

COTTON- Strip-Till, Non-Irrigated

2019 ESTIMATED PER ACRE COSTS AND RETURNS, SOUTH AND EAST GEORGIA

| | | | |
|-------------------------|--------------------------------|-----------------------|--------|
| Seed Technology: | *B2RF, B2XF, WRF, GLT, or GLB2 | Row Spacing: | 36 |
| Tillage: | Strip-Till | Seed Per Foot: | 2.75 |
| Production: | Non-Irrigated | Seed Per Acre: | 39,930 |

| | | | | |
|------------------------|-----------------|---------------------|------------------|-----------------|
| EXPECTED INCOME | Lbs/Acre | Avg Price ** | Income/Ac | Cents/Lb |
| | 750 | 0.720 | \$540.00 | 72.00 |

| VARIABLE COST | Unit | No. Units | Price/Unit | Cost/Acre | Cents/Lb |
|--|--------------|------------------|-------------------|------------------|-----------------|
| Land Rent | Acre | 1 | 0.00 | 0.00 | 0.00 |
| Crop Insurance (Excluding STAX) | Acre | 1 | 16.00 | 16.00 | 2.13 |
| Seed (Including Tech Fees and Seed Treatments) | 1,000 seed | 39.93 | 2.64 | 105.40 | 14.05 |
| Lime- Custom Spread | Ton | 0.33 | 45.00 | 14.85 | 1.98 |
| Fertilizers | | | | | |
| Nitrogen | Lbs | 60 | 0.50 | 30.00 | 4.00 |
| Phosphate (P2O5) | Lbs | 50 | 0.44 | 22.00 | 2.93 |
| Potash (K2O) | Lbs | 50 | 0.32 | 16.00 | 2.13 |
| Chicken Litter- Custom Spread | Tons | 0 | 0.00 | 0.00 | 0.00 |
| Boron, Sulfur, and Others | Acre | 1 | 6.00 | 6.00 | 0.80 |
| Weed Control | | | | | |
| Burndown | Acre | 1 | 13.62 | 13.62 | 1.82 |
| At Planting or PRE | Acre | 1 | 12.22 | 12.22 | 1.63 |
| POST | Acre | 1 | 37.92 | 37.92 | 5.06 |
| Layby | Acre | 1 | 14.54 | 14.54 | 1.94 |
| Hand Weeding | Acre | 1 | 10.00 | 10.00 | 1.33 |
| Insect Control | | | | | |
| Scouting | Acre | 1 | 10.00 | 10.00 | 1.33 |
| 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 | 6.83 | 13.65 | 1.82 |
| 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 | 26 | 0.051 | 1.33 | 0.18 |
| Defoliant and Boll Opener | Acre | 1 | 10.51 | 10.51 | 1.40 |
| Machinery and Equipment | | | | | |
| Fuel and Lube | Gal | 10.83 | 2.50 | 27.08 | 3.61 |
| Repairs and Maintenance | Acre | 1 | 27.41 | 27.41 | 3.66 |
| Custom Spray Applications | Applications | 0 | 0.00 | 0.00 | 0.00 |
| Custom Picking | Acre | 1 | 0.00 | 0.00 | 0.00 |
| Labor | LT/MT | 1.55 | 1.56 | 20.73 | 2.76 |
| Interest on Operating | Months | 6 | \$409.26 | 0.50 | 6.25% |
| 12.79 | | | | 12.79 | 1.71 |
| Ginning and Warehousing | | | | | |
| Ginning | Lbs | 750 | 0.080 | 60.00 | 8.00 |
| Other (Hauling, Etc.) | Bale | 1.51 | 0.00 | 0.00 | 0.00 |
| Storage and Warehousing | Bale | 1.51 | 10.50 | 15.88 | 2.12 |
| Promotions, Boards, Classing | Bale | 1.51 | 6.04 | 9.13 | 1.22 |
| Cottonseed Credit | Gin T/O | 40% | 0.47 | 120.00 | -56.25 |
| -7.50 | | | | | -7.50 |
| BWEP | Bale | 1.51 | 0.75 | 1.13 | 0.15 |

| | | |
|---------------------------------------|-----------------|--------------|
| TOTAL VARIABLE COSTS | \$451.94 | 60.26 |
| NET RETURN ABOVE VARIABLE COST | \$88.06 | 11.74 |

| | | | | | |
|--------------------------|----------------|----------|-------|-----------------|--------------|
| Tractors and Sprayer | Acre | 1 | 49.49 | 49.49 | 6.60 |
| Equipment/Implements | Acre | 1 | 5.87 | 5.87 | 0.78 |
| Picker/BB/MB | Acre | 1 | 72.06 | 72.06 | 9.61 |
| Owned Land Charge | Acre | 1 | 0.00 | 0.00 | 0.00 |
| Misc Overhead | % of Var Costs | \$451.94 | 5.0% | 22.60 | 3.01 |
| Management | % of Var Costs | \$451.94 | 5.0% | 22.60 | 3.01 |
| TOTAL FIXED COSTS | | | | \$172.61 | 23.01 |

| | | |
|-------------------|-----------------|---------------|
| TOTAL COST | \$624.55 | 83.27 |
| NET RETURN | -\$84.55 | -11.27 |

* This does not constitute a recommendation of technologies. These were the technologies most widely planted in GA in 2018.
 ** Planning or budget price based on futures prices and outlook as of March 2019. Includes adjustments for fiber quality.

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

| Rent/Ac | 0.670 | | | 0.720 | | | 0.770 | | |
|---------|---------|---------|--------|---------|--------|--------|---------|--------|--------|
| | 650 | 750 | 850 | 650 | 750 | 850 | 650 | 750 | 850 |
| 50 | -64.02 | -1.00 | 62.01 | -31.52 | 36.50 | 104.51 | 0.98 | 74.00 | 147.01 |
| 75 | -89.80 | -26.78 | 36.23 | -57.30 | 10.72 | 78.73 | -24.80 | 48.22 | 121.23 |
| 100 | -115.58 | -52.56 | 10.45 | -83.08 | -15.06 | 52.95 | -50.58 | 22.44 | 95.45 |
| 125 | -141.36 | -78.34 | -15.33 | -108.86 | -40.84 | 27.17 | -76.36 | -3.34 | 69.67 |
| 150 | -167.14 | -104.13 | -41.11 | -134.64 | -66.63 | 1.39 | -102.14 | -29.13 | 43.89 |

| Acres of This Crop | 1,000 | 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 | Per Acre | |
| Tractors | | | | | | | | | | | | |
| 230 HP | 223000 | 11.61 | 25890 | 400 | 64.73 | 50 | 200 | 0.200 | 12.95 | 6000 | 3000 | 3.00 |
| 190 HP | 186000 | 11.61 | 21594.6 | 500 | 43.19 | 65 | 325 | 0.325 | 14.04 | 4900 | 3185 | 3.19 |
| 110 HP | 78000 | 11.61 | 9056 | 500 | 18.11 | 35 | 175 | 0.175 | 3.17 | 2000 | 700 | 0.70 |
| Hi-clearance sprayer | | | | | | | | | | | | |
| | 195000 | 14.17 | 27632 | 250 | 110.53 | 70 | 175 | 0.175 | 19.34 | 5300 | 3710 | 3.71 |
| Picker | | | | | | | | | | | | |
| | 465000 | 13.81 | 64217 | 165 | 389.19 | 100 | 165 | 0.165 | 64.22 | 12800 | 12800 | 12.80 |
| Totals | | | 148389 | | | | 113710 | | 113.71 | 31000 | 23395 | 23.40 |

| Fuel Cost Per Gallon | \$2.50 | Total Farm | | | | | | | | | | | | |
|---------------------------------|-----------|------------|----------|----------------------|-------|--------------|-----------------------|--------------|-------------------------|-------------|-------------|---------------|--------|--------------|
| Job or Implement- Size | Acres/Yr* | HP Used | Acres/Hr | Fixed Costs Per Year | | | Fixed Costs This Crop | | Repairs and Maintenance | | | Fuel and Lube | | |
| | | | | New Price | % FC | Total FC | % Use | FC/Acre | Est RM | This Crop | Per Acre | Hrs/Ac | Gal/Hr | Cost/Ac |
| Spray 60 ft- burndown | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| Strip/rip/plant- 6-row with PRE | 2000 | 230 | 10.5 | 50000 | 12.25 | 6125 | 50 | 3.06 | 1500 | 750 | 0.75 | 0.095 | 10.12 | 2.77 |
| Spray 60 ft POST 1 | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| Spray 60 ft POST 2 | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| Side dress | 1300 | 190 | 12.5 | 17000 | 12.25 | 2083 | 70 | 1.46 | 425 | 298 | 0.30 | 0.080 | 8.36 | 1.92 |
| Spray- Layby DIRECTED 8 row | 1300 | 190 | 12.5 | 12500 | 12.25 | 1531 | 70 | 0.00 | 315 | 221 | 0.22 | 0.080 | 8.36 | 1.92 |
| Spray 60 ft- pgr | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| Spray 60 ft- insecticide | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| Spray 60 ft- insecticide+pgr | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| Spray 60 ft- defoliate | 9800 | 200 | 40.0 | | | 0 | | 0.00 | | 0 | 0.00 | 0.025 | 8.80 | 0.63 |
| | | | | | | 0 | | 0.00 | | 0 | 0.00 | | 0.00 | |
| | | | | | | 0 | | 0.00 | | 0 | 0.00 | | 0.00 | |
| | | | | | | 0 | | 0.00 | | 0 | 0.00 | | 0.00 | |
| Picker- 6 row | 1000 | 350 | 6.20 | | | 0 | | 0.00 | | 0 | 0.00 | 0.161 | 15.40 | 7.14 |
| Boil Buggy | 1000 | 190 | 6.20 | 30000 | 12.25 | 3675 | 100 | 3.68 | 800 | 800 | 0.80 | 0.161 | 8.36 | 3.88 |
| Module Builder | 1000 | 110 | 6.20 | 34000 | 12.25 | 4165 | 100 | 4.17 | 950 | 950 | 0.95 | 0.161 | 4.84 | 2.24 |
| Stalk puller/chopper- 6 row | 1000 | 230 | 10.5 | 36000 | 12.25 | 4410 | 100 | 4.41 | 1000 | 1000 | 1.00 | 0.095 | 10.12 | 2.77 |
| | | | | | | 0 | | 0.00 | | 0 | 0.00 | | 0.00 | |
| Totals | | | | | | 17842 | | 16.77 | 4990 | 4018 | 4.02 | 1.009 | | 27.08 |

* 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. Updated by Yangxuan Liu. Department of Agricultural and Applied Economics, University of Georgia.

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