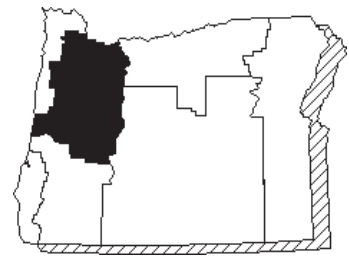


Enterprise Budget

Peppermint, Willamette Valley Region



Michael L. Taylor, Research Associate,
Gale Gingrich, Extension Agent, Marion County, and
Mark Mellbye, Extension Agent, Linn County,
Oregon State University

EM 8489, January 1992

This enterprise budget estimates the typical costs of producing peppermint in the Willamette Valley of Oregon. While efforts were made to reflect common practices, it is not representative of any particular farm and should thus be used only as a guide to estimating actual costs. The major assumptions used in constructing this budget are discussed below. Assistance provided by area producers is greatly appreciated.

For costs and returns associated with establishment of peppermint crops, see *EM 8490, Enterprise Budget: Peppermint Establishment, Willamette Valley Region*.

Cropping Pattern

This budget is based on a 500-acre farm with 125 acres in production of peppermint in rotation with sweet corn or grass seed and wheat. The budget estimates production costs for 1 acre. The established stand is assumed to have a 5-year life, including an establishment year.

Land

A land-lease charge of \$120.00 per acre is included to represent the cost of leasing or owning land. This charge is based on the cost of leasing good quality, irrigated soils in the Mid-Willamette Valley. Irrigation costs are based upon side-roll systems with an estimated annual cost of \$30.00 per acre. Operating costs are based on electricity, maintenance, and repair costs of \$1.61 per acre-inch of water applied.

Labor

All labor (including irrigators) is hired at a rate of \$7.00 per hour, which includes worker's compensation, unemployment insurance, and other labor overhead expenses. Owner/operator compensation is also assumed to be a cash expense of \$7.00 per hour. Labor hours for machinery operation are calculated by

multiplying 1.21 times machine hours to allow for machinery setup, movement, and adjustment. All repairs are estimated separately from operation labor hours.

Capital

Opportunity costs of capital are charged at a rate of 12% for current, intermediate, and long-term capital provided by the owner/operator.

Machinery and Equipment

The machinery complement is sufficient to farm 500 production acres. A detailed breakdown of machinery values used in this budget is shown in table 1. January 1991 replacement costs are used, assuming the machinery is half-depreciated. Estimated machinery costs are shown in table 2.

Operations

The cultural operations are listed in the budget in the order they are typically performed. The growing season begins with postharvest propaning in mid-August and runs through harvest in early August of the following year. A 60-hp tractor is used for propaning and mowing.

Other

A general overhead charge of \$25.00 per acre is included to cover general insurance, tools, shop, utilities, accounting fees, office supplies, and other miscellaneous expenses.

An annual noncash fixed cost of \$164.01 is included to cover the expense of establishing the peppermint crop. See *EM 8490, Enterprise Budget: Peppermint Establishment, Willamette Valley Region*, to see how this charge was calculated.

Peppermint prices have ranged from \$10.00 to \$20.00/lb over the past 5 years, and peppermint is commonly produced under contracts with processors.



OREGON STATE UNIVERSITY EXTENSION SERVICE

EM 8489 Enterprise Budget

ECONOMIC COSTS and RETURNS WILLAMETTE VALLEY REGION PEPPERMINT, (\$/acre) 50 acres

<u>GROSS INCOME Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>	<u>Your Income</u>
Peppermint	70	lb	15.00	1,050.00	_____
Total GROSS Income				1,050.00	_____
<u>VARIABLE COST Description</u>	<u>Labor</u>	<u>Machinery</u>	<u>Materials</u>	<u>Total</u>	<u>Your Cost</u>
DORMANT SEASON					
Propane Burn (Fall)	1.21	1.09	15.60	17.90	_____
Propane	24.0 gal x 0.65 = 15.60				
Fall Weed Control	0.00	0.00	41.30	41.30	_____
Herbicide	1.5 lb x 24.20 = 36.30				
Custom Spray	1.0 acre x 5.00 = 5.00				
Root Borer Control	3.30	0.00	10.80	14.10	_____
Insecticide	0.3 gal x 36.30 = 10.80				
Irrigation-Fall (2")	7.00	0.00	3.22	10.22	_____
Irrigation Operation	2.0 inch x 1.6 = 3.22				
Winter Weed Control	0.00	0.00	36.88	36.88	_____
Herbicide 1	0.375 gal x 65.00 = 24.38				
Herbicide 2	1.25 pint x 6.00 = 7.50				
Custom Spray	1.0 acre x 5.00 = 5.00				
Spot Spray for Thistle(0.1x)	0.00	0.00	0.72	0.72	_____
Herbicide	0.05 pint x 9.49 = 0.47				
Spot Spray	0.1 acre x 2.50 = 0.25				
Total DORMANT SEASON				121.11	_____
GROWING SEASON					
Spring Herbicide Spray (0.7x)	0.00	0.00	20.44	20.44	_____
Herbicide	0.7 lb x 24.20 = 16.94				
Custom Spray	0.7 acre x 5.00 = 3.50				
Spring Fertilizer	0.00	0.00	46.63	46.63	_____
10-20-20	0.225 ton x 185.00 = 41.63				
Custom Application	1.0 acre x 5.00 = 5.00				
Insecticide Spray (0.6x)	0.00	0.00	14.85	14.85	_____
Chemicals	0.3 gal x 39.50 = 11.85				
Custom Application	0.6 acre x 5.00 = 3.00				
Mow	3.23	3.65	0.00	6.88	_____
Propane Burn (Spring)	1.21	1.09	19.50	21.80	_____
Propane	30.0 gal x 0.65 = 19.50				
Fertilizer	7.74	4.82	30.00	42.56	_____
Nitrogen	120.0 lb x 0.25 = 30.00				
Irrigation (20")	70.00	0.00	57.20	127.20	_____
Irrigation Operation	20.0 inch x 1.61 = 32.20				
Water-run Nitrogen	100.0 lb x 0.25 = 25.00				
Harvest & Distilling	0.00	0.00	192.50	192.50	_____
Custom	70.0 lb x 2.75 = 192.50				
Total GROWING SEASON				472.85	_____

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ECONOMIC COSTS and RETURNS WILLAMETTE VALLEY REGION PEPPERMINT, (\$/acre) 50 acres (continued)

<u>VARIABLE COST Description</u>	<u>Labor</u>	<u>Machinery</u>	<u>Materials</u>	<u>Total</u>	<u>Your Cost</u>
MISCELLANEOUS					
Hoeing	11.00	0.00	0.00	11.00	_____
Mite Control	0.00	0.00	15.80	15.80	_____
Insecticide			1.5 pint x 8.53 = 12.80		
Custom Application			0.6 acre x 5.00 = 3.00		
Cutworm Control	0.00	0.00	18.05	18.05	_____
Insecticide			1.33 lb x 9.79 = 13.05		
Custom Application			1.0 acre x 5.00 = 5.00		
Pickup 4WD	32.00	10.17	0.00	42.17	_____
General Overhead	0.00	0.00	25.00	25.00	_____
Total MISCELLANEOUS				112.01	_____
Total VARIABLE COST				705.98	_____
GROSS INCOME minus VARIABLE COST				344.07	_____
 FIXED COST Description					
CASH Cost					
Land Lease			acre	120.00	_____
Machinery and Equipment Insurance			acre	3.72	_____
Total CASH Cost				123.72	_____
NONCASH Cost					
Amortized Establishment Cost			acre	164.01	_____
Irrigation system-Depreciation & Interest			acre	30.00	_____
Machinery & Equipment-Depreciation & Interest			acre	36.48	_____
Total NONCASH Cost				230.49	_____
Total FIXED Cost				354.21	_____
Total of ALL Cost				1,060.19	_____
NET PROJECTED RETURNS				-10.19	_____
Break-Even Price, Total Variable Cost				\$ 10.09 per lb	_____
Break-Even Price, Total Cost				\$ 15.15 per lb	_____

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Table 1. Machinery Cost Assumptions

Machine	Size	List Price	Current Market Value	Salvage Value	Useful Life	Remaining Life	Annual Use
Tractor	60 hp	\$22,000	\$14,300	6,600	6,000 hr	3,000 hr	190 hr
Flail Chopper	12 ft	8,500	4,675	850	2,400 hr	1,200 hr	42 hr
Propane Burner	30 ft	7,500	4,500	1,500	1,500 hr	750 hr	31 hr
Spreader		1,000	600	200	2,000 hr	1,000 hr	100 hr
Pickup	4WD	15,000	9,000	3,000	50,000 mi	25,000 mi	12,500 mi

Table 2. Machinery Cost Calculations

Machine	Size	Costs per Hour or Mile					Total Cost	Hours or miles per acre	Costs per Acre		
		Variable Fuel & Repair & Lube	Fixed Maint.	Fixed Depr. & Interest	Fixed Insurance	Fixed Total			Variable	Fixed	Total
Tractor	60 hp	\$3.25	1.70	7.79	0.48	13.21	1.52	7.52	12.58	20.11	
Flail Chopper	12 ft	0.00	4.33	4.59	0.31	9.22	0.33	1.44	1.63	3.07	
Propane Burner	30 ftl	0.00	3.35	5.52	0.30	9.17	0.25	0.84	1.46	2.29	
Spreader		0.00	1.33	1.22	0.06	2.62	0.80	1.07	1.03	2.09	
Pickup	4WD	0.06	0.04	0.21	0.03	0.34	100.00	10.10	23.50	33.60	
Total								\$20.97	\$40.20	\$61.17	

USE PESTICIDES SAFELY!

- **Wear protective clothing and safety devices as recommended on the label. Bathe or shower after each use.**
- **Read the pesticide label—even if you've used the pesticide before. Follow closely the instructions on the label (and any other directions you have).**
- **Be cautious when you apply pesticides. Know your legal responsibility as a pesticide applicator. You may be liable for injury or damage resulting from pesticide use.**

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