## Costs and Returns per acre from growing corn for silage, 2006

### Sevier 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>Corn silage</td>
<td>19.0</td>
<td>tons</td>
<td>$30.80</td>
<td>$585.20</td>
<td>$585.20</td>
<td></td>
</tr>
<tr>
<td>Residue</td>
<td>-</td>
<td>AUM</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$585.20</td>
<td>$585.20</td>
</tr>
</tbody>
</table>

### Operating costs

#### Land preparation

- **Plowing**: 1 acre, $5.88
- **Discing**: 1 acre, $3.73
- **Land plane**: 1 acre, $3.34
- **Roller harrow**: 2 acre, $3.64
- **Planting**: 1 acre, $5.28

#### Cultivation

- **First**: 1 acre, $2.94
- **Second**: 1 acre, $2.94

#### Fertilization

- **Nitrogen (34-0-0)**: 278 pounds, $0.18, $49.62
- **Phosphate (11-52-0)**: 48 pounds, $0.18, $8.57
- **Custom application**: 1 acre, $7.82

#### Pesticides/herbicides

- **Dual II Magnum**: 1.00 pint, $15.10
- **Phorate**: 6.75 pounds, $2.40, $16.20
- **Custom application**: 1 acre
- **2-4-D**: 1.25 pints, $2.75, $3.44

#### Irrigation (wheel line)

- **Labor**: 1.67 hours, $10.00, $16.67
- **Water assessment**: 1 share, $15.00
- **Repairs/maintenance**: 1 acre, $2.30

#### Harvesting

- **Chopping**: 1 acre, $6.79
- **Packing and Pushing**: 1 acre, $5.73
- **Pumping**: 25 acre inch, $0.00

#### Crop insurance (75% Yield, 100% Price)

- **Interest on operating capital**: 7.61%, $6.45, $6.45

#### Ownership costs (excludes cost of land)

- **Insurance**: 1 acre, $2.00
- **Machinery ownership costs**: 1 acre, $122.43
- **Irrigation equipment costs**: 1 acre, $8.25

#### Total costs

- **Subtotal**: $283.49, $283.49

#### Net returns to owner for unpaid labor, management, equity and risk

- **Above operating costs**: $301.71
- **Above total listed costs**: $169.03

### Breakeven Table - Corn Silage

#### Net returns per acre above operating costs

<table>
<thead>
<tr>
<th>Yield (Ton/Ac)</th>
<th>Selling Price ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$20.80</td>
</tr>
<tr>
<td>17.50</td>
<td>$80.51</td>
</tr>
<tr>
<td>18.00</td>
<td>$90.91</td>
</tr>
<tr>
<td>18.50</td>
<td>$101.31</td>
</tr>
<tr>
<td>19.00</td>
<td>$111.71</td>
</tr>
<tr>
<td>19.50</td>
<td>$122.11</td>
</tr>
<tr>
<td>20.00</td>
<td>$132.51</td>
</tr>
<tr>
<td>20.50</td>
<td>$142.91</td>
</tr>
</tbody>
</table>

#### Assumptions

1. Corn planted in late March and harvested in September.
2. Interest computed on land preparation and planting costs for 6 months and cultivation, fertilization, herbicide and irrigation costs for 4 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. Machinery ownership costs include depreciation, interest, insurance, and housing.

Budget prepared by: E. Bruce Godfrey, Cody Bingham and David Drake