This enterprise budget estimates the typical costs and returns of producing certified rough bluegrass seed in the Madras area of central Oregon. While efforts were made to reflect common practices, it is not representative of any particular farm and should be used only as a guide to estimate actual costs. The major assumptions used in constructing this budget are discussed below. Assistance provided by area producers is greatly appreciated. The stand is assumed to have a 3-year life, including the establishment year. For costs and returns associated with first-year production of rough bluegrass, see EM 8808, Enterprise Budget: Rough Bluegrass Establishment Year, Central Oregon Region.

Cropping Pattern
This budget is based on a typical 600-acre farm with 150 acres in production of certified rough bluegrass seed, with 50 of these acres as first-year fields. The budget includes production costs for 1 acre, with a yield of 950 pounds per acre. A summary of the estimated costs and returns per acre is shown in Table 1.

Land and Irrigation
A land lease charge of $100 per acre is included to represent the cost of leasing or owning the land. The charge is based on the cost of a long-term lease for good-quality irrigated land. A water charge of $3.17 per acre-inch covers the cost of irrigation water and canal maintenance. Calculations are based on the North Unit Irrigation District rates for Deschutes River water rights. This budget assumes that the crop is flood irrigated.

Labor
Hand labor costs $7.68 per hour, including worker’s compensation, social security taxes, and other labor overhead expenses. Hand labor is primarily used for roguing and irrigating. Operator labor costs $13.65 per hour and includes worker’s compensation, social security taxes, and other labor overhead expenses. Operator labor is used for hauling the seed and other machinery operations. Labor hours for machinery operation are calculated by multiplying 1.21 times machine hours to allow for machinery setup, movement, and adjustments.

Capital
Opportunity costs of capital are charged at a rate of 9 percent for current, intermediate, and long-term capital provided by the owner.

Operations
The cultural operations are listed in the budget in the approximate order in which they typically are performed. Table 2 shows the cost of field operations with owned machinery. Following harvest, the field is open burned, then harrowed and propane flamed. Fertilizer is applied and the field is irrigated using approximately 9 inches of water in three sets.

In the spring, cultural operations include another fertilizer application, one roguing operation (hoeing, spot spraying, or clipping weed grass heads), nine irrigation sets (for a total of 27 inches), and a couple of pesticide applications. Seed certification requires one field inspection in June.

The rough bluegrass is swathed with a self-propelled swather about 1 week prior to combining. Two 2-ton trucks (each holds about 8 tons) and one driver are required to haul the seed. Seed cleaning costs about $0.12 per pound. Straw is sold in the swath to a custom baler for $20 per acre.

Machinery and Equipment
The machinery complement is sufficient to farm 600 production acres. A detailed breakdown of machinery values and costs used in this budget is shown in Table 3. January 1998 replacement costs are used. The machinery costs per hour are estimated based on the total farm use of the machinery. Fixed costs for machinery and equipment include the cost of interest and depreciation.

Other
A miscellaneous charge of $10 per acre is included to cover general insurance, tools, office supplies, and other expenses. A pickup and ATV are utilized for hauling supplies, checking irrigation, and other activities related to rough bluegrass seed production.

Total variable cost is $675, with a break-even price over variable costs of $0.71 per pound. The total of all costs is $968, with a break-even price over total costs of $1.02 per pound.
Table 1. Rough bluegrass production years: Summary of estimated costs and returns per acre.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Price ($)</th>
<th>Quantity</th>
<th>Amount ($)</th>
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Published October 2002.
## Table 2. Rough bluegrass production years: Estimated per-acre resource use and costs for field operations.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Perf. Rate (Hr/ac)</th>
<th>Times Over</th>
<th>Month</th>
<th>Tractor Cost</th>
<th>Equipment Cost</th>
<th>Labor</th>
<th>Operating Input</th>
<th>Total Cost</th>
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<td>Water</td>
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<td>Aug–Oct</td>
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<td>Jan</td>
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<td>Seed Certification</td>
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<td>Mar</td>
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<tr>
<td>Fertilize</td>
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<td>Mar</td>
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<td>180# N, 27# S</td>
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<td>Roguing</td>
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<tr>
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Total 800.27  
Interest on Operating Capital 32.61  
Total Specified Cost 832.88

\(^1\)Fertilizer and pesticide costs include cost of custom application.
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<tr>
<th>Item</th>
<th>Size</th>
<th>Perf. Rate</th>
<th>Useful Life</th>
<th>Annual Use</th>
<th>Purchase Price</th>
<th>Repair Cost</th>
<th>Fuel Cons. Rate</th>
<th>Direct Cost</th>
<th>Fixed Cost</th>
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<td>(Hr/acre)</td>
<td>(Years)</td>
<td>(Hours)</td>
<td>($)</td>
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<td>Gallons/hour</td>
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<td>Mint rake</td>
<td>12 ft</td>
<td>0.01</td>
<td>20</td>
<td>20</td>
<td>5,000.00</td>
<td>25</td>
<td>----</td>
<td>3.12</td>
<td>0.03</td>
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<tr>
<td>Paper roller</td>
<td>10 ft</td>
<td>0.50</td>
<td>20</td>
<td>20</td>
<td>2,000.00</td>
<td>20</td>
<td>----</td>
<td>1.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Pasture harrow</td>
<td>12 ft</td>
<td>0.08</td>
<td>20</td>
<td>100</td>
<td>1,000.00</td>
<td>50</td>
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<td>0.02</td>
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<tr>
<td>Precision planter</td>
<td>12.5 ft</td>
<td>0.20</td>
<td>20</td>
<td>75</td>
<td>5,000.00</td>
<td>50</td>
<td>----</td>
<td>1.66</td>
<td>0.33</td>
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<tr>
<td>Roller</td>
<td>12 ft</td>
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<td>20</td>
<td>200</td>
<td>5,000.00</td>
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<td>----</td>
<td>0.62</td>
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<tr>
<td>Rolling cultivator</td>
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<td>50</td>
<td>2,000.00</td>
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<td>----</td>
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<tr>
<td>Rototiller</td>
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<td>20</td>
<td>50</td>
<td>4,200.00</td>
<td>80</td>
<td>----</td>
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<td>Row sprayer</td>
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<td>20</td>
<td>75</td>
<td>13,000.00</td>
<td>70</td>
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<td>6.06</td>
<td>1.21</td>
</tr>
<tr>
<td>Tool bar w/shovels</td>
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<td>0.20</td>
<td>25</td>
<td>25</td>
<td>3,000.00</td>
<td>75</td>
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