



PLANNING FOR PROFIT



Ministry of Agriculture,
Food, & Fisheries

Certified Organic Versus Non-Organic Budgets For Yarrow Flower 1/4 Acre 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

Production Risks - 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.

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

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

Market Risks - This will depend upon your marketing strategy. Buyers for herb crops appear and disappear quite 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 Yarrow Flower

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 (e.g., general labour costs; general marketing costs; irrigation fees; repair&maintenance, organic certification fees)

Projected Income - Organic vs. Conventional

	Target	Unit	Target	Total Income
	Yield		Price	
Yarrow flower, cert organic	60	lbs	11.00	\$660.00

Projected Direct Expenses

Labour	Qty -Yr 1	Qty -Yr 2	Unit	Price	Expense-Yr 1	Expense-Yr 2
Weeding - hired labour	16	16	hour	8.00	128.00	128.00
Harvest - hired labour		20	hour	8.00	0.00	160.00
<i>Total hired labour cost</i>	16.0	36.0	hour	8.00	128.00	288.00
Seed Cost						
Yarrow	1		kg	140.00	140.00	0.00
Tractor Fuel						
	14		litres	0.50	7.00	0.00
Tractor Oil & lube						
					1.05	0.00
Packaging						
Bags - large		2	each	0.05	0.00	0.00
Corrugated boxes		2	each	2.50	0.00	0.00
Marketing						
Advertising/faxes/telephone						100.00
Irrigation	0.25	0.25	acres	60.00	15.00	3.75
TOTAL					\$291.05	\$391.75

Establishment Costs

-\$291.05

Income less Direct Expenses (certified organic production)

\$268.25

Projected Indirect Expenses

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

Projected Income
<i>minus</i> 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
	\$5.00	\$7.50	\$11.00	\$12.00
Total Income	(\$92)	\$103	\$268	\$334

Yield vs. Income	Low	Average	Target	High
	Yield	Yield	Yield	Yield
	50	55	60	65
Total Income	\$282	\$337	\$392	\$447

Certified Organic vs. Conventional

	Area	Yield	Unit	Average	Price	Total
				Price	Range	Income
Yarrow flower, cert organic	.25 acre	60	lbs	11.00	5.00-14.00	\$660.00
Yarrow flower, conventional	.25 acre	60	lbs	3.00	1.25-4.50	\$180.00

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
% Direct Expenses Year 2	0	0	0	10	25	15	25	15	10	0	0	0
% Income - Year 2	0	0	0	0	0	0	0	0	0	50	50	0

Total Labour Hours Required

Labour	Quantity	Quantity
Seeding	2	
Weeding	24	24
Weeding - hired labour	16	16
Pest/Disease control	4	4
Fertilization	2	2
Irrigation	2	2
Harvest		10
Harvest - hired labour		20
Drying		2
Packaging		1
Total operator labour hours	34	45
Total hired labour hours	16	36
Total labour hours required	50	81

Investment Capital Replacement Costs

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 & Equipment	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 30" centres.
- Yarrow is a perennial crop but should be replanted every 3-5 years .
- There may be a small harvest the first year.

Quality Considerations

.Full colour must be retained by careful drying.

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.
- A secondary crop may be whole herb which sells for a much lesser price but has yields as much as 3 times higher than flowers.

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 estimated on an average picker harvesting 2 dried lbs/hour.

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

Contributors:

The following people contributed to the preparation of this factsheet:

- Tracy Schimpf, contractor, Kelowna.
- Howard Joynt, P.Ag., Farm Management Specialist, BCMAFF, Vernon.
- herb growers