



Ministry of Agriculture, Food, & Fisheries

Certified Organic Versus Non-Organic Budgets For Lemon Balm Herb 1/4 Acre Winter 2002

This information is provided as a tool for projecting costs and returns for B.C. farm enterprises and as a general guide for planning individual farms. The sample budget should be used as a guide only and should not be used for business analysis without adjustments to reflect individual situations. Each farm should develop their own budget to reflect their production goals, costs and market prices.

Information regarding financial planning and other enterprise budgets may be downloaded from the internet at http://www.agf.gov.bc.ca/busmgmt/budgets/index.htm

Key Success Factors

- Medium level of horticultural training and skills.
- Good site selection and preparation.
- Vigilant record keeping of all aspects of operation from production to marketing.
- Strong marketing skills Identify and research your markets prior to planting.
- Reduce direct and indirect expenses as much as possible -

Risk Factors and Strategies

<u>Production Risks</u> - Disease, weed and insect control are essential to ensure high yields. Climate, topography and soil conditions will affect crop and variety options. Ensure you make selections that are suited to your area. Inexperience and lack of diligence can result in a set back or general reduction in crop yields. Adverse weather conditions can reduce yields and quality. Programs available to offset production risks include NISA and whole farm insurance.

<u>Handling Risks</u> - Ensure all crops are properly harvested, dried, packaged, stored and shipped. Improper handling will reduce the amount of your marketable product.

<u>Price Risks</u> - Depending upon your target market, competition from other local growers or import products is a constant factor. Adjustments in your production or marketing plans may be required. Providing a consistent and high quality product and ensuring your customer needs are met are vital elements in offsetting adverse effects of a competitive market place.

Herbs prices are also very quantity sensitive. Small scale production may result in higher gains than production over 250 lbs.

<u>Market Risks</u> - This will depend upon your marketing strategy. Buyers for herb crops appear and disappear rapidly. Demand for one herb may be high in one year and slow the next. Ensure that your commodity mix will allow for the rise and fall of the markets for individual herbs. Expect to spend a large portion of time keeping track of the current market.

Sample Enterprise Budget and Worksheet

Certified Organic Versus Non-Organic Budgets For Lemon Balm Herb

The sample enterprise budget provided should be viewed as a first approximation only. Use the column "your farm" to add, delete and adjust items to reflect your specific production situation.

The following income and direct expense information does not account for general farm inputs that are applied to the total farm area (eg. general labour costs; general marketing costs; irrigation fees; repair&maintenance, organic certification fees)

Projected Income - Certified Organic Lemon Balm

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	Yield-Year 2	Unit	Average	Total Income	Your Farm
			Price	Year 2	
Lemon balm, cert organic	450	lbs	9.00	\$4,050.00	

Projected Direct Expenses Certified Organic Lemon Balm

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Labour	Qty-Year 1	Qty - Year 2	Unit	Price	Expense-Yr 1	Expense-Yr 2
Weeding - hired labour	40	20	hour	8.00	320.00	160.00
Harvest - hired labour		36	hour	8.00	0.00	288.00
Seed Cost						
Lemon balm	1		kg	280.00	280.00	0.00
Tractor Fuel	14		litres	0.50	7.00	0.00
Tractor Oil & lube					1.05	0.00
Packaging						
Bags - large		18	each	0.05	0.00	0.90
Corrugated boxes		18	each	2.50	0.00	45.00
Marketing						
Advertising/faxes/telephone					0.00	100.00
Irrigation	0.25	0.25	acres	60.00	15.00	15.00
TOTAL					\$303.05	\$448.90

Establishment Costs

Income less Year 2 Direct Expenses (certified organic production)

-\$303.05

\$3,601.10

Projected Indirect Expense	S	Your Farm
Depreciation		
Interest		
Insurance		
Administration		
Legal/accounting		
Other		
Total		
Indirect expenses do not vary	with the level of output and are typically associated with inputs used in more	
than one enterprise and must	be allocated appropriately (prorated) between uses.	

Projected Net Income		Your Farm
Projected Income		
minus Projected Direct AND Indirect Expenses		
	Projected Net Income	

Sensitivity Analysis of Total Production Income

Profitability is strongly influenced by market prices and yield. The tables below illustrate the changes to income as prices and yield vary.

Price vs. Income	Low	Average	Target	High
	Price	Price	Price	Price
	\$5.25	\$7.50	\$9.00	\$11.50
Total Income	\$1,914	\$2,926	\$3,601	\$4,726
Yield vs. Income	Low	Average	Target	High
	Yield	Yield	Yield	Yield
	350	400	450	525
Total Income	\$2,701	\$3,037	\$3,601	\$4,252

Certified Organic vs Conventional

	Area	Yield-Year 2	Unit	Average	Price	Total
				Price	Range	Income
Lemon balm, cert organic	.25 acre	450	lbs	9.00	7.00-15.00	\$4,050.00
Lemon balm, conventional	.25 acre	450	lbs	3.00	2.50-4.50	\$1,350.00

Cash Flow Timing

The table below indicates the monthly flow of income and indirect expenses.

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% Income	0	0	0	0		()	0	0	0	50	50	0 0
% Direct Exp Year 2	0	0	0	20		2	0	7	33	7	33	0	0 0

Total Labour Requirements

Investment Capital Replacement Costs

Labour	Qty-Year 1	Qty - Year 2	Unit
Seeding	2		hour
Weeding	20	20	hour
Weeding - hired labour	40	20	hour
Pest/Disease control	2	2	hour
Fertilization		2	hour
Irrigation	2	2	hour
Harvest		8	hour
Harvest - hired labour		36	hour
Drying		8	hour
Packaging		4	hour
Total operator labour hours	26	46	hour
Total hired labour hours	40	56	hour
Total labour hours	66	102	hour

Buildings	\$15,000
Tractor	15,000
Implements	
Tillers	8,000
Harrows	2,000
Rototiller	500
Dryer	1,500
Bins/totes etc.	100
Hand trucks/dolleys	100
Scale	300
Vehicle	12,000
Small Tools	500
Irrigation System	3,000
Total	\$58,000

Assumptions

The following assumptions were made in calculating the sample budget:

General Farm Assumptions

Income & Expenses:

- Projected income and expenses are based on current markets.

Planting Information:

- Planting is based on rows with 24-30" centres Aim for 12-18" between plants .
- Seeding is done by hand.
- There will be a small harvest available in the first year.
- Lemon balm is a perennial crop but may need to be replanted every 5-7 years.

Marketing Information:

- Prices are based on selling entire production to a small to mid-size manufacturer. A more difficult market is selling directly to retail customers, small craft companies or herbalists. A higher price could be realized in the smaller market but will increase the time and expense required for marketing and packaging.

- Lemon balm is used in the medicinal herb, tea and essential oil sectors.

Quality Considerations

- Lemon balm is prone to bruising and heating during harvest - Herb must be handled carefully and moved into the shade as quickly as possible.

- Large stems must be removed after drying.

Labour requirements:

- Herb enterprises are normally conducted using operator labour with occasional outside help brought

in during weed/harvest crisis situations.

- Most weed control labour happens during the seedling stage when the plants are the least weed tolerant . Once the plants reach 12", they begin to shade out weeds and the labour requirements diminish dramatically.

- Harvest labour is based on two harvests per year.

- Herb harvest can be mechanized.

Equipment Costs:

- Tractor Fuel Costs are calculated as follows: no of tractor hours x 8L/hr consumption x \$0.50/L price.
- Oil & lube costs are assumed at 15% of fuel costs.
- Repair and Maintenance costs are calculated at 3% of investment capital replacement costs.
- Investment Capital replacements costs are for a 10acre farm with 2 acres in production.

References:

- Technical Feasibility Study for Medicinal & Aromatic Plants AG Consulting
- Medicinal Herbs in the Garden, Field & Marketplace, L. Sturdivant, T. Blakeley
- Potential of Herbs as a Cash Crop, RA Miller
- Richters Herbs, www.richters.com
- BCMAFF Planning for Profit Budgets available http://www.agf.gov.bc.ca/busmgmt/budgets/index.htm

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