## Utah State University

**Extension Economics**

### Costs and Returns per acre from growing onions, 2006

#### Box Elder County

<table>
<thead>
<tr>
<th>Receipts</th>
<th>Quantity per acre</th>
<th>Unit</th>
<th>Price/cost per unit</th>
<th>Value/cost per acre</th>
<th>Base Value</th>
<th>Your Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payable onions</td>
<td>460</td>
<td>cwt</td>
<td>$5.97</td>
<td>$2,791.78</td>
<td>$2,791.78</td>
<td>$2,791.78</td>
</tr>
<tr>
<td>Residue</td>
<td>-</td>
<td>cwt</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td>$4,559.78</td>
<td>$4,559.78</td>
<td>$4,559.78</td>
</tr>
</tbody>
</table>

#### Operating costs

**Land preparation**
- Plowing: 1 acre, $5.88
- Discing: 2 acres, $7.47
- Land plane: 2 acres, $6.69
- Bedding: 1 acre, $6.06
- Roller harrow: 1 acre, $3.64
- Planting: 1 acre, $8.90
- Seed: 2 pounds, $67.00

**Fertilization**
- Nitrogen (34-0-0): 450 pounds, $80.33
- Phosphate (11-52-0): 160 pounds, $28.56
- Micro Nutrients: 1 acre, $5.00
- Custom application: 1 acre, $7.82

**Pesticides/herbicides**
- Roundup: 1 quart, $6.32
- Goal: 1 pint, $13.40
- Mustang Max: 20 ounce, $13.40
- Buctril: 1 pint, $7.25
- Penncap: 5 quart, $28.56
- Prowl: 2 quart, $25.00
- Warrior: 10 ounce, $2.39
- Custom application: 14 acre, $110.48

**Cultivation**
- 1st cultivating: 1 acre, $19.60
- 2nd and 3rd cultivating: 2 acres, $39.20
- Hand weeding: 2 times/acre, $170.00
- Irrigation (siphon): 10 irrigations, $26.67
- Water assessment: 1 share, $10.00
- Repairs/maintenance: 1 acre, $2.30
- Pumping: 1 acre inch, $0.00

**Harvesting**
- Undercutting: 1 acre, $15.09
- Topping: 1 acre, $37.34
- Loading: 1 acre, $28.68
- Trucking: 4.1 loads/acre, $66.39
- Grading: 497 cwt, $993.33
- Crop insurance (75% Yield, 100% Price): 1 acre, $84.55
- Interest on operating capital: 7.61%, $19.50

**Ownership costs**
- Farm insurance: 1 acre, $2.00
- Machinery ownership costs: 1 acre, $157.26
- Irrigation ownership costs: 1 acre, $8.25

**Total costs**
$2,264.89

**Net returns to owner for unpaid labor, management, equity and risk**
Above operating costs: $2,157.40
Above total listed costs: $1,989.89

### Breakeven Table - Dry Onions

<table>
<thead>
<tr>
<th>Yield (cwt/Ac)</th>
<th>Selling Price ($/cwt)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$7.57</td>
</tr>
<tr>
<td>466.67</td>
<td>$1,403.73</td>
</tr>
<tr>
<td>476.67</td>
<td>$1,549.40</td>
</tr>
<tr>
<td>486.67</td>
<td>$1,695.06</td>
</tr>
<tr>
<td>496.67</td>
<td>$1,840.73</td>
</tr>
<tr>
<td>506.67</td>
<td>$1,986.40</td>
</tr>
<tr>
<td>516.67</td>
<td>$2,132.06</td>
</tr>
<tr>
<td>526.67</td>
<td>$2,277.73</td>
</tr>
</tbody>
</table>

**Assumptions**
1. Onions planted in late March and harvested in September.
2. Interest computed on land preparation and planting costs for 6 months and fertilization/herbicide/irrigation/cultivation costs for 3 months.
3. Machinery operating costs include: fuel, oil, repairs and labor.
4. Machinery ownership costs are allocated based on equipment used for each crop.
5. Onion equipment ownership costs are allocated to onion acreage only.
6. Machinery ownership costs include depreciation, interest, insurance, and housing.

Budget prepared by: E. Bruce Godfrey, Cody Bingham, Mike Pace and Lyle Holmgren