

COTTON- Conventional Tillage, Irrigated
2016 ESTIMATED PER ACRE COSTS AND RETURNS, SOUTH AND EAST GEORGIA

| | | | |
|-------------------------|-----------------------------|-----------------------|---------------|
| Seed Technology: | B2RF or WRF or GLB2 or LLB2 | Row Spacing: | 36 |
| Tillage: | Conventional | Seed Per Foot: | 2.50 |
| Production: | Irrigated | Seed Per Acre: | 36,300 |

| | Lbs/Acre | Avg Price** | Income/Ac | Cents/Lb |
|------------------------|----------|-------------|-----------------|--------------|
| EXPECTED INCOME | 1200 | 0.700 | \$840.00 | 70.00 |

| VARIABLE COST | Unit | No. Units | Price/Unit | Cost/Acre | Cents/Lb | | |
|--|--------------|------------------|-------------------|------------------|-----------------|---------|--------|
| Land Rent | Acre | 1 | 0.00 | 0.00 | 0.00 | | |
| Crop Insurance (Including STAX) | Acre | 1 | 18.00 | 18.00 | 1.50 | | |
| Seed (Including Technology Fees) | 1,000 seed | 36.3 | 2.39 | 86.65 | 7.22 | | |
| Seed Treatments | 1,000 seed | 36.3 | 0.39 | 14.16 | 1.18 | | |
| Lime- Custom Spread | Ton | 0.33 | 45.00 | 14.85 | 1.24 | | |
| Fertilizers | | | | | | | |
| Nitrogen | Lbs | 90 | 0.50 | 45.00 | 3.75 | | |
| Phosphate (P2O5) | Lbs | 70 | 0.42 | 29.40 | 2.45 | | |
| Potash (K2O) | Lbs | 70 | 0.34 | 23.80 | 1.98 | | |
| Chicken Litter- Custom Spread | Tons | 0 | 44.00 | 0.00 | 0.00 | | |
| Boron, Sulfur, and Others | Acre | 1 | 5.50 | 5.50 | 0.46 | | |
| Weed Control | | | | | | | |
| Pre-Plant Broadcast or PPI | Acre | 1 | 6.76 | 6.76 | 0.56 | | |
| At Planting or PRE | Acre | 1 | 9.13 | 9.13 | 0.76 | | |
| POST | Acre | 1 | 32.54 | 32.54 | 2.71 | | |
| Layby | Acre | 1 | 15.49 | 15.49 | 1.29 | | |
| Hand Weeding | Acre | 1 | 15.00 | 15.00 | 1.25 | | |
| Insect Control | | | | | | | |
| Scouting | Acre | 1 | 10.00 | 10.00 | 0.83 | | |
| In-Furrow (If no seed treatment used) | Lbs | 0 | 0.00 | 0.00 | 0.00 | | |
| Spray- Caterpillar Pests | Applications | 0 | 0.00 | 0.00 | 0.00 | | |
| Spray- Stink Bugs, Other Pests | Applications | 2 | 3.85 | 7.70 | 0.64 | | |
| Nematicide (If no seed treatment used) | Acre | 1 | 0.00 | 0.00 | 0.00 | | |
| Fungicide (If no seed treatment used) | Acre | 1 | 0.00 | 0.00 | 0.00 | | |
| PGR | Ounces | 36 | 0.078 | 2.81 | 0.23 | | |
| Defoliant and Boll Opener | Acre | 1 | 11.63 | 11.63 | 0.97 | | |
| Irrigation | Applications | 8 | 8.00 | 64.00 | 5.33 | | |
| Machinery and Equipment | | | | | | | |
| Fuel and Lube | Gal | 13.05 | 1.80 | 23.49 | 1.96 | | |
| Repairs and Maintenance | Acre | 1 | 31.00 | 31.00 | 2.58 | | |
| Custom Spray Applications | Applications | 0 | 0.00 | 0.00 | 0.00 | | |
| Custom Picking | Acre | 1 | 0.00 | 0.00 | 0.00 | | |
| Labor | LT/MT | 1.65 | Hrs | 2.08 | 12.50 | 26.04 | 2.17 |
| Interest on Operating | Months | 6 | \$492.95 | 0.50 | 6.50% | 16.02 | 1.34 |
| Ginning and Warehousing | | | | | | | |
| Ginning | Lbs | 1200 | 0.080 | 96.00 | 8.00 | | |
| Other (Hauling, Etc.) | Bale | 2.42 | 0.00 | 0.00 | 0.00 | | |
| Storage and Warehousing | Bale | 2.42 | 10.50 | 25.45 | 2.12 | | |
| Promotions, Boards, Classing | Bale | 2.42 | 5.88 | 14.26 | 1.19 | | |
| Cottonseed Credit | Gin T/O | 40% | Ton | 0.75 | 195.00 | -146.25 | -12.19 |
| BWEP | Bale | 2.42 | 0.75 | 1.82 | 0.15 | | |

| | | |
|-----------------------------|-----------------|--------------|
| TOTAL VARIABLE COSTS | \$500.25 | 41.69 |
|-----------------------------|-----------------|--------------|

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|---------------------------------------|-----------------|--------------|
| NET RETURN ABOVE VARIABLE COST | \$339.75 | 28.31 |
|---------------------------------------|-----------------|--------------|

| | | | | | |
|----------------------|----------------|----------|--------|--------|-------|
| Tractors and Sprayer | Acre | 1 | 51.41 | 51.41 | 4.28 |
| Equipment/Implements | Acre | 1 | 18.23 | 18.23 | 1.52 |
| Irrigation | Acre | 1 | 125.00 | 125.00 | 10.42 |
| Picker/BB/MB | Acre | 1 | 80.06 | 80.06 | 6.67 |
| Owned Land Charge | Acre | 1 | 0.00 | 0.00 | 0.00 |
| Misc Overhead | % of Var Costs | \$500.25 | 5.0% | 25.01 | 2.08 |
| Management | % of Var Costs | \$500.25 | 5.0% | 25.01 | 2.08 |

| | | |
|--------------------------|-----------------|--------------|
| TOTAL FIXED COSTS | \$324.72 | 27.06 |
|--------------------------|-----------------|--------------|

| | | |
|-------------------|-----------------|--------------|
| TOTAL COST | \$824.98 | 68.75 |
|-------------------|-----------------|--------------|

| | | |
|-------------------|----------------|-------------|
| NET RETURN | \$15.02 | 1.25 |
|-------------------|----------------|-------------|

** Expected average price includes LDP/MLG if applicable, and adjustments for fiber quality.



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PER ACRE NET RETURN ABOVE VARIABLE COST AT VARIOUS PRICES, YIELD, and RENT

| Rent/Ac | 0.650 | | | 0.700 | | | 0.750 | | |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1100 | 1200 | 1300 | 1100 | 1200 | 1300 | 1100 | 1200 | 1300 |
| 150 | 59.14 | 124.87 | 190.60 | 114.14 | 184.87 | 255.60 | 169.14 | 244.87 | 320.60 |
| 175 | 33.33 | 99.06 | 164.79 | 88.33 | 159.06 | 229.79 | 143.33 | 219.06 | 294.79 |
| 200 | 7.52 | 73.25 | 138.97 | 62.52 | 133.25 | 203.97 | 117.52 | 193.25 | 268.97 |
| 225 | -18.29 | 47.43 | 113.16 | 36.71 | 107.43 | 178.16 | 91.71 | 167.43 | 243.16 |
| 250 | -44.11 | 21.62 | 87.35 | 10.89 | 81.62 | 152.35 | 65.89 | 141.62 | 217.35 |

| Acres of This Crop | 900 | Fixed Costs Per Year | | | Fixed Costs Share For This Crop | | | | Repairs and Maintenance | | | |
|-----------------------------|--------|----------------------|---------------|----------|---------------------------------|-------|---------------|---------|-------------------------|--------------|--------------|--------------|
| | | New Price | % FC | Total FC | Hrs Use | FC/Hr | % Use | Hrs Use | Hrs/Ac | FC/Acre | Est RM | This Crop |
| Tractors | | | | | | | | | | | | |
| 225 HP | 225000 | 11.61 | 26123 | 500 | 52.25 | 55 | 275 | 0.306 | 15.96 | 5700 | 3135 | 3.48 |
| 185 HP | 175000 | 11.61 | 20317.5 | 600 | 33.86 | 65 | 390 | 0.433 | 14.67 | 4400 | 2860 | 3.18 |
| 100 HP | 74000 | 11.61 | 8591 | 500 | 17.18 | 30 | 150 | 0.167 | 2.86 | 1900 | 570 | 0.63 |
| Hi-clearance sprayer | | | | | | | | | | | | |
| | 175000 | 14.17 | 24798 | 255 | 97.25 | 65 | 166 | 0.184 | 17.91 | 4800 | 3120 | 3.47 |
| Picker | | | | | | | | | | | | |
| | 465000 | 13.81 | 64217 | 155 | 414.30 | 100 | 155 | 0.172 | 71.35 | 12750 | 12750 | 14.17 |
| Totals | | | 144045 | | | | 110486 | | 122.76 | 29550 | 22435 | 24.93 |

| Fuel Cost Per Gallon | \$1.80 | Total Farm | | Fixed Costs Per Year | | | Fixed Costs This Crop | | Repairs and Maintenance | | | Fuel and Lube | | |
|------------------------------|--------|------------|---------|----------------------|-------|----------|-----------------------|--------------|-------------------------|-------------|-------------|---------------|--------------|--------------|
| | | Acres/Yr* | HP Used | New Price | % FC | Total FC | % Use | FC/Acre | Est RM | This Crop | Per Acre | Hrs/Ac | Gal/Hr | Cost/Ac |
| Disk- 30ft | 3600 | 225 | 17.0 | 50000 | 12.25 | 6125 | 50 | 3.40 | 1250 | 625 | 0.69 | 0.059 | 9.90 | 1.21 |
| Disk- 30ft | 3600 | 225 | 17.0 | 50000 | 12.25 | 6125 | 50 | 3.40 | 1250 | 625 | 0.69 | 0.059 | 9.90 | 1.21 |
| Rip and bed- 8-row | 1800 | 225 | 11.5 | 32000 | 12.25 | 3920 | 50 | 2.18 | 800 | 400 | 0.44 | 0.087 | 9.90 | 1.78 |
| Spray 60 ft- preplant | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | | | 0.026 | 7.70 | 0.41 |
| Plant- 8 row w/PRE | 1800 | 185 | 11.5 | 40000 | 12.25 | 4900 | 50 | 2.72 | 1100 | 550 | 0.61 | 0.087 | 8.14 | 1.47 |
| Spray 60 ft POST 1 | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | 0 | 0.00 | 0.026 | 7.70 | 0.41 |
| Spray 60 ft POST 2 | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | | 0.00 | 0.026 | 7.70 | 0.41 |
| Side dress | 1300 | 185 | 12.0 | 17000 | 12.25 | 2083 | 70 | 1.62 | 425 | 298 | 0.33 | 0.083 | 8.14 | 1.40 |
| Spray- Layby DIRECTED 8 row | 1300 | 185 | 12.0 | 12500 | 12.25 | 1531 | 70 | 0.00 | 315 | 221 | 0.25 | 0.083 | 8.14 | 1.40 |
| Spray 60 ft- pgr | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | 0 | 0.00 | 0.026 | 7.70 | 0.41 |
| Spray 60 ft- insecticide+pgr | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | 0 | 0.00 | 0.026 | 7.70 | 0.41 |
| Spray 60 ft- insecticide+pgr | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | 0 | 0.00 | 0.026 | 7.70 | 0.41 |
| Spray 60 ft- defoliate | 9800 | 175 | 38.5 | | | 0 | | 0.00 | | 0 | 0.00 | 0.026 | 7.70 | 0.41 |
| | | | | | | 0 | | 0.00 | | 0 | 0.00 | | 0.00 | |
| Picker- 6 row | 900 | 350 | 5.80 | | | 0 | | 0.00 | | 0 | 0.00 | 0.172 | 15.40 | 5.50 |
| Boll Buggy | 900 | 185 | 5.80 | 30000 | 12.25 | 3675 | 100 | 4.08 | 800 | 800 | 0.89 | 0.172 | 8.14 | 2.91 |
| Module Builder | 900 | 100 | 5.80 | 34000 | 12.25 | 4165 | 100 | 4.63 | 950 | 950 | 1.06 | 0.172 | 4.40 | 1.57 |
| Stalk puller/chopper- 6 row | 900 | 225 | 9.5 | 36000 | 12.25 | 4410 | 100 | 4.90 | 1000 | 1000 | 1.11 | 0.105 | 9.90 | 2.16 |
| | | | | | | 0 | | 0.00 | | 0 | 0.00 | | 0.00 | |
| Totals | | | | | | | | 25315 | 26.94 | 7890 | 5468 | 6.08 | 1.263 | 23.49 |

* All acres for the implement including multiple trips over the field. Disking 1,500 acres 2 times would be 3,000 acres total. Spraying 1,500 acres 6 times would be 9,000 acres.

Developed by Don Shurley and Amanda Smith, Department of Agricultural and Applied Economics, University of Georgia.

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