“Pick-Your-Own” Operations
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for "Pick-Your-Own" Operations

Computing Production Costs of Fruits and Vegetables

strawberries
sweet corn
tomatoes
snap beans
cabbage

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VEGETABLE CROP PRODUCTION for a pick-your-own operation requires special management considerations if the grower expects to provide a good supply of high-quality, pick-your-own vegetables throughout the season. Variety and pesticide selection are two examples of important management factors.

Pesticides

Pick-your-own vegetable farms usually produce a wide selection of vegetables requiring the use of many different pesticides. Pesticide use can cause problems in contamination and residues if proper planning is not conducted. You can avoid herbicide residues by using weed control chemicals which do not cause toxic carryover to subsequent crops. Registered insect and disease control chemicals should be selected that have few or zero days between application and safe harvest. This minimizes the number of days customers must be restricted from fields.

When several crops are planted in close proximity, they are subject to contamination from drifting pesticides that may not be registered for the particular crop. Therefore, pesticide drift during application must be prevented by the use of proper application equipment and technique.

Early Varieties

Fresh vegetables available early in the season can attract customers and lengthen the season. Selection of early maturing varieties and the use of plastic soil mulches and plant and row covers will permit earlier planting and hasten the maturity of warm-season crops. Sweet corn, tomatoes, peppers and vine crops all respond favorably to mulches and protective plant covers. These require additional investment, but benefits from their use exceed costs by attracting customers early in the season.

Since early varieties of most vegetables are not usually as high in quality as longer-season varieties, they should be planted only for the first early production. Mid-season varieties are usually of higher quality, and main season varieties are highest in quality. After an initial planting of early, middle and late season varieties, only main season varieties are suggested for successive planting due to better quality and higher yield.

Planting

Successive plantings of main season varieties should be made according to the weather and particular by temperature conditions. Snap beans and

sweet corn should be planted each week except in the cool early season and in planting for late summer and fall production. In early season, the interval between plantings should be longer than one week. For fall production, the time interval between plantings should be less than one week due to the seasonal differences in temperature.

Weed Control

Good weed control is necessary for top production and to retain customers. Searching for snap beans, tomatoes and other crops in weeds is not pleasant. Weeds often harbor plant diseases and insects which lower production and quality. Also, snakes in weedy areas may frighten customers.

Row Spacing

Standardization in row spacing is necessary when several crops are grown using one set of farm machinery. This requires some crops to be grown at row spacing differing from that for optimum production. A tractor with a wheel spacing of 6 feet (wheel center to wheel center) can operate in 2-, 3-, 4- and 5-foot rows. These row spacings will accommodate most crops. Row spacing requirements must be considered for other farm equipment, such as a cultivator, used in most crops. Ease of harvesting by customers should also be a consideration in selecting the best row spacing for a particular crop.

Irrigation

Irrigation is essential in maintaining schedules. It not only supplements rainfall during dry periods, but should be used to insure timely emergence of seeded crops. With irrigation, a production schedule can be followed closely to provide a continuous supply of pick-your-own vegetables.

Irrigation water and pesticides may need to be applied in the late evening during the harvest season when customers are not generally in the field.

Extension publications which should be consulted for specific production recommendations include the following:

E-154 Fruit Pesticide Handbook

E-312 Control of Insects, Diseases and Nematodes on Commercial Vegetables

E-433 Chemical Weed Control for Horticultural Crops.

E-550 Fertilizer Recommendations for Michigan Vegetable and Field Crops

E-675 A to T — Commercial Vegetable Recommendations for Michigan

E-682 Commercial Strawberry Culture in Michigan

Evaluating Production Costs

Vegetable crop budgets are given in the following tables as guidelines for the physical inputs, man-hours, costs and possible production involved in producing crops for pick-your-own operations. The tables have been developed for easy adaptation to individual situations. They are not provided as recommendations on practices of materials.

Each crop budget includes a table giving hours and cost of labor, machinery time and operating costs and materials and costs for each growing operation. Most labor has been budgeted at $2.75 per hour, which results in a cost of $3.00 per hour when the employee's share of Social Security and Workman's Compensation are added. Out-of-pocket costs will be reduced where the operator and his family provide these labor functions.

Machinery costs are shown in Table 1, assuming the equipment line and amount of use on an 80-acre farm. Variable costs per hour include repairs, gas and oil as shown in the three right-hand columns. Operating costs for gas and oil are estimated at 0.06 times the PTO or rated engine horsepower times gasoline cost of $0.29 per gallon. For example, the first item in Table 1 is a 54 H.P. tractor $\times$ 0.06 = 3.3 $\times$ $.29 = $.94.

Repair costs per hour were estimated, using the wear-out lives and total repair estimates given in Table 2 and Figure 1. It was assumed that all equipment was at the mid-point of its wear-out life. Repair costs per hour equal the percent of total purchase price obtained from Figure 1 at total accumulated hours of 50 percent of lifetime hours. Multiply percentage by the purchase price, and then divide by one half the estimated hours of wear-out life for that kind of equipment. For example, the large tractor has an estimated wear-out life of 12,000 hours of use, and during that period of time total repairs on the average will equal 120 percent of the current list price. At 50 percent of wear-out life, using Repair Curve 1, the applicable percentage is 42. Forty-two percent times current purchase price of $7,000 equals $2,940 of total repairs. This figure divided by 6,000 hours of use at the midpoint of its wear-out life equals $0.49 repair cost per hour.

Overhead machinery costs were calculated, using depreciation per hour of use on each crop. Interest was charged at 8 percent times the total machinery invested divided by the number of acres operated. Other overhead costs such as taxes and insurance have been detailed in the overhead cost table. Subsequent tables include an estimate of overhead costs and harvesting cost if sold wholesale rather than pick your own.

Table 1 — Equipment and Building Costs

(Assumed for an 80 Acre Fruit Farm Southwest Michigan, 1974)

Item	Purchase cost	Years of usage	Salvage value	Average value	Annual depreciation	Annual Hrs. use for farm*	Depreciation per unit use	Variable cost per hour		
								Repairs	Operating	Total
Large tractor (50-60 HP)	$7,000	10	$ 700	$3,850	$630	500	$1.25	$0.49	$0.94	$1.43
Small tractor (40 HP)	5,400	10	540	2,970	486	500	.97	.33	.70	1.03
2-ton truck (used)	2,400	10	240	1,820	216	3,000/M	.07/M	.04/M	.07/M	.11/M
Weed sprayer	500	10	50	275	45	100	.45	.16	—	.16
Row crop sprayer	500	10	50	275	45	150	.30	.40	—	.40
Well and tank	2,000	20	0	1,000	100	450/MG	.22/MG	.05/MG	.12/MG	.17/MG
Fertilizer spreader	500	8	50	275	56	75	.75	.30	—	.30
Trailer	400	15	40	220	24	100	.24	.06	—	.06
High pressure sprayer	200	15	20	110	12	50	.24	.25	—	.25
Disk, (8 ft)	900	15	90	495	54	50	1.08	.40	—	.40
Drag, (12 ft)	180	15	—	90	11	50	.22	.08	—	.08
Wiggle hoe	100	10	10	45	5	50	.10	.08	—	.08
Transplanter (2-row)	900	10	90	495	81	50	1.62	.40	—	.40
Culti-mulcher	1,200	15	120	660	72	100	.72	.50	—	.50
Cultivator	400	10	40	220	36	100	.36	.20	—	.20
Irrigation (10 A)	12,000	15	2,000	8,000	667	200/AI	3.33/AI	2.75/AI	—	2.75/AI
Rotary mower	1,000	15	100	550	60	100	.60	.30	—	.30
Plow (3B)	800	15	—	400	27	100	.27	.40	—	.40
Planter (2-row)	1,200	15	120	660	72	50	1.44	.50	—	.50
Rotary hoe	800	10	80	440	72	50	1.44	.26	—	.26
				$22,850						

*Annual usage is based upon a farm with 80 acres of fruit. Units are hours except when followed by "M" which indicates miles; "MG" thousand gallons; "AI" acre inches; and "MD" man days.

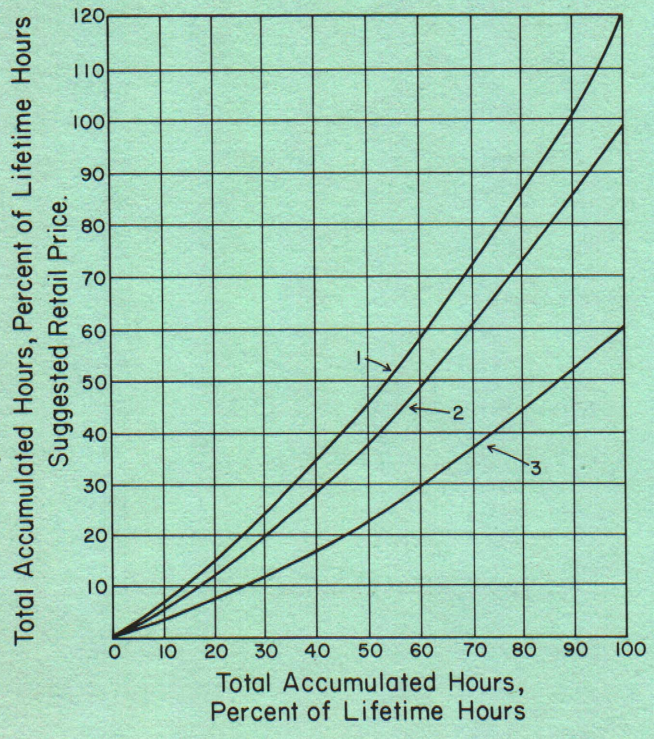

Figure 1. Total Accumulated Repair Costs for Farm Tractors and Implements.

Table 2. Machinery Schedule for Estimated Wear-Out Life and Repairs

Item	Estimated wear-out life (hours)	Total repairs in wear-out life % list price	Repair curve (Figure 1)
Stationary power unit ...	12,000	120	1
Tractor (2 wheel drive) .	12,000	120	1
Wagon or tractor	5,000	100	2
Mower, rotary	2,000	60	3
Fertilizer equipment (dry)	1,200	120	1
Mower	2,000	120	1
Seeding equipment	1,200	100	2
Sprayers, mounted	1,200	100	2
Tillage tools	2,500	120	1
Truck	2,000	60	3

Table 3 — Variable Cost of Growing Snap Beans

Operation	Labor			Equipment				Materials		
	Labor Hours	*Wage Rate*	*Cost*	*Equipment Used*	*Hours of Use*	*Cost Per Hour*	*Cost*	*Item*	*Cost*	*Total Variable Cost*
Lime (1 yr cost)								.5 T/A @ $6.60/T	$3.30	$ 3.30
Plow	.6	$3.00	$1.80	Large tractor	.6	$1.43	$ .86			2.90
				Plow	.6	.40	.24			
Disc (twice)	.6	3.00	1.80	Large tractor	.6	1.43	.86			2.90
				Disc	.6	.40	.24			
Fertilize	.5	3.00	1.50	Small tractor	.4	1.03	.41	300 lb 10-20-20 @ $9.00/cwt	27.00	29.03
				Fertilizer spreader	.4	.30	.12			
Pre-emerg weed control	.5	3.00	1.50	Small tractor	.4	1.03	.41	3 lb Eptam/A @ $2.70/lb	8.10	10.13
				Fertilizer spreader	.4	.30	.12			
Drag	.2	3.00	.60	Large tractor	.2	1.43	.27			.89
				Drag	.2	.08	.02			
Plant	2	3.00	6.00	Small tractor	2	1.03	2.06	75 lb Seed/A @ $1.10/lb	82.50	110.08
				Planter	2	.50	1.00	200 lb 10-20-20 @ $9.00/cwt	18.00	
								1 lb granular Di-Syston/A @ .52/lb	.52	
Cultivate (3 times)	5	3.00	15.00	Small tractor	5	1.03	5.15			21.15
				Cultivator	5	.20	1.00			
			$28.20				$12.76		$139.42	$180.38

Overhead Cost for Snap Beans

	Cash	*Noncash*	*Your Farm*
Machinery depreciation		21.84	_____
Machinery insurance	2.48		_____
Building depreciation		2.50	_____
Building operating cost	2.00		_____
Taxes	12.00		_____
Interest — Machinery		28.35	_____
Building		1.28	_____
Real estate		60.00	_____
Operating funds		3.61	_____
(180.38 × 8% × .25)			
Total	$16.48	$117.58	_____
Total overhead		$134.06	_____

Snap Beans Harvest Cost (300 Bu)

Labor — 250 hr @ $2.18	545.00	_____
50 hr @ $3.00	150.00	_____
Machinery	9.00	_____
Materials (baskets @ $.40)	100.00	_____
	$804.00	_____

Per Acre Cost of Growing and Harvesting Snap Beans (300 Bu)

Variable growing cost	*Per acre*	*Per bu*	*Your farm*
Labor	$ 28.20		_____
Machinery	12.76		_____
Fertilizer	48.30		_____
Seed	82.50		_____
Herbicide	8.10		_____
Spray material	.52		_____
	$180.38	$ .60	_____
Overhead cost	134.06	.45	_____
Total variable & overhead	$314.44	$1.05	_____
Harvest cost	804.00	2.68	_____
Total cost	$1,118.44	$3.73	_____

Table 4 — Growing Operations and Related Variable Costs for 10 Acres of Strawberry Production

(Southwestern Michigan 1974)

Operation	Labor			Machinery				Materials		
	Labor Hr. per 10 Acres	*Wage rate*	*Cost*	*Equipment used*	*Hours of use*	*Cost per hour of use*	*Cost*	*Item*	*Cost per 10 acres*	*Total Cost per 10 acres*
Fall (Soil building)										
Plow	6	$3.00	$18.00	3-Plow tractor	6	$1.43	$8.58			$28.98
				Plow	6	.40	2.40			
Disc (twice)	6	3.00	18.00	Disc	6	.40	2.40			28.98
				3-Plow tractor	6	1.43	8.58			
Drag	2	3.00	6.00	3-Plow tractor	2	1.43	2.86			9.02
				Drag	2	.08	.16			
Seeding rye	3	3.00	9.00	2-Plow tractor	3	1.03	3.09	Rye 2B/A @ 3.00/B	$60.00	72.99
				Fert. spreader	3	.30	.90			
Fumigation				Custom application		15.00/A	150.00	30 Gal DD/A or Vorlex @ $72.50/A	725.00	875.00
Culti-mulch	3	3.00	9.00	3-Plow tractor	3	1.43	4.29			14.79
				Culti-mulcher	3	.50	1.50			
Growing year										
Plow-down fertilizer	3	3.00	9.00	2-Plow tractor	3	1.03	3.09	400 lb 11-48-0 @ $150/T	300.00	312.99
				Fert. spreader	3	.30	.90			
Plow	6	3.00	18.00	3-Plow tractor	6	1.43	8.58			28.98
				Plow	6	.40	2.40			
Disc (twice)	6	3.00	18.00	3-Plow tractor	6	1.43	8.58			28.98
				Disc	6	.40	2.40			
Drag	2	3.00	6.00	3-Plow tractor	2	1.43	2.86			9.02
				Drag	2	.08	.16			
Planting ¾ acre/hr										
Tractor driver	14	3.00	42.00	3-Plow tractor	14	1.43	20.02	4,500 plants/A planted 2½ × 4 @ $35.00/1,000	1575.00	1820.49
				Transplanter	14	.40	5.60			
Hourly (4)	56	$2.18	$122.08							$122.08
Regular	14	3.00	42.00	2-Plow tractor	7	1.03	$7.21			55.79
				Trailer	7	.06	.42			
				3-Plow tractor	2	1.43	2.86			
				Seed sprayer	—	—	—			
				Truck	30 Mi	.11	3.30			
Weed spray (2 times)	8 Hr/ Spray- 16 Hr	3.00	48.00	2-Plow tractor	16	1.03	16.48	12 lb Dacthal/A sprayed @ $1.40/lb. Spray .4 of area/spray	134.40	201.44
				Weed sprayer	16	.16	2.56			
Wiggle hoe	2 men × 15 Hr/ Hoeing 60 Hr	2.18	130.80	2-Plow tractor	30	1.03	30.90			164.10
				Wiggle hoe	30	.08	2.40			
Cultivation (6 times)	14 Hr/ Cultiv 84 Hr	3.00	252.00	2-Plow tractor	84	1.03	86.52	600 lb 11-48-0 @ $150/T in 2 side dressings	450.00	805.32
				Cultivator	84	.20	16.80			
Hoeing (4 times)	1 A/10 Hr/day 400 Hr	2.18	872.00							872.00
Pinch blossoms (2 times)	½ A/ man/day 320 Hr	2.18	697.60							697.60
Spraying (4 times)										
1. 50 gal/A	2 men @ 5 hr ea.			3-Plow tractor	5	1.43	7.15	2 pt. Guthion/A @ $1.26/pt. 1 lb Cyprex/A @ $3.48/lb	60.00	94.30
				High pressure sprayer						
	5	3.00	15.00		5	.25	1.25			
	5	2.18	10.90							
2. 50 gal/A	2 men @ 5 hr ea.			3-Plow tractor	5	1.43	7.15	Same as above	60.00	94.30
				High pressure						
	5	3.00	15.00	sprayer	5	.25	1.25			
	5	2.18	10.90							

Table 4 — (Strawberries) Continued

Operation	Labor			Machinery				Materials		
	Labor Hr. per 10 Acres	*Wage rate*	*Cost*	*Equipment used*	*Hours of use*	*Cost per hour of use*	*Cost*	*Item*	*Cost per 10 acres*	*Total Cost per 10 acres*
3. 200 Gal/A	5	$3.00	$15.00	3-Plow tractor Row crop sprayer	5 5	$1.43 .40	$7.15 2.00	Kelthane 2½ lb/A @ $2.30/lb Guthion 2 pt/A @ $1.26/pt Cyprex 1 lb/A @ $3.48/lb	$117.50	$141.65
4. 200 Gal/A	5	3.00	15.00	3-Plow tractor Row crop sprayer	5 5	1.43 .40	7.15 2.00	2 pt Guthion/A @ $1.26/pt 1 lb Cyprex/A @ $3.48 lb	60.00	84.15
Irrigation — set-up equipment	20	2.18	43.60	2-Plow tractor Trailer	10 10	1.03 .06	10.30 .60			54.50
One half Al (6 times)	1/10 hr/Al	3.00	9.00	Irrigation equipment Pump	30 Al 30 Al	2.75 .38	82.50 11.40			102.90
Cutting runners in fall	10	3.00	30.00	2-Plow tractor Cultivator	10 10	.20 .20	2.00 2.00			42.30
Labor cabins for 219 man days of labor @ .55			120.45							120.45
Cost up to first fruiting year			$2,602.33				Machinery $561.00		Materials $3,541.90	$6,705.23
First Fruiting year										
Set up of irrigation equipment	20	2.18	43.60	2-Plow tractor Trailer	10 10	1.03 .06	10.30 .60			54.50
Broadcast fertilizer	3	3.00	9.00	2-Plow tractor Fert. spreader	3 3	1.03 .30	3.09 .90	200 lb 12-12-12 per A @ $106/T	106.00	118.99
Frost control (5 times) 7 hr/night	35	3.00	105.00	Irrigation equipment Pump	40 Al 40 Al	2.75 .38	110.00 15.20			230.20
First cover spray 200 gal/A	7	3.00	21.00	Weed sprayer 2-Plow tractor	8 8	.16 1.03	1.28 8.24	6 lb Captan/A @ .69 lb	41.40	71.92
Herbicide spray	8	3.00	24.00	Weed sprayer 2-Plow tractor	8 8	.16 1.03	1.28 8.24	8 lb 50% WP Tenoran/A sprayed @ $2.60/lb. Spray .4 area	83.20	116.72
Herbicide spray	8	$3.00	$24.00	Weed sprayer 2-Plow tractor	8 8	$ .16 1.03	$1.28 8.24	12 lb Diphinamid/A @ $2.63/lb. Spray .4 area	$126.24	$159.76
Second cover spray	5	3.00	15.00	Row crop sprayer 3-Plow tractor	5 5	.40 1.43	2.00 7.15	2 lb Thiodan/A @ $2.40/lb 1 lb Benlate/A @ $8.90/lb	137.00	161.15
Third cover spray	5	3.00	15.00	Row crop sprayer 3-Plow tractor	5 5	.40 1.43	2.00 7.15	1 lb Benlate/A @ $8.90/lb	89.00	113.15
Pre-Harvest spray	5	3.00	15.00	Row crop sprayer 3-Plow tractor	5 5	.40 1.43	2.00 7.15	½ lb Benlate/A @ $8.90/lb 1 lb Thiodan/A @ $2.40/lb	68.50	92.65
Pre-Harvest spray	5	3.00	15.00	Row crop sprayer 3-Plow tractor	5 5	.40 1.43	2.00 7.15	½ lb Benlate/A @ $8.90/lb	44.50	68.65
Hoeing (1 time)	160	2.18	348.80							348.80
Irrigation ½ Al (6 times)	1/10 Hr Per Al 3	3.00	9.00	Irrigation equipment Pump	30 Al 30 Al	2.75 .38	82.50 11.40	1 lb Benlate/A on 3 irrigations @ $8.90/lb 2 qt Guthion/A @ $2.52/qt on 3 irrigation	418.20	521.10
Broadcast fertilizer	3	3.00	9.00	2-Plow tractor Fert. spreader	3 3	1.03 .30	3.09 .90	50 lb 46% Urea/A @ $200/T	50.00	62.99
Mulching: 1 man **2 men**	16 32	3.00 2.18	48.00 69.76	2-Plow tractor Trailer Straw spreader	16 16 (Rent @ $5/A)	1.03 .06	16.48 .96 50.00	2 T straw @ $30/T	600.00	785.20
Setting straw off rows	80	2.18	174.40							174.40
Labor cabins for 73 man days of labor @ $.55			40.15							40.15
Variable cost to harvest first fruiting year		Labor	$985.71				Machinery $370.58		Materials $1764.04	$3120.33
Variable cost for growing and first fruiting year		Labor	$3588.04				Machinery $931.58		Materials $5305.94	$9825.56

Overhead Cost for Growing Strawberries.

Item	*Cash*	*Noncash*	*Your Farm*
Depreciation on machinery ..		$130.47	
Taxes (2 years)	$24.00		
Building operating cost	7.18		
Building depreciation		7.40	
Machinery insurance	7.06		
Interest on machinery		80.66	
Building		5.92	
Real estate (2 years)		120.00	
Operating funds		58.84	
Total	$38.24	$403.29	
Total overhead		$441.53	

Strawberry Harvest Cost (400 crates)

Labor — Piecework	$753.00	
Other	244.00	
Machinery	17.00	
Crates and baskets	600.00	
	$1,614.00	

Per Acre Cost of Growing and Harvesting Strawberries (400 crates)

Variable growing cost	*Per acre*	*Per crate*	*Your farm*
Labor — Piecework	$195.90		
Regular	162.90		
Machinery	93.16		
Fertilizer	60.60		
Plants	157.50		
Herbicide	34.38		
Spray material	139.61		
Other	138.50		
Total	$928.55	$2.46	
Overhead cost	441.53	1.10	
Total variable & overhead ...	$1,424.08	$3.56	
Harvest cost	1,614.00	4.03	
Total cost	$3,038.08	$7.59	

Table 5 — Variable Cost of Growing Sweet Corn

Operation	Labor			Equipment				Materials		
	Labor hours	*Wage rate*	*Cost*	*Equipment used*	*Hours of use*	*Cost per hour*	*Cost*	*Item*	*Cost*	*Total variable cost*
Plow-down fertilizer	.5	$3.00	$1.50	Small tractor	.5	$1.03	$ .52	400 lb 10-20-20 @ $9.00/cwt	36.00	$38.17
				Fertilizer spreader	.5	.30	.15			
Plow	.6	3.00	1.80	Large tractor	.6	1.43	.86			2.90
				Plow	.6	.40	.24			
Disc (twice)	.6	3.00	1.80	Large tractor	.6	1.43	.86			2.90
				Disc	.6	.40	.24			
Soil insecticide	.5	3.00	1.50	Small tractor	.5	1.03	.52	3 lb granular Diazinon/ A @ $5.25 per lb Active ingredient	15.75	17.92
				Fertilizer spreader	.5	.30	.15			
Drag	.2	3.00	.60	Large tractor	.2	1.43	.27			.89
				Drag	.2	.08	.02			
Plant	2	3.00	6.00	Small tractor	2	1.03	2.06	10 lb Seed @ $1.45/lb	14.50	41.56
				Planter	2	.50	1.00	200 lb 10-20-20 @ $9.00 /cwt	18.00	
Pre-emergence herbicide	.5	3.00	1.50	Small tractor	.4	1.03	.41	1 lb Bladex/A @ $3.40/lb	3.40	12.88
				Weed sprayer	.4	.16	.07	2 lb Lasso/A @ $3.75/lb	7.50	
Rotary hoe	.3	3.00	.90	Small tractor	.3	1.03	.31			1.29
				Rotary hoe	.3	.26	.08			
Cultivation (2 times)	4	3.00	12.00	Small tractor	4	1.03	4.12	200 lb ammonium nitrate @ $11.00 cwt (applied once)	22.00	38.92
				Cultivator	4	.20	.80			
Spray (3 times)	1.5	3.00	4.50	Small tractor	1.5	1.03	1.54	1.5 lb Sevin/spray @ $1.60/lb	2.40	9.04
				R. C. sprayer	1.5	.40	.60			
			$32.10				$14.82		$119.55	$166.47

Overhead Cost for Growing Sweet Corn

Hr/hourly rate	*Cash*	*Noncash*	*Your farm*
Depreciation on machinery ..		$18.09	
Taxes, insurance and repairs on buildings ..... ($2,000 avg. value × 8% × 1/80)	$ 2.00		
Depreciation on buildings ... ($4,000 purchase price ÷ 20 yrs. ÷ 1/80)		2.50	
Taxes (land)	12.00		
Interest on real estate ..... ($750 × .08) (land value)		60.00	
Interest on buildings ..... ($2,000 × .08 × 1/80)		1.28	
Interest on operating funds .. (166.47 × 8% × .25)		3.33	
Interest on machinery ..... (22,850 × .08 × 1/80)		22.85	
Insurance on machinery ..... (22,850 × .007 × 1/80)	2.00		
Total	$16.00	$108.05	
Total overhead		$124.05	

Sweet Corn Harvest (Variable Cost)

Labor — 26 hr per A @	$3.00	=	$ 78.00	
Small tractor — 3 hr @	$1.03	=	3.09	
Trailer — 3 hr @	$.06	=	.18	
Sacks (150 — 5 doz) @	$.30	=	45.00	
			$126.27	

Per-Acre Cost of Growing and Harvesting Sweet Corn. (750 doz)

Variable growing cost	*Per acre*	*Cost per doz*	*Your farm*
Labor (10.7 hr @ $3.00) ...	$ 32.10		
Machinery	14.82		
Fertilizer	76.00		
Seed	14.50		
Herbicide and sterilant ...	26.65		
Spray material	2.40		
Total	$166.47	$ .22	
Overhead cost	124.05	.17	
Total variable & overhead	$290.52	$ .39	
Harvest cost	126.27	.17	
Total cost	$416.79	$ .56	

Table 6 — Variable Cost of Growing Fresh Market Tomatoes

Operation	Labor			Equipment				Materials			
	Labor hours	*Wage rate*	*Cost*	*Equipment used*	*Hours of use*	*Cost per hour*	*Cost*	*Item*	*Cost*	*Total variable cost*
Lime (1 yr's cost)								.5 T/A @ $6.60	$3.30	$3.30
Disk cover crop	.4	$3.00	$1.20	Large tractor	.4	$1.43	$ .57			1.93
				Disk	.4	.40	.16			
Seed cover crop	.3	3.00	.90	Small tractor	.3	1.03	.31	2 B Rye seed @ $3.00/B	6.00	23.80
				Fertilizer spreader	.3	.30	.09			
Plow	.6	3.00	1.80	Large tractor	.6	1.43	.86	150 lb Ammonium nitrate @ $11.00/cwt	16.50	2.90
				Plow	.6	.40	.24			
Fertilizer	.3	3.00	.90	Large tractor	.3	1.43	.43	400 lb 5-20-50 @ $9.00/cwt	36.00	37.42
				Fertilizer spreader	.3	.30	.09			
Weed spray	.5	3.00	1.50	Small tractor	.4	1.03	.41	1.5 Treflan @ $3.75/pt	5.25	7.23
				Weed sprayer	.4	.16	.07			
Disk (twice)	.6	3.00	1.80	Large tractor	.6	1.43	.86			2.90
				Disc	.6	.40	.24			
Drag	.2	3.00	.60	Large Tractor	.2	1.43	.27			
				Drag	.2	.08	.02			
Planting										
Tractor driver	3	3.00	9.00	Large tractor	3	1.43	4.29	5,000 plants @ $10.00/1,000	50.00	111.58
Hourly (4)	12	2.18	26.16	Transplanter	3	1.43	4.29	20 lb 10-50-10 @ $.40/lb	8.00	
Regular	3	3.00	9.00	Small tractor	3	1.03	3.09			
				Trailer	3	1.06	3.18			
				Truck	6 mi	.11	.66			
Cultivate (5 times)	7	3.00	21.00	Small tractor	7	1.03	7.21	500 lb 11/48-0 @ $14.00/cwt	70.00	99.61
				Cultivator	7	.20	1.40	(applied once)		
Hand hoe	4	2.18	8.72							8.72
Spray (first)	.5	3.00	1.50	Small tractor	.5	1.03	.52	1 lb Dieldrin @ $3.00/lb	3.00	5.22
				RC sprayer	.5	.40	.20			
Spray (second)	.5	3.00	1.50	Small tractor	.5	1.03	.52	2 lb Maneb @ $1.30/lb	2.60	10.42
				RC sprayer	.5	.40	.20	2 lb Thiodan @ $2.80/lb	5.60	
Spray (third)	.5	3.00	1.50	Small tractor	.5	1.03	.52	2 lb Maneb @ $1:30/lb	2.60	4.82
				RC sprayer	.5	.40	.20			
5 sprays	2.5	3.00	7.50	Small tractor	2.5	1.03	2.58	2 lb Maneb/spray @ $1.30/lb	13.00	54.28
				RC sprayer	2.5	.40	1.00	1.5 lb Copper/spray @ $1.20/lb	9.00	
								5 lb Epson salts/spray @ $.02/lb	.50	
								1 pt Guthion/spray @ $3.60/pt	18.00	
								3 lb Nutrileaf/spray on 2 sprays @ $.45/lb	2.70	
3 Sprays	1.5	3.00	4.50	Small tractor	1.5	1.03	1.55	2 lb Maneb/spray @ $1.30/lb	7.80	20.15
				RC sprayer	1.5	.40	.60	1.5 lb Copper/spray @ $1.20/lb	5.40	
								5 lb Epsom salts/spray @ $.02/lb	.30	
			$99.08				$30.54		$265.55	$395.17

Overhead Cost for Tomatoes

	Cash	*Noncash*	*Your farm*
Machinery depreciation		34.25	
Machinery insurance	2.48		
Building depreciation		2.50	
Building operating cost	2.00		
Taxes	12.00		
Interest — Machinery		22.85	
Building		1.28	
Real estate		60.00	
Operating funds		7.90	
(395.17 × 8% × .25)			
Total	$16.48	$134.28	
Total overhead		$150.76	

Tomato Harvest Cost (500 Bu)

		Your farm
Labor — Piecework	$282.00	
Other	219.00	
Machinery	52.00	
Materials	388.00	
	$941.00	

Per-Acre Cost of Growing and Harvesting Tomatoes (500 Bu)

Variable growing cost	*Per Acre*	*Per Bu*	*Your farm*
Labor — Regular	64.20		
Hourly	34.88		
Machinery	30.54		
Fertilizer	117.30		
Plants	50.00		
Herbicide	5.25		
Spray material	70.50		
Other	6.00		
Total	$395.17	$ .79	
Overhead cost	150.76	.30	
Total variable and overhead	545.93	1.09	
Harvest cost	941.00	1.88	
Total Cost	$1,486.93	$2.97	

Table 7 — Variable Cost of Growing Cabbage

Operation	Labor			Equipment				Materials		
	Labor hours	*Wage rate*	*Cost*	*Equipment used*	*Hours of use*	*Cost per hour*	*Cost*	*Item*	*Cost*	*Total variable cost*
Plow	.6	$3.00	$1.80	Large tractor	.6	$1.43	$ .86			$ 2.90
				Plow	.6	.40	.24			
Disc (twice)	.6	3.00	1.80	Large tractor	.6	1.43	.86			2.90
				Disc	.6	.40	.24			
Drag	.2	3.00	.60	Large tractor	.2	1.43	.27			.89
				Drag	.2	.08	.02			
Spread fertilizer	.5	3.00	1.50	Small tractor	.4	1.03	.41	500 lb 10-20-20 @ $9.00/cwt	$45.00	47.03
				Fertilizer spreader	.4	.30	.12			
Pre-emergence weed control	.5	3.00	1.50	Small tractor	.4	1.03	.41	1 lb Treflan per acre @ $7.50/lb	7.50	9.48
				Weed sprayer	.4	.16	.07			
Disc in materials	.3	3.00	.90	Large tractor	.3	1.43	.43			1.45
				Disc	.3	.40	.12			
Planting										
Tractor driver	3	3.00	9.00	Large tractor	3	1.43	4.29	14,000 plants @ $10.00		269.78
Hourly (4)	12	2.18	26.16	Transplanter	3	.40	1.20	per thousand	140.00	
Regular	3	3.00	9.00	Small tractor	3	1.03	3.09	200 lb 0-45-0 @ $11.00/cwt	22.00	
				Trailer	3	.06	.18	10 lb 10-50-10 @ $.20/lb	2.00	
				Truck	6 mi.	.11	.66	2 lb Guthion/A @ $3.60/lb	7.20	
								30 lb PCNB/A @ $1.50/lb	45.00	
Cultivation (3 times)	5	3.00	15.00	Small tractor	5	1.03	5.15	100 lb Ammonium Nitrate		32.15
				Cultivator	5	.20	1.00	@ $11.00/cwt	11.00	
Hoeing	10	2.18	21.80					Dipel 1 lb 3.2% WP/A @ $9.20/lb — 3 sprays	27.60	21.80
Insecticide spray (7 times)	3.5	3.00	10.50	Small tractor	3.5	1.03	3.60	Lannate ½ gal/A @ $17.00		115.43
				R.C. sprayer	3.5	.40	1.40	per gal 6 sprays	51.00	
								Parathion ½ lb/A @ $2.75/lb. 7 sprays	9.63	
								Maneb 1½ lb/A @ $1.30/lb. 6 sprays	11.70	
			$99.56				$24.62		$379.63	$503.81

Overhead Cost for Growing Cabbage

	Cash	*Noncash*	*Your farm*
Depreciation on machinery		$ 28.39	
Building depreciation		2.50	
Building cost			
(2,000 × 8% × 1/80)	$ 2.00		
Machinery insurance	2.48		
Taxes	12.00		
Interest on machinery		28.35	
Building		1.28	
Real estate		60.00	
($750 × .08)			
Operating funds		10.08	
(503.81 ×.08×.25)			
Total	$16.48	$130.60	
Total overhead		$147.08	

Cabbage Harvest Cost (10,000 head)

Labor — 80 hr @ $3.00	$240.00	
Small tractor — 7 hr @ $1.03	7.21	
Trailer — 7 hr @ $.06	.42	
Sacks — (600 @ $.30)	180.00	
	$427.63	

Per Acre Cost of Growing and Harvesting Cabbage (10,000 head)

Variable growing cost	*Per acre*	*Cost/100 head*	*Your farm*
Labor	$ 99.56		
Machinery	24.62		
Fertilizer	80.00		
Plants	140.00		
Herbicide	7.50		
Spray material	152.13		
Total	$ 503.81	$3.60	
Overhead cost	147.08	1.05	
Total variable & overhead	$ 650.89	$4.65	
Harvest cost	427.63	3.05	
Total cost	$1,078.52	$7.70	

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