2011 Bell Peppers on Plastic Budget
Fumigant – Chloropicrin-400
Mulch – Smooth Low Density Black on Black Polyethylene Mulch (Metalized smooth)

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Myra Clarisse Ferrer, Graduate Student, Agricultural and Applied Economics, UGA

Table 1. Yields and prices of producing bell peppers with chloropicrin-400 on smooth low density black on black polyethylene mulch (Metalized smooth) in Georgia.

<table>
<thead>
<tr>
<th>Item</th>
<th>BEST</th>
<th>OPTIMISTIC</th>
<th>MEDIAN</th>
<th>PESSIMISTIC</th>
<th>WORST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield (cartons)</td>
<td>1680</td>
<td>1520</td>
<td>1360.50</td>
<td>1200.50</td>
<td>1041</td>
</tr>
<tr>
<td>Price per carton</td>
<td>16.00</td>
<td>14.00</td>
<td>12.00</td>
<td>10.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

Table 2. Pre-harvesting variable cost of producing bell peppers with chloropicrin-400 on smooth low density black on black polyethylene mulch (Metalized smooth) in Georgia.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Amt/acre</th>
<th>Yours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants</td>
<td>Thousand</td>
<td>7.50</td>
<td>$29.50</td>
<td>$221.25</td>
<td></td>
</tr>
<tr>
<td>Lime, applied</td>
<td>Ton</td>
<td>1.00</td>
<td>$28.50</td>
<td>$28.50</td>
<td></td>
</tr>
<tr>
<td>Base Fertilizer</td>
<td>Ibs.</td>
<td>12.00</td>
<td>$26.41</td>
<td>$316.88</td>
<td></td>
</tr>
<tr>
<td>Sidedress Fertilizer (soluble)</td>
<td>Gal.</td>
<td>60.00</td>
<td>$2.82</td>
<td>$169.37</td>
<td></td>
</tr>
<tr>
<td>Insecticide</td>
<td>Acre</td>
<td>1.00</td>
<td>$240.16</td>
<td>$240.16</td>
<td></td>
</tr>
<tr>
<td>Fungicide</td>
<td>Acre</td>
<td>1.00</td>
<td>$349.02</td>
<td>$349.02</td>
<td></td>
</tr>
<tr>
<td>Nematicide</td>
<td>Acre</td>
<td>1.00</td>
<td>$822.88</td>
<td>$822.88</td>
<td></td>
</tr>
<tr>
<td>Herbicide</td>
<td>Acre</td>
<td>1.00</td>
<td>$111.68</td>
<td>$111.68</td>
<td></td>
</tr>
<tr>
<td>Plastic</td>
<td>Roll</td>
<td>2.80</td>
<td>$68.50</td>
<td>$191.80</td>
<td></td>
</tr>
<tr>
<td>Plastic Removal</td>
<td>Acre</td>
<td>1.00</td>
<td>$75.00</td>
<td>$75.00</td>
<td></td>
</tr>
<tr>
<td>Drip Tape</td>
<td>Ft</td>
<td>8700.00</td>
<td>$0.02</td>
<td>$174.00</td>
<td></td>
</tr>
<tr>
<td>Fumigation and Mulching</td>
<td>Acre</td>
<td>1.00</td>
<td>$1,659.50</td>
<td>$1,659.50</td>
<td></td>
</tr>
<tr>
<td>Machinery</td>
<td>Hr.</td>
<td>5.00</td>
<td>$21.00</td>
<td>$105.00</td>
<td></td>
</tr>
<tr>
<td>Transplant Labor</td>
<td>Hr.</td>
<td>20.00</td>
<td>$7.00</td>
<td>$140.00</td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>Hr.</td>
<td>33.00</td>
<td>$6.00</td>
<td>$198.00</td>
<td></td>
</tr>
<tr>
<td>Land rent</td>
<td>Acre</td>
<td>1.00</td>
<td>$110.00</td>
<td>$110.00</td>
<td></td>
</tr>
<tr>
<td>Irrigation (Mach + Labor)</td>
<td>Acre</td>
<td>1.00</td>
<td>$65.08</td>
<td>$65.08</td>
<td></td>
</tr>
<tr>
<td>Interest on Oper. Cap.</td>
<td>$</td>
<td>4978.11</td>
<td>$0.07</td>
<td>$174.23</td>
<td></td>
</tr>
</tbody>
</table>

Pre-Harvest Variable Costs
$5,152.35
Table 3. Harvesting and marketing costs of producing bell peppers with chloropicrin-400 on smooth low density black on black polyethylene mulch (Metalized smooth) in Georgia.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Amt/acre</th>
<th>Yours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picking and hauling</td>
<td>Ctn.</td>
<td>1360</td>
<td>$0.85</td>
<td>$1,156.42</td>
<td></td>
</tr>
<tr>
<td>Grading and packing</td>
<td>Ctn.</td>
<td>1360</td>
<td>$1.10</td>
<td>$1,496.55</td>
<td></td>
</tr>
<tr>
<td>Container</td>
<td>Ctn.</td>
<td>1360</td>
<td>$0.75</td>
<td>$1,020.37</td>
<td></td>
</tr>
<tr>
<td>Marketing 8.50 % GROSS</td>
<td>Ctn.</td>
<td>1360</td>
<td>$1.02</td>
<td>$1,387.71</td>
<td></td>
</tr>
<tr>
<td><strong>Total Harvest and Marketing</strong></td>
<td></td>
<td></td>
<td><strong>$3.72</strong></td>
<td><strong>$5,061.05</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Total Variable Costs |       |        |          | $10,213.40 |

Table 4. Fixed costs of producing bell peppers with chloropicrin-400 on smooth low density black on black polyethylene mulch (Metalized smooth) in Georgia.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Amt/acre</th>
<th>Yours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery</td>
<td>Acre</td>
<td>1.00</td>
<td>$53.59</td>
<td>$53.59</td>
<td></td>
</tr>
<tr>
<td>Irrigation</td>
<td>Acre</td>
<td>1.00</td>
<td>$220.65</td>
<td>$220.65</td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>Acre</td>
<td>1.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Overhead and Management</td>
<td>$</td>
<td>5152.35</td>
<td>$0.15</td>
<td>$772.85</td>
<td></td>
</tr>
<tr>
<td><strong>Total Fixed Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1,047.09</strong></td>
<td></td>
</tr>
</tbody>
</table>

| Total budgeted cost per acre |       |        |          | **$11,260.49** |

Table 5. Risk-rated returns over total costs of producing bell peppers with chloropicrin-400 on smooth low density black on black polyethylene mulch (Metalized smooth) in Georgia.

<table>
<thead>
<tr>
<th>Description</th>
<th>Optimistic</th>
<th>Expected</th>
<th>Pessimistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns($)</td>
<td>9,605</td>
<td>8,092</td>
<td>6,579</td>
</tr>
<tr>
<td>Chances</td>
<td>7%</td>
<td>16%</td>
<td>31%</td>
</tr>
<tr>
<td>Chances</td>
<td>50%</td>
<td>31%</td>
<td>16%</td>
</tr>
</tbody>
</table>

CHANCES FOR PROFIT 95%       BASE BUDGETED NET REVENUE 5,065

Acknowledgment
This project was supported by CSREES Grant entitled "Assisting Vegetable Growers in the adoption of methyl bromide alternatives for weeds, diseases, and nematodes", 2006-2009.