



Ministry of Agriculture, Food, & Fisheries

# Certified Organic Versus Non-Organic Budgets for Catnip 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 & 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 may 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 changes 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 Catnip 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 Catnip**

	Yield-Yr 2	Unit	Average	<b>Total Income</b>
			Price	Year 2
Catnip, certified organic	400	lbs	\$7.00	\$2,800.00

### Projected Direct Expenses- Certified Organic Catnip

Labour	Qty-Yr 1	Qty-Yr 2	Unit	Price	Expense-Yr 1	Expense-Yr 2
Weeding - hired labour	\$40.00	\$20.00	hour	\$8.00	\$320.00	\$160.00
Harvest - hired labour		48	hour	8.00	0.00	384.00
Seed Cost						
Catnip	1		kg	150.00	150.00	0.00
Tractor Fuel	14		litres	0.50	7.00	0.00
Tractor Oil & lube					1.05	0.00
Packaging						
Bags - large		16	each	0.05	0.00	0.80
Corrugated boxes		16	each	2.50	0.00	40.00
Marketing						
Advertising/faxes/telephone					0.00	100.00
Irrigation	0.25	0.25	acres	60.00	15.00	15.00
TOTAL					\$173.05	\$539.80

Establishment Costs

Income less Year 2 Direct Expenses (certified organic production)

\$173.05

\$2,260.20

Projected Indirect Expenses		
Depreciation		
Interest		
Insurance		
Administration		
Legal/accounting		
Other		
Total		
Projected Net Income		
Projected Inco	ome	
minus Projected Direct AND Indirect	t Expenses	
		Proiected Net Income

# Sensitivity Analysis of Total Production Income

Profit is influenced by market prices and yield. The tables below illustrates the changes to income as prices and yield vary.

Price vs. Income	Low Price	Average Price	Target Price	High Price
	\$2.00	\$5.00	\$7.00	\$8.50
Total Income	\$260	\$1,460	\$2,260	\$2,860

Yield vs. Income	Low Yield	Average Yield	Target Yield	High Yield
	250	375	400.00	520.00
Total Income	\$1,210	\$1,898	\$2,260	\$2,738

#### **Certified Organic vs Conventional**

	Area	Yield-Yr 2	Unit	Average Price	Price Range	Total Income
Catnip, cert organic	.25 acre	400	lbs	7.00	3.00-15.00	\$2,800.00
Catnip, conventional	.25 acre	400	lbs	3.50	1.00-9.00	\$1,400.00

# **Cash Flow Timing**

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

	JF	M A	M J	J A	S O	N D
% Income Year 2	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-Yr 1	Qty - Yr 2
Seeding	2	
Weeding	30	20
Weeding - hired labour	40	20
Pest/Disease control	1	1
Fertilization		2
Irrigation	2	2
Harvest		16
Harvest - hired labour		48
Drying		8
Packaging		4
Total operator labour hours	35	53
Total hired labour hours	40	68
Total labour hours	75	121

## **Investment Capital Replacement Costs**

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Buildings	\$15,000
Tractor	15,000
Implements	
Tillers	8,000
Harrows	2,000
Rototiller	500
Dryer	1,500
Bins/totes etc.	100
Hand trucks/dolle	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" between plants.
- Seeding is done by hand.
- Catnip fields need to be replaced every 3-4 years for highest production.
- .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.

- Catnip is used in the medicinal, tea and essential oil markets.

### **Quality Considerations**

These are several grades of catnip produced - The lowest is a whole herb including stem . This budget is based on mid-range qualit which is leaf and flower with The largest stems removed. Highest grade is flowertops only.

### 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.

#### **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 cost are for a 10 acre 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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