



Ministry of Agriculture, Food, & Fisheries

Certified Organic Versus Non-Organic Budgets For American Skullcap Herb Winter 2002

This information is a tool to project costs and returns for B.C. farm enterprises and is a general guide to plan individual farm operations. This sample budget should be used as a guide only. Each farm should develop their own budget to reflect specific production goals, costs and market prices.

Information regarding financial planning and other enterprise budgets may be viewed at the B.C. Ministry of Agriculture, Food and Fisheries website (http://www.agf.gov.bc.ca/busmgmt/).

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. Certified organic production is the simplest way to compete with low-cost imported crops. 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 American Skullcap Herb 1/4 Acre

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 Skullcap

1 Tojecteu Income - Certin							
	F	Target	Unit	Target		Total Income	Your Farr
		Yield-Year 2		Price		Year 2	
Skullcap herb, cert organic		500	lbs	10.00		\$5,000.00	
Projected Direct Expenses- C		-			<u>.</u>		
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							
American skullcap	1		kg	800.00	800.00	0.00	
Tractor Fuel	14		litres	0.50	7.00	0.00	
Tractor Oil & lube					1.05	0.00	
Packaging							
Bags - large		20	each	0.05	0.00	1.00	
Corrugated boxes		20	each	2.50	0.00	50.00	
Marketing							
					0.00	100.00	
					0.00	100.00	
Advertising/faxes/telephone	0.25	0.25	acres	60.00	15.00	15.00	
Advertising/faxes/telephone Irrigation	0.25	0.25	acres	60.00			
Advertising/faxes/telephone (rrigation FOTAL	0.25	0.25	acres	60.00	15.00	15.00	
Advertising/faxes/telephone Irrigation TOTAL Establishment Costs				60.00	15.00 \$823.05	15.00	
Advertising/faxes/telephone Irrigation TOTAL Establishment Costs Income less Year 2 Direct Ex	xpenses (certified			60.00	15.00 \$823.05	15.00 \$454.00	Your Far
Advertising/faxes/telephone Irrigation TOTAL Establishment Costs Income less Year 2 Direct Ex Projected Indirect Expens	xpenses (certified			60.00	15.00 \$823.05	15.00 \$454.00	Your Far
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BCMAFF Planning for Profit p. 2

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 Price	Average Price	Target Price	High Price
	\$6.00	\$8.50	\$10.00	\$14.00
Total Income	\$2,546	\$3,796	\$4,546	\$6,546

Yield vs. Income

	Low Yield	Average Yield	Target Yield	High Yield
	350	465	500	525
Total Income	\$3,046	\$3,839	\$4,546	\$5,339

Certified Organic vs Conventional

	Area	Yield-Year 2	Unit	Average	Price	Total
				Price	Range	Income
Skullcap, cert organic	.25 acre	500	lbs	10.00	8.00-15.00	\$5,000.00
Skullcap, conventional	.25 acre	500	lbs	6.00	2.00-9.00	\$3,000.00

Cash Flow Timing

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

	J	F	M A	M J	J A	S O	N D
% Income	0	0	0 0	0 0	0 0	50 50	0 0
% Direct Expenses - Year 2	0	0	0 20	20 7	33 7	33 0	0 0

Total labour requirements

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				

Investment Capital Replacement Costs

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

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" between plants.
- Seeding is done by hand.
- There will be a small harvest available in the first year.

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.

Quality Considerations

- Full colour must be retained after drying.
- During harvest care must be taken to not let the herb heat up too much .

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 at, http://www.agf.gov.bc.ca/busmgmt/budgets/index.htm

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