

SMALL WHITE BEANS
1977 - Cost Analysis Work Sheet

SMALL WHITE BEAN YIELD - 2400 lbs/acre
(clean beans)

Operating Costs/Hour

Class I Equipment Operator - \$5.60* per hr. total
Class II Equipment Operator - 5.50* per hr. total
Other Labor - 4.52* per hr. total

	Fuel & Repairs	Deprec.	Interest	Total
CT-Crawler Tractor 80 hp	\$7.10	\$3.08	\$2.30	\$12.84
WT-Wheel Tractor 60 hp	2.86	1.90	.95	5.71
SWT-Wheel Tractor 40 hp	2.16	1.60	.80	4.56

Operation	Tractor	**Acres /hour	Hours /acre	Labor	Fuel & Repairs	Materials		Cost/Acre	
						Kind and Amount	Costs	Sample	Yours
<u>Cultural Costs</u>									
Disc 3x	CT	4.0	.75	4.12	6.80				10.92
Chisel	CT	2.0	.50	2.75	4.05				6.80
Landplane	CT	2.0	.50	2.75	4.55				7.30
Harrow 2x	CT	10.0	.20	1.10	1.64				2.74
Fertilize-custom						50 lb N, 50 lb P ₂ O ₅ , Appl.	\$5.50	31.50	31.50
Weed Control-custom						Material and application		19.50	19.50
Plant	WT	3.3	.30	1.68	1.58	Seed: 30 lb @ 25¢		7.50	10.76
Cultivate 4x	SWT	2.0	2.00	11.00	6.84				17.84
Irrigate 3x			3.00	13.56	6.00	Water: 1.5 acre ft. @ \$14		21.00	40.56
Hand hoe			5.00	22.60					22.60
Total Cultural Costs			12.25	\$59.56	\$31.46			\$79.50	\$170.52
<u>Harvesting Costs</u>									
Cutting	SWT	3.3	.30	1.65	.95				2.60
Windrow	SWT	3.3	.30	1.65	.83				2.48
Hand labor			1.00	4.52					4.52
Threshing-custom						\$1.75 cwt field run;10% over clean wt.		46.20	46.20
Haul-custom						.25 cwt field run;10% over clean wt.		6.60	6.60
Cleaning-custom						1.00 cwt field run;10% over clean wt.		26.40	26.40
Storage and bags						Storage 35¢ cwt; Bags 35¢ cwt		16.80	16.80
Total Harvest Costs			1.60	\$ 7.82	\$ 1.78			\$96.00	\$105.60
Rent 60% of \$200									\$120.00
Business & miscellaneous costs 6% of cultural, harvest costs, and rent									\$ 23.77
<u>Depreciation & Interest</u>									
						<u>Depreciation</u>	<u>Interest 8%</u>		
	Tractors					\$10.73	\$ 6.88		
	Other equip. \$180-10 yr. 60%					10.80	4.32		
Total Depreciation & Interest						\$21.53	\$11.20		\$ 32.73
Total Cost per Acre									\$452.62
Total Cost per Cwt. (clean beans)									18.86

*Social Security, Workman's Compensation, and all other payroll costs included.

**The number of acres per hour for each time the operation is done.

SMALL WHITE BEANS - PROFITS AS AFFECTED BY YIELD AND PRICE

YIELD Cwt./Acre	Total Production Costs/Acre	Small White Beans - Value per Cwt.							
		\$ 16.00	\$ 18.00	\$ 20.00	\$ 22.00	\$ 24.00	\$ 26.00	\$ 28.00	\$ 30.00
Cwt.		\$ - Profit or Loss Per Acre							
14	\$410.22	-186.22	-158.22	-130.22	-102.22	- 74.22	- 46.22	- 18.22	+ 9.78
16	418.70	-162.70	-130.70	- 98.70	- 66.70	- 34.70	- 2.70	+ 29.30	61.30
18	427.18	-139.18	-103.18	- 67.18	- 31.18	+ 4.82	40.82	76.82	112.82
20	435.66	-115.66	- 75.66	- 35.66	+ 4.34	44.34	84.34	124.34	164.34
22	444.14	- 92.14	- 48.14	- 4.14	+ 39.86	83.86	127.86	171.86	215.86
24	452.62	- 68.62	- 20.62	+ 27.38	75.38	123.38	171.38	219.38	267.38
26	461.11	- 45.11	+ 6.89	58.89	110.89	162.89	214.89	266.89	318.89
28	469.58	- 21.58	+ 34.42	90.42	146.42	202.42	258.42	314.42	370.42
30	478.06	+ 1.94	61.94	121.94	181.94	241.94	301.94	361.94	421.94
32	486.54	+ 25.46	89.46	153.46	217.46	281.46	345.46	409.46	473.46

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GARBANZO BEANS

Warren E. Bendixen
Edward A. Yeary

1977 - Cost Analysis Work Sheet

GARBANZO BEAN YIELD - 1000 lbs/acre
(clean basis)

Operating Costs/Hour

Class I Equipment Operator - \$5.60* per hr. total
Class II Equipment Operator - 5.50* per hr. total
Other Labor - 4.52* per hr. total

	Fuel & Repairs	Deprec.	Interest	Total
CT-Crawler tractor 80 hp	\$ 7.10	\$3.08	\$2.30	\$12.48
WT-Wheel tractor 60 hp	2.86	1.90	.95	5.71
SWT-Wheel tractor 40 hp	2.16	1.60	.80	4.56

Operations	Trac-tor	**Acres /hour	Hours /acre	Labor \$	Fuel & Repairs \$	Kind and Amount	Cost/acre	
							Costs \$	Sample \$
Cultural Costs								
Disc 2x	CT	4.0	.50	2.75	4.53			7.28
Plow 1x	CT	2.0	.50	2.75	4.48			7.23
Harrow 3x	CT	6.0	.50	2.75	4.10			6.85
Coil tooth chisel	WT	2.0	.50	2.75	2.08			4.83
Springtooth 2x	CT	6.0	.33	1.82	2.70			4.52
Weed control-custom						Material and application	14.00	14.00
Plant	WT	3.3	.30	1.68	1.58	Seed: 25 lb @ 32¢	8.00	11.26
Light harrow	WT	10.0	.10	.55	.36			.91
Cultivate 3x	SWT	2.0	1.50	8.25	5.13			13.38
Hand weeding			3.00	13.56				13.56
Insect control-custom						Material and application	11.00	11.00
Foliar spray-custom						Copper spray \$3, Appl. \$5	8.00	8.00
Total Cultural Costs			7.23	\$36.86	\$24.96		\$41.00	\$102.82
Harvesting Costs								
Cutting	SWT	3.3	.30	1.65	.95			2.60
Windrow (rake 2x)	SWT	3.3	.60	3.30	1.90			5.20
Hand labor			.50	2.26				2.26
Threshing-custom						\$1.75 cwt field run;12% over clean wt	19.60	19.60
Hauling-custom						.20 cwt field run;12% over clean wt	2.24	2.24
Cleaning-custom						1.10 cwt field run;12% over clean wt	12.32	12.32
Storage and bags						Storage 35¢ cwt; bags 35¢ cwt.	7.00	7.00
Total Harvest Costs			1.40	\$ 7.21	\$ 2.85		\$41.16	\$ 51.22
Rent - Value of 1/4 share: 250 lbs @ 30¢								\$ 75.00
Business and Miscellaneous costs 6% of cultural, harvest costs, and rent								\$ 13.74
Depreciation & Interest								
						<u>Depreciation</u>	<u>Interest 8%</u>	
	Tractors					\$ 11.19	\$ 6.99	
	Other equip. \$90-10 yr.					9.00	3.60	
Total Depreciation & Interest						\$ 20.19	\$10.59	\$ 30.78
Total Cost per Acre								\$273.56
Total Cost per Cwt (Clean beans)								27.36

*Social Security, Workman's Compensation, and all payroll costs included. **Acres/hr. each time operation is done.

GARBANZO BEANS - PROFITS AS AFFECTED BY YIELD & PRICE

YIELD Cwt/Acre	Total Production Costs/Acre	GARBANZO BEANS - PRICE PER CWT.							
		\$ 25.00	\$ 30.00	\$ 35.00	\$ 40.00	\$ 45.00	\$ 50.00	\$ 55.00	\$ 60.00
Cwt		\$ - Profit or Loss Per Acre							
6	\$256.12	-106.12	- 76.12	- 46.12	- 16.12	+ 13.88	43.88	73.88	103.88
8	264.84	- 64.84	- 24.84	+ 15.16	55.16	95.16	135.16	175.16	215.16
10	273.56	- 23.56	+ 26.44	76.44	126.44	176.44	226.44	276.44	326.44
12	282.28	+ 17.72	77.72	137.72	197.72	257.72	317.72	377.72	437.72
14	291.00	59.00	129.00	199.00	269.00	339.00	409.00	479.00	549.00
16	299.72	100.28	180.28	260.28	340.28	420.28	500.28	580.28	660.28
18	308.44	141.56	231.56	321.56	411.56	501.56	591.56	681.56	771.56
20	317.16	182.84	282.84	382.84	482.84	582.84	682.84	782.84	882.84
22	325.88	224.12	334.12	444.12	554.12	664.12	774.12	884.12	994.12
24	334.60	265.40	385.40	505.40	625.40	745.40	865.40	985.40	1105.40
26	343.32	306.68	436.68	566.68	696.68	826.68	956.68	1086.68	1216.68
28	352.04	347.96	487.96	627.96	767.96	907.96	1047.96	1187.96	1327.96
30	360.76	389.24	539.24	689.24	839.24	989.24	1139.24	1289.24	1439.24
32	369.48	430.52	590.52	750.52	910.52	1070.52	1230.52	1390.52	1550.52

Rent is based on 1/4 crop yield

The cost of rent, threshing, hauling, cleaning & storage vary with yield/acre.

The market value of the beans also vary the rent cost per acre.

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June 1977

LIMA BEAN YIELDS - 2400 lbs/acre
(clean beans)

Operating Costs

	Fuel & Repairs	Deprec.	Interest	Total
Class I Equipment Operator - \$5.60*per hr. total	CT-Crawler Tractor 80 hp \$7.10	\$3.08	\$2.30	\$12.48
Class II Equipment Operator - 5.50*per hr. total	WT-Wheel Tractor 60 hp 2.86	1.90	.95	5.71
Other Labor - 4.52*per hr. total	SWT-Wheel Tractor 40 hp 2.16	1.60	.80	4.56

Operation	Trac- tor	**Acres /hour	Hours /acre	Labor \$	Fuel & Repairs \$	Materials		Cost/Acre	
						Kind and Amount	Costs	Sample	Yours
Cultural Costs		Ac.	Hr.				\$	\$	
Disc 3x	CT	4.0	.75	4.12	6.80				10.92
Chisel	CT	2.0	.50	2.75	4.05				6.80
Landplane	CT	2.0	.50	2.75	4.55				7.30
Harrow 2x	CT	10.0	.20	1.10	1.64				2.74
Fertilize-custom						60 lb N, 60 lb P ₂ O ₅ , App. \$5.50	35.90	35.90	
Weed Control-custom						Material and application	22.75	22.75	
Plant	WT	3.3	.30	1.68	1.58	Seed: 100 lb @ 45¢	45.00	48.26	
Cultivate 4x	SWT	2.0	2.00	11.00	6.84				17.84
Irrigate 3x			3.00	13.56	6.00	Water: 1.5 acre ft. @ \$14	21.00	40.56	
Hand hoe			5.00	22.60					22.60
Pest Control-custom 2x						Material \$7.50; App. \$10	17.50	17.50	
Total Cultural Costs			12.25	\$59.56	\$31.46		\$142.15	\$233.17	
Harvesting Costs									
Cutting	SWT	3.3	.30	1.65	.95				2.60
Windrow	SWT	3.3	.30	1.65	.83				2.48
Hand Labor			1.00	4.52					4.52
Threshing-custom						\$2 cwt. field run;15% over clean weight	55.20	55.20	
Haul-custom						20¢ cwt field run;15% over clean weight	5.52	5.52	
Cleaning-custom						2.50 cwt field run;15% over clean weight	69.00	69.00	
Storage and bags						Storage 35¢ cwt; bags 35¢ cwt	16.80	16.80	
Total Harvest Costs			1.60	\$ 7.82	\$ 1.78		\$146.52	\$156.12	
Rent - 12 month basis									\$200.00
Business & miscellaneous costs 6% of cultural, harvest costs, and rent									35.36
Depreciation & Interest						Depreciation	Interest 8%		
						Tractors	\$10.73	\$ 6.88	
						Other equip. \$180-10 yrs.	18.00	7.20	
Total Depreciation & Interest							\$28.73	\$14.08	\$ 42.81
Total Cost per Acre									\$667.46
Total Cost per Cwt (clean beans)									27.81

*Social Security, Workman's Compensation, and all other payroll costs included.

** The number of acres per hour for each time the operation is done.

DRY LIMA BEANS - PROFITS AS AFFECTED BY YIELDS AND PRICE

YIELD Cwt/Acre	Total Production Costs/Acre	Dry Lima Beans - Price Per Cwt.							
		\$ 25.00	\$ 30.00	\$ 35.00	\$ 40.00	\$ 45.00	\$ 50.00	\$ 55.00	\$ 60.00
		\$ - Profit or Loss Per Acre							
Cwt									
14	\$604.01	-254.01	-184.01	-114.01	- 44.01	+ 25.99	95.99	165.99	235.99
16	616.70	-216.70	-136.70	- 56.70	+ 23.30	103.30	183.30	263.30	343.30
18	629.39	-179.39	- 89.39	+ 0.61	90.61	180.61	270.61	360.61	450.61
20	642.08	-142.08	- 42.08	+ 57.92	157.92	257.92	357.92	457.92	557.92
22	654.77	-104.77	+ 5.23	115.23	225.23	335.23	445.23	555.23	665.23
24	667.46	- 67.46	+ 52.54	172.54	292.54	412.54	532.54	652.54	772.54
26	680.15	- 30.15	+ 99.85	229.85	359.85	489.85	619.85	749.85	879.85
28	692.84	+ 7.16	147.16	287.16	427.16	567.16	707.16	847.16	987.16
30	705.53	44.47	194.47	344.47	494.47	644.47	794.47	944.47	1094.47
32	718.22	81.78	241.78	401.78	561.78	721.78	881.78	1041.78	1201.78
34	730.91	119.09	289.09	459.09	629.09	799.09	969.09	1139.09	1309.09
36	743.60	156.40	336.40	516.40	696.40	876.40	1056.40	1236.40	1416.40

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BUSH BEAN YIELD - 2000 lbs/acre
(clean basis)

Operating Costs/Hour

	Fuel & Repair	Deprec.	Interest	Total
Class I Equipment Operator - \$5.60* total/hour	CT-Crawler tractor 80 hp \$7.10	\$3.08	\$2.30	\$12.48
Class II Equipment Operator - \$5.50* total/hour	WT-Wheel tractor 60 hp 2.86	1.90	.95	5.71
Other Labor - \$4.52* total/hour	SWT-Wheel tractor 40 hp 2.16	1.60	.80	4.56

Operations	Tractor	**Acres /hour	Hours /acre	Labor	Fuel & Repairs	Materials Kind and Amount	Costs		Cost/Acre	
									Sample	Yours
<u>Cultural Costs</u>		Ac.	Hr.	\$	\$		\$	\$		
Disc 2x	CT	4.0	.50	2.75	4.53				7.28	
Chisel	CT	2.0	.50	2.75	4.05				6.80	
Landplane	CT	2.0	.50	2.75	4.55				7.30	
Disc 1x	CT	4.0	.25	1.38	2.51				3.89	
Harrow 2x	CT	10.0	.20	1.10	1.64				2.74	
List & Fertilize-custom						40 lb N; 50 lb P ₂ O ₅ ; 50 lb K ₂ O App.	5.50	36.30	36.30	
Weed control-custom						Herbicide and application		19.50	19.50	
Plant	WT	3.3	.30	1.68	1.58	Seed: 125 lbs @ 35¢		43.75	47.01	
Cultivate 4x	SWT	2.0	2.00	11.00	6.84				17.84	
Fungicide-custom						Material and Application \$20		20.00	20.00	
Irrigate 5x			4.00	18.08	7.00	Water: 1.8 ac. ft. @ \$14		25.20	50.28	
Hand weed, pull nightshade			9.00	40.68					40.68	
Total Cultural Costs			17.25	\$82.17	\$32.70			\$144.75	\$259.62	
<u>Harvesting Costs</u>										
Cutting	SWT	3.3	.30	1.65	.95				2.60	
Windrow	SWT	3.3	.30	1.65	.83				2.48	
Hand labor		1.0	1.00	4.52					4.52	
Threshing-custom						\$2.00 cwt field run; 20% over clean wt.		48.00	48.00	
Hauling-custom						.25 cwt field run; 20% over clean wt.		6.00	6.00	
Total Harvest Costs			1.60	\$ 7.82	\$ 1.78			\$54.00	\$ 63.60	
Rent - 60% of \$200									\$120.00	
Business and Miscellaneous Costs - 60% of cultural, harvest costs, and rent									\$ 26.60	
<u>Depreciation and Interest</u>						<u>Depreciation</u>	<u>Interest 8%</u>			
	Tractors					\$ 10.73	\$ 6.88			
	Other equipment \$180-10 yr.-60%					10.80	4.32			
Total Depreciation & Interest						\$ 21.53	\$11.20		\$ 32.73	
Total Cost per Acre									\$502.55	
Total Cost per Cwt (Cleaned basis)									25.13	

*Social Security, Workman's Compensation, and all other payroll costs included.

**The number of acres per hour for each time the operation is done.

BUSH BEANS FOR SEED PRODUCTION - PROFITS AS AFFECTED BY YIELD AND PRICE

YIELD Cwt/Acre	Total Production Costs/Acre	Bean - Value per cwt.							
		\$ 25.00	\$ 30.00	\$ 35.00	\$ 40.00	\$ 45.00	\$ 50.00	\$ 55.00	\$ 60.00
<u>\$ Profit or Loss Per Acre</u>									
14	\$485.39	-135.39	- 65.39	+ 4.61	74.61	144.61	214.61	284.61	354.61
16	491.11	- 91.11	- 11.11	+ 68.89	148.89	228.89	308.89	388.89	468.89
18	496.83	- 46.83	+ 43.17	133.17	223.17	313.17	403.17	493.17	583.17
20	502.55	- 2.55	+ 97.45	197.45	297.45	397.45	497.45	597.45	697.45
22	508.27	41.73	151.73	261.73	371.73	481.73	591.73	701.73	811.73
24	513.99	86.01	206.01	326.01	446.01	566.01	686.01	806.01	926.01
26	519.71	130.29	260.29	390.29	520.29	650.29	780.29	910.29	1040.29
28	525.43	174.57	314.57	454.57	594.57	734.57	874.57	1014.57	1154.57
30	531.15	218.85	368.85	518.85	668.85	818.85	968.85	1118.85	1268.85
32	536.87	263.13	423.13	583.13	743.13	903.13	1063.13	1223.13	1383.13

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