Equipment costs are composed of three parts: non-cash overhead, cash overhead, and operating costs. Both of the overhead factors have been discussed in previous sections. The operating costs consist of repairs, fuel, and lubrication and are discussed under operating costs.

Table Values. Due to rounding, the totals may be slightly different from the sum of the components.

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For information concerning University of California publications contact UC DANR Communications Services (1-800-994-8849), online at http://anrcatalog.ucdavis.edu or your local county Cooperative Extension office.

UC COOPERATIVE EXTENSION

Table 1. COST PER ACRE TO PRODUCE DAIKON

SAN JOAQUIN VALLEY 2005

Operation	Operation Time (Hrs/A)	Cash and Labor Costs per Acre: Labor Cost	Fuel, Lube & Repairs	Material Cost	Custom/ Rent	Total Cost	Your Cost
Cultural:							
Land Prep: Plow, Disc, List	0.00	0	0	0	100	100	
Land Prep: Flatten Bed Tops	0.33	5	1	0	0	6	
Fertilize: Preplant (15-15-15)	0.09	1	0	59	0	61	
Plant: Seed	1.00	15	4	116	0	135	
Irrigate: (water & labor)	10.50	98	0	53	0	150	
Fertilize: UN32	0.00	0	0	57	0	57	
Miscellaneous Pickup Use	5.00	75	59	0	0	134	
TOTAL CULTURAL COSTS	16.92	194	65	285	100	644	
Harvest:							
Hand Pick, Wash & Pack	104.00	969	0	715	0	1,684	
Haul	6.00	89	75	0	0	165	
TOTAL HARVEST COSTS	110.00	1,059	75	715	0	1,849	
Interest on operating capital @ 7.65%						35	
TOTAL OPERATING COSTS/ACRE		1,252	141	1,000	100	2,529	
CASH OVERHEAD:							
Liability Insurance						43	
Office Expense						10	
Land Rent						300	
Property Taxes						5	
Property Insurance						4	
Investment Repairs						3	
TOTAL CASH OVERHEAD COSTS						364	
TOTAL CASH COSTS/ACRE						2,893	
Non-Cash Overhead (Capital Recovery)		Per Producing Acre		Annual Cost Capital Recovery			
Flat Irrigation Pipe		46		25		25	
Miscellaneous Field Tools		100		24		24	
Equipment		706		94		94	
TOTAL NON-CASH OVERHEAD COSTS		852		142		142	
TOTAL COSTS/ACRE						3,035	

UC COOPERATIVE EXTENSION

Table 2. COST PER ACRE TO PRODUCE DAIKON

SAN JOAQUIN VALLEY - 2005

	Quantity/ Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
GROSS RETURNS					
Daikon	650.00	box	8.00	5,200	
OPERATING COSTS					
Carton:					
Boxes 40 lb	650.00	each	1.10	715	
Seed:					
Daikon	1.00	lb	116.00	116	
Custom/Contract:					
Land Preparation	1.00	acre	100.00	100	
Fertilizer:					
15-15-15	300.00	lb	0.20	59	
UN32	440.00	lb	0.13	57	
Irrigation:					
Water	21.00	each	2.50	53	
Labor (machine)	14.91	hrs	12.42	185	
Labor (non-machine)	114.50	hrs	9.32	1,067	
Fuel - Gas	45.82	gal	2.05	94	
Fuel - Diesel	2.70	gal	1.51	4	
Lube				15	
Machinery repair				28	
Interest on operating capital @ 7.65%				35	
TOTAL OPERATING COSTS/ACRE				2,529	
NET RETURNS ABOVE OPERATING COSTS				2,671	
CASH OVERHEAD COSTS:					
Liability Insurance				43	
Office Expense				10	
Land Rent				300	
Property Taxes				5	
Property Insurance				4	
Investment Repairs				3	
TOTAL CASH OVERHEAD COSTS/ACRE				364	
TOTAL CASH COSTS/ACRE				2,893	
NON-CASH OVERHEAD COSTS (Capital Recovery)					
Flat Irrigation Pipe				25	
Miscellaneous Field Tools				24	
Equipment				94	
TOTAL NON-CASH OVERHEAD COSTS/ACRE				142	
TOTAL COSTS/ACRE				3,035	
NET RETURNS ABOVE TOTAL COSTS				2,165	

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Table 3. COST PER ACRE TO PRODUCE DAIKON

SAN JOAQUIN VALLEY - 2005

Beginning JAN 05 Ending DEC 05	JAN 05	FEB 05	MAR 05	APR 05	MAY 05	JUN 05	JUL 05	AUG 05	SEP 05	OCT 05	NOV 05	DEC 05	TOTAL
Cultural:													
Land Prep: Plow, Disc, List		100											100
Land Prep: Flatten Bed Tops		6											6
Fertilize: Preplant (15-15-15)		61											61
Plant: Seed			135										135
Irrigate: (water & labor)			36	57	57								150
Fertilize: UN32			14	29	14								57
Miscellaneous Pickup Use	22	22	22	22	22	22							134
TOTAL CULTURAL COSTS	22	190	208	108	94	22	0	0	0	0	0	0	644
Harvest:													
Hand Pick, Wash, & Pack					1,131	553							1,684
Haul					110	55							165
TOTAL HARVEST COSTS	0	0	0	0	1,241	608	0	0	0	0	0	0	1,849
Interest on operating capital @ 7.65%	0	1	3	3	12	16	0	0	0	0	0	0	35
TOTAL OPERATING COSTS/ACRE	22	191	210	112	1,347	647	0	0	0	0	0	0	2,529
OVERHEAD:													
Liability Insurance	43												43
Office Expense	2	2	2	2	2	2							10
Land Rent					300								300
Property Taxes	5												5
Property Insurance	4												4
Investment Repairs	0	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL CASH OVERHEAD COSTS	52	2	2	2	302	2	0	0	0	0	0	0	364
TOTAL CASH COSTS/ACRE	75	193	212	113	1,648	648	0	0	0	0	0	0	2,893

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Table 4. RANGING ANALYSIS

SAN JOAQUIN VALLEY - 2005

COSTS PER ACRE AT VARYING YIELD TO PRODUCE DAIKON

	YIELD (40 lb boxes/acre)						
	450	500	550	600	650	700	750
OPERATING COSTS/ACRE:							
Cultural Cost	644	644	644	644	644	644	644
Harvest Cost (pick, wash, haul)	1,225	1,381	1,537	1,693	1,849	2,005	2,161
Interest on operating capital	29	30	32	34	35	37	39
TOTAL OPERATING COSTS/ACRE	1,898	2,055	2,213	2,371	2,528	2,686	2,844
TOTAL OPERATING COSTS/cwt	4.22	4.11	4.02	3.95	3.89	3.84	3.79
CASH OVERHEAD COSTS/ACRE	363	363	363	364	364	364	365
TOTAL CASH COSTS/ACRE	2,261	2,418	2,576	2,735	2,892	3,050	3,209
TOTAL CASH COSTS/cwt	5.02	4.84	4.68	4.56	4.45	4.36	4.28
NON-CASH OVERHEAD COSTS/ACRE	128	132	135	139	142	146	149
TOTAL COSTS/ACRE	2,389	2,550	2,711	2,874	3,034	3,196	3,358
TOTAL COSTS/cwt	5.31	5.10	4.93	4.79	4.67	4.57	4.48

NET RETURNS PER ACRE ABOVE OPERATING COSTS

PRICE	YIELD (40 lb boxes/acre)						
$/box	450	500	550	600	650	700	750
4.00	-98	-55	-13	29	72	114	156
6.00	802	945	1,087	1,229	1,372	1,514	1,656
8.00	1,702	1,945	2,187	2,429	2,672	2,914	3,156
10.00	2,602	2,945	3,287	3,629	3,972	4,314	4,656
12.00	3,502	3,945	4,387	4,829	5,272	5,714	6,156
14.00	4,402	4,945	5,487	6,029	6,572	7,114	7,656
16.00	5,302	5,945	6,587	7,229	7,872	8,514	9,156
18.00	6,202	6,945	7,687	8,429	9,172	9,914	10,656
20.00	7,102	7,945	8,787	9,629	10,472	11,314	12,156

NET RETURNS PER ACRE ABOVE CASH COSTS

PRICE	YIELD (40 lb boxes/acre)						
$/box	450	500	550	600	650	700	750
4.00	-461	-418	-376	-335	-292	-250	-209
6.00	439	582	724	865	1,008	1,150	1,291
8.00	1,339	1,582	1,824	2,065	2,308	2,550	2,791
10.00	2,239	2,582	2,924	3,265	3,608	3,950	4,291
12.00	3,139	3,582	4,024	4,465	4,908	5,350	5,791
14.00	4,039	4,582	5,124	5,665	6,208	6,750	7,291
16.00	4,939	5,582	6,224	6,865	7,508	8,150	8,791
18.00	5,839	6,582	7,324	8,065	8,808	9,550	10,291
20.00	6,739	7,582	8,424	9,265	10,108	10,950	11,791

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Table 4 continued

NET RETURNS PER ACRE ABOVE TOTAL COSTS

PRICE	YIELD (40 lb boxes/acre)						
$/box	450	500	550	600	650	700	750
4.00	-589	-550	-511	-474	-434	-396	-358
6.00	311	450	589	726	866	1,004	1,142
8.00	1,211	1,450	1,689	1,926	2,166	2,404	2,642
10.00	2,111	2,450	2,789	3,126	3,466	3,804	4,142
12.00	3,011	3,450	3,889	4,326	4,766	5,204	5,642
14.00	3,911	4,450	4,989	5,526	6,066	6,604	7,142
16.00	4,811	5,450	6,089	6,726	7,366	8,004	8,642
18.00	5,711	6,450	7,189	7,926	8,666	9,404	10,142
20.00	6,611	7,450	8,289	9,126	9,966	10,804	11,642

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Table 5. WHOLE FARM ANNUAL EQUPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
SAN JOAQUIN VALLEY - 2005

ANNUAL EQUIPMENT COSTS

						Cash Overhead		
Yr	Description	Price	Yrs Life	Salvage Value	Capital Recovery	Insur-ance	Taxes	Total
05	35HP 2WD Tractor	15,265	20	1,959	1,279	59	86	1,424
05	Bed Shaper Pipe 9'	150	10	27	18	1	1	20
05	Fertilizer Applicator	850	20	44	73	3	4	82
05	Pickup 1/2 Ton	28,000	5	12,549	4,423	140	203	4,766
05	Planter Jr 1-Bed, 2-Row	1,100	10	195	135	4	6	146
05	Trailer 12x16	4,500	20	235	386	16	24	426
	TOTAL	49,865		15,009	6,314	224	324	6,864
	60% of New Cost *	29,919		9,005	3,789	134	195	4,118

*Used to reflect a mix of new and used equipment

ANNUAL INVESTMENT COSTS

					Cash Overhead			
Description	Price	Yrs Life	Salvage Value	Capital Recovery	Insur-ance	Taxes	Repairs	Total
Irrigation Flat Pipe	455	2		248	0	0	9	257
Miscellaneous Field Tools	1,000	5		237	3	0	20	261
TOTAL INVESTMENT	1,455		0	486	3	0	29	518

ANNUAL BUSINESS OVERHEAD COSTS

Description	Units/ Farm	Unit	Price/ Unit	Total Cost
Land Rent	10	acre	300.00	3,000
Liability Insurance	10	acre	42.90	429
Office Expense	10	acre	10.00	100

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Table 6. HOURLY EQUIPMENT COSTS

SAN JOAQUIN VALLEY - 2005

Yr	Description	Actual Hours Used	Capital Recovery	Cash Overhead Insur-ance	Taxes	Operating Repairs	Fuel & Lube	Total Oper.	Total Costs/Hr.
05	35HP 2WD Tractor	100	7.66	0.36	0.52	0.62	2.98	3.60	12.14
05	Bed Shaper Pipe 9'	100	0.11	0.00	0.01	0.01	0.00	0.01	0.13
05	Fertilizer Applicator	60	0.74	0.03	0.05	0.31	0.00	0.31	1.13
05	Pickup 1/2 Ton	400	6.63	0.21	0.30	2.08	9.82	11.90	19.04
05	Planter Jr, 1-Bed, 2-Row	150	0.54	0.02	0.03	0.29	0.00	0.29	0.88
05	Trailer 12x16	150	1.55	0.07	0.09	0.66	0.00	0.66	2.37

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Table 7. OPERATIONS WITH EQUIPMENT

SAN JOAQUIN VALLEY - 2005

Operation	Operation Month	Equipment Tractor	Implement	Non-Machine Labor (hr/ac)	Material	Broadcast Rate/acre	Unit	Material Cost $/acre
Cultural:								
Land Prep: Plow, Disc, List	Feb	Custom					acre	100
Land Prep: Flatten Bed Tops	Feb	35HP 2WD	Bed Shaper Pipe					
Fertilize: Preplant (15-15-15)	Feb	35HP 2WD	Fert Applicator		15-15-15	300.00	lb	59.40
Fertilize: UN32	Mar				UN32	110.00	lb	14.30
	Apr				UN32	220.00	lb	28.60
	May				UN32	110.00	lb	14.30
Plant: Seed	Mar	35HP 2WD	Planter		Seed	1.00	lb	116.00
Irrigate: (water & labor)	Mar			2.50	Water	5.00	irrig	12.50
	Apr			4.00	Water	8.00	irrig	20.00
	May			4.00	Water	8.00	irrig	20.00
Miscellaneous Pickup Use	All	Pickup						
Harvest: Hand Pick, Wash, Pack	May			70.00	Boxes	435.00	box	478.50
	June			34.00	Boxes	215.00	box	236.50
Haul	May	Pickup	Trailer					
	June	Pickup	Trailer					