

U.C. COOPERATIVE EXTENSION

SAMPLE COSTS TO PRODUCE BROCCOLI Processed IN THE SAN JOAQUIN VALLEY - 1992

by

Jesus Valencia, Stanislaus Co.

Michelle Le Strange, Tulare & Kings Co.

Don May, Fresno Co.

Karen Klonsky, Extension Economist, U.C. Davis

and

Pete Livingston, Staff Research Associate, U.C. Davis

The detailed costs for processed broccoli production in the San Joaquin Valley are presented in this study. The hypothetical farm used in this report consists of 1,200 acres of which 200 acres are in broccoli. The remainder of the farm is planted to different field and row crops.

Practices described in this study are based on those production procedures considered typical for this crop and area. Sample costs given for labor, materials, equipment and contract services are based on current figures. Some costs and practices detailed in this study may not be applicable to your situation. This study is only intended as a guide and can be used in making production decisions, determining potential returns, preparing budgets and evaluating production loans. A column for **Your Cost** is provided on **Tables 1 and 2, Costs Per Acre To Produce Broccoli and Detail of Costs To Produce Broccoli**, respectively.

This study consists of **General Assumptions for Producing Processed Broccoli** and six tables.

- Table 1. Costs Per Acre To Produce Broccoli**
- Table 2. Detail of Costs Per Acre To Produce Broccoli**
- Table 3. Monthly Cash Costs Per Acre To Produce Broccoli**
- Table 4. Annual Equipment, Investment And Business Overhead Costs**
- Table 5. Hourly Equipment Costs**
- Table 6. Ranging Analysis**

For an explanation of calculations used for the study refer to the attached General Assumptions, call the Department of Agricultural Economics, Cooperative Extension, University of California, Davis, California, (916) 752-3589 or call the farm advisor in the county of interest.

The University of California Cooperative Extension in compliance with the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and the Rehabilitation Act of 1973 does not discriminate on the basis of race, creed, religion, color, national origins, or mental or physical handicaps in any of its programs or activities, or with respect to any of its employment practices or procedures. The University of California does not discriminate on the basis of age, ancestry, sexual orientation, marital status, citizenship, medical condition (as defined in section 12926 of the California Government Code) or because the individuals are disabled or Vietnam era veterans. Inquiries regarding this policy may be directed to the Personnel Studies and Affirmative Action Manager, Agriculture and Natural Resources, 2120 University Avenue, University of California, Berkeley, California 94720, (510) 644-4270.

GENERAL ASSUMPTIONS FOR PRODUCING PROCESSED BROCCOLI
San Joaquin Valley - 1992
U.C. Cooperative Extension

The following is a description of some general assumptions pertaining to sample costs of processed broccoli production in the San Joaquin Valley. The costs are based on typical cultural practices used by growers in this region, some of which may not be used during every production year. Costs are presented as annual costs per acre. The use of trade names in this study does not constitute an endorsement or a recommendation by the University of California nor is any criticism implied by omission of other similar products.

1. LAND:

This cost of production study is based on a 1,200 acre field and row crop operation of which 200 acres is dedicated to growing processed broccoli. Other crops grown on the same acreage in rotation with broccoli might include small grains, cantaloupes, mixed melons, tomatoes, field corn, etc.

2. RENT AGREEMENT:

The land used for broccoli production in this study is rented on a per acre basis. Under this agreement the landowner receives \$150 per acre annually. Since the land is double cropped half of the rent (\$75) is allocated to the broccoli operation and half is allocated to the other crop.

3. CULTURAL PRACTICES:

The cultural, pesticide and fertilizer inputs for the production of processed broccoli vary considerably from grower to grower and field to field. Land preparation operations such as discing, chiseling, landplaning, and listing, are done with a 270 hp (horsepower) crawler tractor and occurs in July. A 130 HP wheel tractor is used to perform most of the other cultural operations that occur throughout the growing season.

A preplant fertilizer is custom broadcast onto the field along with an herbicide before the beds are listed up. A rate of 50 pounds per acre of actual nitrogen is used. Two additional nitrogen applications occur during the growing season. Both times the additional fertilizers are run through the water in regularly scheduled irrigations during August and September. Eighty pounds per acre of actual N is applied in each of the two irrigations. A total of 210 pounds per acre of actual nitrogen is applied to the crop in this study.

A hybrid variety of broccoli is directly seeded into double rows on 40 inch beds at a rate of 1 pound per acre. Fields are planted to stand with 5 to 6 inch spacing between plants. Most growers do not plant all of their broccoli acreage at one time, so plantings are staggered over several weeks. This allows growers to take advantage of a longer market season and also eases harvest requirements.

Irrigation water is supplied by a water district at a cost of \$30 per acre foot. A single pre-irrigation of 3 acre inches is sprinkled on the fields before the preplant fertilizer and herbicide are broadcast over the field. A total of 10 more irrigations occur from July through October. A season total of 27 acre inches of water (this includes the water for the pre-irrigation) is applied for crop. The pre-irrigation is the only irrigation that uses sprinklers to apply the water. All of the remaining irrigations use gated pipe to deliver the water to the field. The sprinkler pipe is rented and the gated pipe is owned by the grower.

A variety of pest management techniques are used to control various weed, disease and insect problems in broccoli. A preplant herbicide is broadcast onto the field in the same operation as the fertilizer. Both of these materials are incorporated into the ground by discing twice. The broccoli is cultivated twice between irrigations in August and September, to control weeds. Various worms and aphids are managed with a mix of insecticide sprays. One fungicide spray is applied to control downey mildew. In this study all pesticides are applied by aircraft. Additional pest control may be required depending on each grower's own situation.

The practices and inputs used in this cost study serve only as a sample or a guide. Variations in cultural practices and inputs can be significant. Contact your local farm advisor for advice on production practices.

4. HARVEST, YIELDS & RETURNS:

The processors are responsible for harvesting the broccoli. The only harvest operation that the grower pays is the hauling from field to the processing plant. In this study, transportation costs for the grower are \$0.05 per gross pound of cut broccoli.

Yields in the San Joaquin Valley for processed broccoli, can range from 6,000 to 9,000 net pounds per acre. The net pounds of packed broccoli equals 75% of the gross yield. The crop yield used in this study is 10,000 gross pounds per acre harvested or 7,500 net pounds processed. Broccoli growers may produce higher than the 9000 pounds used in the range shown on Table 6, or even 0 pounds per acre due to crop failure. Many factors can influence crop yields. Pest incidence, climate and resource availability are a few of the factors that can cause fluctuations in yields that growers may not be able to control. Variations of yields can occur across regions and fields.

Prices paid to growers are based on net weight of broccoli. No specific return price is assumed in this study due to the variation in contract prices for broccoli. Over the past 3 years, the average price to US growers for processed broccoli has ranged from a high of \$0.196 per pound to a low of \$0.182 per pound.

5. RISK:

The risks associated with vegetable production 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 of vegetable production.

Because of the risk involved, access to a market is crucial. A grower should contract with a processor before any broccoli production begins. Interested parties should contact processors for more information on contracts or prices.

6. LABOR:

Basic hourly wages for workers are \$5.97 and \$4.48 per hour for machine operators and field workers respectively. Adding 34% for SDI, FICA, insurance and other benefits gives the labor rates shown of \$8.00 per hour for machine operators and \$6.00 per hour for field labor. The labor for operations involving machinery are 10% higher than the machine hours to account for the extra labor involved in equipment set-up, moving, maintenance and

repair. Wages for managers are not included as a cash cost. Any returns above total costs are considered a return to management.

7. OVERHEAD:

County taxes are calculated as 1% of the average of the equipment, buildings and improvements. Insurance is charged at 0.5% of the average value of the equipment over its useful life. Office and business costs are estimated at \$30 per acre for the ranch. These expenses include office supplies, phone, bookkeeping, accounting, legal fees, road preparation and maintenance, etc.

8. INTEREST:

Interest on operating capital is based on cash costs and is calculated monthly for five months until harvest at the rate of 9.00% per year. Adjustments for inflation have not been included in these interest rates. Interest is also charged on investment at 4.00% per year to account for income foregone that could be received from an alternative investment (opportunity cost) and is based on the average value of the buildings and equipment.

9. INVESTMENT:

The investments shown in **Table 4** are those that are partially or completely allocated to the broccoli operation. Investments including the fuel wagon, buildings, shop tools, etc., can be used by the whole farm so only a portion of the costs are assigned to the broccoli operation and the rest of the costs are distributed to the other farm enterprises. Annual investments shown in **Table 1** represent depreciation and opportunity cost for each investment on an annual per acre basis.

10. EQUIPMENT COSTS:

In allocating the equipment costs per acre, the following calculations were made and shown in **Table 4**: (a) Original Cost of equipment is the cost of the new equipment plus sales tax. (b) Depreciation is straight line with a ten percent salvage value. (c) Interest on investment is calculated as the average value per acre of the equipment during its useful life, multiplied by an interest rate of 4.00%. Average value equals new cost plus salvage value divided by 2 on a per acre basis. (d) Total investment costs are also calculated as 60% of the depreciation and the interest costs for all new equipment to reflect a mix of the new and used equipment. These values are also used in **Table 1**. Most of this equipment is used on the entire 1,200 acre ranch.

11. FUEL & REPAIR:

The fuel and repair cost for each operation in **Table 1** is determined by multiplying the total hourly operating cost for each piece of equipment by the number of hours per acre for that operation. Prices for on-farm delivery of gasoline and diesel are \$0.71 and \$0.98 per gallon respectively.

Table 1.

U.C. COOPERATIVE EXTENSION
 COSTS PER ACRE TO PRODUCE BROCCOLI
 PROCESSED
 SAN JOAQUIN VALLEY - 1992

Labor Rate: \$ 8.00/hr. machine labor
 \$ 6.00/hr. non-machine labor

Interest Rate: 9.00%
 Yield per Acre: 7500 lb

Operation	Operation Time (Hrs/A)	Labor Cost	Fuel & Repairs	Cash and Labor Material Cost	Costs per Acre Custom/Rent	Total Cost	Your Cost
Cultural:							
Stubble Disc 2X	0.29	2.75	8.30	0.00	0.00	11.05	
Chisel	0.14	1.37	3.63	0.00	0.00	5.00	
Land Plane Field 2X	0.31	2.94	7.88	0.00	0.00	10.82	
Preirrigate	0.50	3.00	0.00	7.50	31.25	41.75	
Apply Fertilizer and Herbicide	0.00	0.00	0.00	48.29	4.75	53.04	
Incorporate With Disc 2X	0.27	2.56	6.65	0.00	0.00	9.21	
List Beds	0.27	2.56	6.65	0.00	0.00	9.21	
Mulch Beds	0.18	1.74	3.15	0.00	0.00	4.89	
Shape Beds And Plant	0.41	3.94	7.33	150.00	0.00	161.26	
Make Ditches	0.06	1.78	0.93	0.00	0.00	2.71	
Irrigate	4.00	24.00	0.00	48.00	0.00	72.00	
Close Ditches	0.06	1.78	0.76	0.00	0.00	2.54	
Cultivate & Furrow Out 2X	0.43	4.13	5.57	0.00	0.00	9.70	
Apply Insecticide	0.00	0.00	0.00	107.60	13.50	121.10	
Irrigate & Fertilize	1.00	6.00	0.00	50.91	0.00	56.91	
Apply Fungicide	0.00	0.00	0.00	33.74	6.75	40.49	
Pickup Truck Use	0.23	2.16	1.44	0.00	0.00	3.60	
TOTAL CULTURAL COSTS	8.13	60.69	52.30	446.04	56.25	615.29	
Harvest:							
Field Cut And Load Truck	0.00	0.00	0.00	0.00	500.00	500.00	
TOTAL HARVEST COSTS	0.00	0.00	0.00	0.00	500.00	500.00	
Postharvest:							
Chop Stubble	0.30	2.87	4.16	0.00	0.00	7.03	
TOTAL POSTHARVEST COSTS	0.30	2.87	4.16	0.00	0.00	7.03	
Interest on operating capital @ 9.00%						16.36	
TOTAL OPERATING COSTS/ACRE		63.56	56.46	446.04	556.25	1138.68	
TOTAL OPERATING COSTS/LB						0.15	
CASH OVERHEAD:							
Land Rent						75.00	
Office Expense						30.00	
Property Taxes						2.30	
Equipment Insurance						1.15	
Investment Repairs						1.54	
TOTAL CASH OVERHEAD COSTS						110.00	
TOTAL CASH COSTS/ACRE						1248.68	
TOTAL CASH COSTS/LB						0.17	
NON-CASH OVERHEAD:							
Investment	Per producing Acre	Depreciation	Annual Cost	Interest @ 4.00%			
Buildings	54.17	2.17		1.08		3.25	
Shop Tools	8.33	0.42		0.17		0.58	
Fuel Wagon	7.50	0.68		0.16		0.84	
Fuel Tanks & Pumps	40.25	2.01		0.81		2.82	
Gated Pipe	28.56	1.29		0.63		1.91	
Equipment	289.42	21.61		6.37		27.98	
TOTAL NON-CASH OVERHEAD COSTS	428.23	28.17		9.22		37.38	
TOTAL COSTS/ACRE						1286.06	
TOTAL COSTS/LB						0.17	

Table 2.

U.C. COOPERATIVE EXTENSION
 DETAIL OF COSTS PER ACRE TO PRODUCE BROCCOLI
 PROCESSED
 SAN JOAQUIN VALLEY - 1992

Use of trade names does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products.

Labor Rate: \$8.00/hr. machine labor Interest Rate: 9.00%
 \$6.00/hr. non-machine labor

	Quantity/Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
OPERATING COSTS					
Water	27.00	acin	2.50	67.50	
Rent:					
Sprinkler Pipe	1.00	acre	31.25	31.25	
Fertilizer:					
13-26-0	384.00	lb	0.11	42.24	
UN-32	44.22	gal	0.88	38.91	
Lbs of N = 11.1 lbs/gal X .32 X 44.22 gal					
Herbicide:					
Treflan PRO 5	1.00	pint	6.05	6.05	
Custom:					
Ground Application	1.00	acre	4.75	4.75	
Air Application	3.00	acre	6.75	20.25	
Haul	10000.00	lb	0.05	500.00	
Seed:					
Broccoli Seed	1.00	lb	150.00	150.00	
Insecticide:					
Javelin	2.00	lb	15.70	31.40	
Lannate	8.00	pint	6.23	49.84	
Metasystox R	4.00	pint	6.59	26.36	
Fungicide:					
Ridomil - Bravo	2.00	lb	16.87	33.74	
Labor (machine)	3.52	hrs	8.00	28.16	
Labor (non-machine)	5.90	hrs	6.00	35.40	
Fuel - Gas	0.66	gal	0.98	0.64	
Fuel - Diesel	35.03	gal	0.71	24.87	
Lube				3.83	
Machinery repair				27.11	
Interest on operating capital @ 9.00%				16.36	

TOTAL OPERATING COSTS/ACRE				1138.68	
TOTAL OPERATING COSTS/LB				0.15	

CASH OVERHEAD COSTS:					
Land Rent				75.00	
Office Expense				30.00	
Property Taxes				2.30	
Equipment Insurance				1.15	
Investment Repairs				1.54	

TOTAL CASH OVERHEAD COSTS/ACRE				110.00	

TOTAL CASH COSTS/ACRE				1248.68	
TOTAL CASH COSTS/LB				0.17	

NON-CASH OVERHEAD COSTS (DEPRECIATION & INTEREST):					
Buildings				3.25	
Shop Tools				0.58	
Fuel Wagon				0.84	
Fuel Tanks & Pumps				2.82	
Gated Pipe				1.91	
Equipment				27.98	

TOTAL NON-CASH OVERHEAD COSTS/ACRE				37.38	

TOTAL COSTS/ACRE				1286.06	
TOTAL COSTS/LB				0.17	
=====					

Table 3.

U.C. COOPERATIVE EXTENSION
MONTHLY CASH COSTS PER ACRE TO PRODUCE BROCCOLI
PROCESSED
SAN JOAQUIN VALLEY - 1992

Beginning Ending	JUL 92	AUG 92	SEP 92	OCT 92	NOV 92	DEC 92	JAN 93	FEB 93	MAR 93	APR 93	MAY 93	JUN 93	TOTAL
Cultural:													
Stubble Disc 2X	11.05												11.05
Chisel	5.00												5.00
Land Plane Field 2X	10.82												10.82
Preirrigate	41.75												41.75
Apply Fertilizer and Herb.	53.04												53.04
Incorporate With Disc 2X	9.21												9.21
List Beds	9.21												9.21
Mulch Beds	4.89												4.89
Shape Beds And Plant		161.26											161.26
Make Ditches		2.21	0.50										2.71
Irrigate		27.00	27.00	18.00									72.00
Close Ditches		1.05	1.05	0.45									2.54
Cultivate & Furrow Out 2X		4.85	4.85										9.70
Apply Insecticide		38.15		82.95									121.10
Irrigate & Fertilize		28.36	28.55										56.91
Apply Fungicide			40.49										40.49
Pickup Truck Use	0.72	0.72		0.72	0.72								3.60
TOTAL CULTURAL COSTS	145.69	263.60	103.16	102.12	0.72								615.29
Harvest:													
Field Cut And Load Truck				500.00									500.00
TOTAL HARVEST COSTS				500.00									500.00
Postharvest:													
Chop Stubble					7.03								7.03
TOTAL POSTHARVEST COSTS					7.03								7.03
Interest on oper. capital	1.09	3.07	3.84	8.36									16.36
TOTAL OPERATING COSTS/ACRE	146.78	266.67	107.01	610.48	7.75								1138.68
TOTAL OPERATING COSTS/LB	0.02	0.04	0.01	0.08	0.00								0.15
OVERHEAD:													
Land Rent					75.00								75.00
Office Expense					30.00								30.00
Property Taxes	2.30												2.30
Equipment Insurance	1.15												1.15
Investment Repairs	0.31	0.31	0.31	0.31	0.31								1.54
TOTAL CASH OVERHEAD COSTS	3.76	0.31	0.31	0.31	105.31								110.00
TOTAL CASH COSTS/ACRE	150.55	266.97	107.31	610.78	113.06								1248.68
TOTAL CASH COSTS/LB	0.02	0.04	0.01	0.08	0.02								0.17

Table 4.

U.C. COOPERATIVE EXTENSION
ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS
SAN JOAQUIN VALLEY - 1992

ANNUAL EQUIPMENT COSTS

Yr	Description	Price	Yrs Life	- Non-Cash Over. - -		Cash Overhead -		Total
				Depre- ciation	Interest	Insur- ance	Taxes	
92	130 hp 2wd Tractor	77359	12	5801.92	1701.90	212.74	425.48	8142.04
92	270 hp Crawler	151940	12	11395.50	3342.68	417.84	835.67	15991.69
92	Bed Shaper - 3 Row	4004	15	240.27	88.08	11.01	22.02	361.38
92	Chisel - Heavy 16'	7500	15	450.00	165.00	20.63	41.25	676.88
92	Cultivator Sled	3745	15	224.67	82.40	10.30	20.60	337.97
92	Disc - Finish 18'	6000	15	360.00	132.00	16.50	33.00	541.50
92	Disc - Offset 18'	20230	15	1213.80	445.06	55.63	111.27	1825.76
92	Ditcher - V	12706	15	762.33	279.54	34.94	69.88	1146.69
92	Mower - Flail 10'	5628	10	506.50	123.82	15.48	30.95	676.75
92	Mulcher - 3 Row	19260	15	1155.60	423.72	52.96	105.93	1738.21
92	Pickup Truck - 1/2 Ton	17655	7	2269.86	388.42	48.55	97.11	2803.94
92	Planter - Precision	9650	7	1240.71	212.30	26.54	53.08	1532.63
92	Scraper - Drag 10'	2884	15	173.07	63.44	7.93	15.86	260.30
92	Triplane - 16'	17527	15	1051.60	385.60	48.20	96.40	1581.80
TOTAL		356088		26845.83	7833.96	979.25	1958.50	37617.54
60% of New Cost *		213653		16107.50	4700.38	587.55	1175.10	22570.52

* Used to reflect a mix of new and used equipment.

ANNUAL INVESTMENT COSTS

Yr	Description	Price	Yrs Life	- Non-Cash Over. -		Cash Overhead			Total
				Depre- ciation	Interest	Insur- ance	Taxes	Repairs	
INVESTMENT									
	Buildings	65000	25	2600.00	1300.00	162.50	325.00	100.00	4487.50
	Fuel Tanks & Pumps	8050	20	402.50	161.00	20.13	40.25	125.00	748.88
	Fuel Wagon	1500	10	135.00	33.00	4.13	8.25	50.00	230.38
	Gated Pipe	5712	20	257.05	125.66	15.71	31.42	100.00	529.84
	Shop Tools	10000	20	500.00	200.00	25.00	50.00	100.00	875.00
TOTAL INVESTMENT		90262		3894.55	1819.66	227.47	454.92	475.00	6871.60

ANNUAL BUSINESS OVERHEAD COSTS

Description	Units/ Farm	Unit	Price/ Unit	Total Cost
Land Rent	200.00	acre	75.00	15000.00
Office Expense	1200.00	acre	30.00	36000.00

Table 5.

U.C. COOPERATIVE EXTENSION
HOURLY EQUIPMENT COSTS
SAN JOAQUIN VALLEY - 1992

Yr	Description	Actual Hours Used	COSTS PER HOUR							Total Costs/Hr.
			-Non-Cash Over.- Depre- ciation	Interest	- Cash Overhead - Insur- ance	Taxes	Repairs	Operating Fuel & Lube	Total Oper.	
92	130 hp 2wd Tractor	1131.9	3.08	0.90	0.11	0.23	4.64	6.16	10.80	15.12
92	270 hp Crawler	1071.0	6.38	1.87	0.23	0.47	7.60	13.51	21.11	30.06
92	Bed Shaper - 3 Row	219.0	0.66	0.24	0.03	0.06	1.15	0.00	1.15	2.14
92	Chisel - Heavy 16'	165.6	1.63	0.60	0.07	0.15	2.15	0.00	2.15	4.61
92	Cultivator Sled	166.0	0.81	0.30	0.04	0.07	1.07	0.00	1.07	2.30
92	Disc - Finish 18'	165.7	1.30	0.48	0.06	0.12	1.72	0.00	1.72	3.68
92	Disc - Offset 18'	175.2	4.16	1.52	0.19	0.38	5.81	0.00	5.81	12.07
92	Ditcher - V	166.0	2.76	1.01	0.13	0.25	3.65	0.00	3.65	7.79
92	Mower - Flail 10'	199.8	1.52	0.37	0.05	0.09	2.02	0.00	2.02	4.05
92	Mulcher - 3 Row	165.2	4.20	1.54	0.19	0.38	5.53	0.00	5.53	11.85
92	Pickup Truck - 1/2 Ton	267.0	5.10	0.87	0.11	0.22	3.12	3.29	6.41	12.71
92	Planter - Precision	224.0	3.32	0.57	0.07	0.14	4.84	0.00	4.84	8.94
92	Scraper - Drag 10'	166.0	0.63	0.23	0.03	0.06	0.83	0.00	0.83	1.77
92	Triplane - 16'	165.2	3.82	1.40	0.18	0.35	2.54	0.00	2.54	8.29

Table 6.

U.C. COOPERATIVE EXTENSION
RANGING ANALYSIS
SAN JOAQUIN VALLEY - 1992

COSTS PER ACRE AT VARYING YIELDS TO PRODUCE PROCESSED BROCCOLI							
	YIELD (LB/ACRE)						
	6000	6500	7000	7500	8000	8500	9000
OPERATING COSTS/ACRE:							
Cultural Cost	615	615	615	615	615	615	615
Harvest Cost	400	433	467	500	533	567	600
Postharvest Cost	7	7	7	7	7	7	7
Interest on operating capital	16	16	16	16	17	17	17
TOTAL OPERATING COSTS/ACRE	1038	1072	1105	1139	1172	1206	1239
TOTAL OPERATING COSTS/LB	0.17	0.16	0.16	0.15	0.15	0.14	0.14
CASH OVERHEAD COSTS/ACRE							
	110	110	110	110	110	110	110
TOTAL CASH COSTS/ACRE	1148	1182	1215	1249	1282	1316	1349
TOTAL CASH COSTS/LB	0.19	0.18	0.17	0.17	0.16	0.15	0.15
NON-CASH OVERHEAD COSTS/ACRE							
	37	37	37	37	37	37	37
TOTAL COSTS/ACRE	1185	1219	1252	1286	1320	1353	1387
TOTAL COSTS/LB	0.20	0.19	0.18	0.17	0.16	0.16	0.15

NET RETURNS PER ACRE ABOVE OPERATING COSTS FOR PROCESSED BROCCOLI							
PRICE (DOLLARS PER LB)	YIELD (LB/ACRE)						
	6000	6500	7000	7500	8000	8500	9000
0.16	-78	-32	15	61	108	154	201
0.17	-18	33	85	136	188	239	291
0.18	42	98	155	211	268	324	381
0.19	102	163	225	286	348	409	471
0.20	162	228	295	361	428	494	561
0.21	222	293	365	436	508	579	651
0.22	282	358	435	511	588	664	741

NET RETURNS PER ACRE ABOVE CASH COSTS FOR PROCESSED BROCCOLI							
PRICE (DOLLARS PER LB)	YIELD (LB/ACRE)						
	6000	6500	7000	7500	8000	8500	9000
0.16	-188	-142	-95	-49	-2	44	91
0.17	-128	-77	-25	26	78	129	181
0.18	-68	-12	45	101	158	214	271
0.19	-8	53	115	176	238	299	361
0.20	52	118	185	251	318	384	451
0.21	112	183	255	326	398	469	541
0.22	172	248	325	401	478	554	631

NET RETURNS PER ACRE ABOVE TOTAL COSTS FOR PROCESSED BROCCOLI							
PRICE (DOLLARS PER LB)	YIELD (LB/ACRE)						
	6000	6500	7000	7500	8000	8500	9000
0.16	-225	-179	-132	-86	-40	7	53
0.17	-165	-114	-62	-11	40	92	143
0.18	-105	-49	8	64	120	177	233
0.19	-45	16	78	139	200	262	323
0.20	15	81	148	214	280	347	413
0.21	75	146	218	289	360	432	503
0.22	135	211	288	364	440	517	593