Grain sorghum

Dryland

Owned land

<table>
<thead>
<tr>
<th>Income per acre</th>
<th>Units</th>
<th>Yield</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary crop</td>
<td>bushels</td>
<td>85</td>
<td>3.30</td>
<td>280.50</td>
</tr>
<tr>
<td>By product crop</td>
<td>bushels</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Net payments (fixed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total income per acre</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$280.50</strong></td>
</tr>
</tbody>
</table>

Operating costs per acre

- Seed: 13.20
- Fertilizer: 51.05
  - Nitrogen: 21.25
  - Phosphorus: 13.39
  - Potassium: 6.41
  - Other soil amendments: 10.00
- Crop protection: 30.00
  - Herbicide: 30.00
  - Insect-fungicide: 0.00
- Crop supplies, storage, and marketing: 1.00
- Crop consulting and insurance: 14.00
- Custom hire and rental: 6.00
- Machinery fuel, drying, and irrigation energy: 10.76
- Machinery repairs and maintenance: 11.02
- Operator and hired labor: 12.57
- Other expense: 0.00
- Operating interest: 4.11

**Operating costs per acre**

**$153.71**

Ownership costs per acre\(^1\)

- Farm business overhead: 2.83
- Machinery overhead: 21.59
- Machinery depreciation: 23.41
- Real estate charge: 115.50

**Ownership costs per acre**

**$163.34**

**Total costs per acre**

**$317.05**

Income over operating costs per acre: 126.79
Income over total costs per acre: -36.55

Operating costs per bushel: 1.81
Ownership costs per bushel: 1.92
Total costs per bushel: 3.73

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The Crop Budget Generator is a product of the Food and Agricultural Policy Research Institute at the University of Missouri

www.fapri.missouri.edu
Detailed Report

Grain sorghum
Gr Sorghum 2018
10/19/2017

Selected input quantities per acre

Yield, bushels 85.0
Seeding rate, count 90,000
Nitrogen rate, lbs 85
Phosphorus rate, lbs 38.25
Potassium rate, lbs 24.65
Lime rate, tons 0.5
Sum of allocated labor, hours 0.84
Irrigation, inches 0

Selected input prices $ per unit

Farm diesel, per gallon 2.37
Operating interest, % 5.50
Nitrogen, per lb 0.25
Phosphorus, per lb 0.35
Potassium, per lb 0.26
Lime, per ton 20.00
Skilled labor, per hour 18.00
Land value, per acre 3,500

Machine activity (not custom)

<table>
<thead>
<tr>
<th>Machine activity (not custom)</th>
<th>Labor Hours per acre</th>
<th>Fuel Gallons per acre</th>
<th>Operating Costs (^2) $ per acre</th>
<th>Ownership Costs (^3) $ per acre</th>
<th>Total Costs $ per acre</th>
<th>Trips per acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-Ripper 30” O.C., (17 ft); 360 4WD</td>
<td>0.03</td>
<td>0.45</td>
<td>1.87</td>
<td>5.72</td>
<td>7.59</td>
<td>0.3</td>
</tr>
<tr>
<td>Split row no-till planter (16/31 row 30/15”); 225 MFWD</td>
<td>0.05</td>
<td>0.53</td>
<td>4.43</td>
<td>11.78</td>
<td>16.20</td>
<td>1</td>
</tr>
<tr>
<td>Boom sprayer (90 ft); 130 MFWD</td>
<td>0.04</td>
<td>0.25</td>
<td>2.35</td>
<td>3.90</td>
<td>6.25</td>
<td>2</td>
</tr>
<tr>
<td>Anhydrous applicator (21 ft); 225 MFWD</td>
<td>0.09</td>
<td>0.88</td>
<td>4.70</td>
<td>6.83</td>
<td>11.53</td>
<td>1</td>
</tr>
<tr>
<td>Combine, fixed grain head (30 ft); 275 HP Comb.</td>
<td>0.07</td>
<td>0.91</td>
<td>7.25</td>
<td>8.86</td>
<td>16.11</td>
<td>1</td>
</tr>
<tr>
<td>Grain cart (500 bushel); 225 MFWD</td>
<td>0.04</td>
<td>0.37</td>
<td>1.80</td>
<td>2.63</td>
<td>4.43</td>
<td></td>
</tr>
<tr>
<td>Grain auger 10 in- 5000 bu/hr (70 ft); 130 MFWD</td>
<td>0.02</td>
<td>0.10</td>
<td>0.58</td>
<td>0.60</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>Pickup truck</td>
<td>0.49</td>
<td>2.60</td>
<td>2.02</td>
<td>4.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>0.34</strong></td>
<td><strong>4.55</strong></td>
<td><strong>27.60</strong></td>
<td><strong>45.00</strong></td>
<td><strong>72.61</strong></td>
<td><strong>5.3</strong></td>
</tr>
</tbody>
</table>

1 Farm business overhead includes liability insurance, utilities, accounting, etc. Machinery overhead is the sum of opportunity interest, property taxes, insurance, and housing. Machinery depreciation is a market value decline due to aging and usage. Thus, a portion of depreciation should be considered an operating costs for some decisions. Real estate charge includes land, improvements, taxes. Economic costs may differ from rental rates.

2 Machinery operating cost is the sum of fuel, repairs, maintenance, and the value of labor.

3 Machinery ownership cost is the sum of machinery overhead and depreciation (see page 1).