



# PLANNING FOR PROFIT

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BRITISH  
COLUMBIA

Ministry of Agriculture,  
Food, & Fisheries

## Certified Organic Versus Non-Organic Budgets For Red Clover 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 imported crops. 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 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 Red Clover 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 (eg. general labour costs; general marketing costs; irrigation fees; repair&maintenance, organic certification fees).

#### Projected Income - Certified Organic Red Clover

|  | Yield-Year 2 | Unit | Average Price | Total Income |
|--|--------------|------|---------------|--------------|
|  | 75           | lbs  | 25.00         | \$1,875.00   |

#### Projected Direct Expenses- Certified Organic Red Clover

| Labour                        | Qty-Year 1 | Qty - Year 2 | Unit   | Price | Expense-Yr 1 | Expense-Yr 2 |
|-------------------------------|------------|--------------|--------|-------|--------------|--------------|
| Harvest - hired labour        |            | 70           | hour   | 8.00  | 0.00         | 560.00       |
| <b>Seed Cost</b>              |            |              |        |       |              |              |
| Red clover                    | 2          |              | kg     | 20.00 | 40.00        | 0.00         |
| <b>Fertilizer</b>             |            |              |        |       |              |              |
| <b>Tractor Fuel</b>           | 14         |              | litres | 0.50  | 7.00         | 0.00         |
| <b>Tractor Oil &amp; lube</b> |            |              |        |       | 1.05         | 0.00         |
| <b>Packaging</b>              |            |              |        |       |              |              |
| Bags - large                  |            | 2            | each   | 0.05  | 0.00         | 0.10         |
| Corrugated boxes              |            | 2            | each   | 2.50  | 0.00         | 5.00         |
| <b>Marketing</b>              |            |              |        |       |              |              |
| Advertising/faxes/telephone   |            |              |        |       | 0.00         | 100.00       |
| <b>Irrigation</b>             | 0.25       | 0.25         | acres  | 60.00 | 15.00        | 15.00        |
| <b>TOTAL</b>                  |            |              |        |       | 63.05        | 680.10       |

Establishment Cost

-\$63.05

Income less Direct Expenses (certified organic production)

\$1,194.90

#### 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 .....

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 Price | Average Price | Target Price | High Price |
|---------------------|-----------|---------------|--------------|------------|
|                     | \$15.00   | \$19.50       | \$25.00      | \$28.50    |
| <b>Total Income</b> | \$445     | \$782         | \$1,195      | \$1,457    |

| Yield vs. Income    | Low Yield | Average Yield | Target Yield | High Yield |
|---------------------|-----------|---------------|--------------|------------|
|                     | 50        | 65            | 75.00        | 90.00      |
| <b>Total Income</b> | \$570     | \$945         | \$1,195      | \$1,570    |

| Certified Organic vs Conventional         | Area     | Yield-Year 2 | Unit | Average Price | Price Range | Total Income |
|---|----------|--------------|------|---------------|-------------|--------------|
| <b>Red Clover flower certifi. organic</b> | .25 acre | 75           | lbs  | 25.00         | 20.00-32.00 | \$1,875.00   |
| <b>Red clover flower conventional</b>     | .25 acre | 75           | lbs  | 12.00         | 5.00-20.00  | \$900.00     |

## 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 |
|-----------------------------|---|---|---|---|----|----|----|----|----|----|---|---|
| <b>% Direct Exp. Year 2</b> | 0 | 0 | 0 | 0 | 20 | 25 | 15 | 25 | 15 | 0  | 0 | 0 |
| <b>% Income - Year 2</b>    | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 50 | 50 | 0 | 0 |

## Total Labour Requirements

| Labour hrs                  | Qty-Year 1 | Qty - Year 2 |
|-----------------------------|------------|--------------|
| Seeding - broadcast         | 1          |              |
| Weeding                     | 20         | 20           |
| Pest control                | 1          | 1            |
| Fertilization               | 2          | 2            |
| Irrigation                  | 2          | 2            |
| Harvest                     |            | 10           |
| Harvest - hired labour      |            | 70           |
| Drying                      |            | 2            |
| Packaging                   |            | 2            |
| Total operator labour hours | 26         | 39           |
| Total hired labour hours    | 0          | 70           |
| <b>Total labour hours</b>   | <b>26</b>  | <b>109</b>   |

## Investment Capital Replacement Cost

|                         |                    |
|-------------------------|--------------------|
| Buildings               | \$15,000.00        |
| 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              |
| <b>Total</b>            | <b>\$58,000.00</b> |

## **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 broadcast seeding 1/4 acre.
- There may be a small harvest available in the first year.
- Red clover is a perennial crop but may need to be replanted every 3-4 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.

#### **Quality Considerations**

- There are numerous grades of red clover in the marketplace. This budget is based on pricing for hand-picked blossoms with no leaf and full colour which is the highest grade attainable. All brown blossoms must be culled from this product.
- A second grade product can be produced by harvesting blossoms with a hand rake. Prices are under \$10 per lb.
- The lowest grade is whole herb harvested like hay. It must contain less than 3% weed content.

#### **Labour requirements:**

- Herb enterprises are normally conducted using operator labour with occasional outside help brought in during weed 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 1 dried lb/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 cost.
- 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](http://www.richters.com)
- BCMAFF - Planning for Profit Budgets - available at <http://www.agf.gov.bc.ca/busmgmt/budgets/index.htm>

#### **Contributors:**

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