

| COTTON- Conventional Tillage, 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: | Conventional | | | Seed Per Foot: | 2.50 |
| Production: | Non-Irrigated | | | Seed Per Acre: | 36,300 |
| 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 | 36.3 | 2.64 | 95.82 | 12.78 |
| 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 | | | | | |
| Pre-Plant Broadcast or PPI | Acre | 1 | 0.00 | 0.00 | 0.00 |
| At Planting or PRE | Acre | 1 | 9.56 | 9.56 | 1.27 |
| POST | Acre | 1 | 40.84 | 40.84 | 5.45 |
| 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 | 12.69 | 2.50 | 31.72 | 4.23 |
| Repairs and Maintenance | Acre | 1 | 28.58 | 28.58 | 3.81 |
| 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 | | | |
| Interest on Operating | Months | 6 | | | |
| 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% | | | |
| Cottonseed Credit | Ton | 0.47 | 120.00 | -56.25 | -7.50 |
| BWEP | Bale | 1.51 | 0.75 | 1.13 | 0.15 |
| TOTAL VARIABLE COSTS | | | | \$437.90 | 58.39 |
| NET RETURN ABOVE VARIABLE COST | | | | \$102.10 | 13.61 |
| Tractors and Sprayer | Acre | 1 | 47.57 | 47.57 | 6.34 |
| Equipment/Implements | Acre | 1 | 16.71 | 16.71 | 2.23 |
| 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 | \$437.90 | 5.0% | 21.89 | 2.92 |
| Management | % of Var Costs | \$437.90 | 5.0% | 21.89 | 2.92 |
| TOTAL FIXED COSTS | | | | \$180.13 | 24.02 |
| TOTAL COST | | | | \$618.03 | 82.40 |
| NET RETURN | | | | -\$78.03 | -10.40 |
| * 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. | | | | | |
| Developed by Don Shurley and Amanda Smith. Updated by Yangxuan Liu March 2019 | | | | | |
| Funding support provided by the Georgia Cotton Commission | | | | | |



COTTON- Conventional Tillage, Non-Irrigated
2019 ESTIMATED PER ACRE COSTS AND RETURNS, SOUTH AND EAST GEORGIA

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 | -49.98 | 13.04 | 76.05 | -17.48 | 50.54 | 118.55 | 15.02 | 88.04 | 161.05 |
| 75 | -75.76 | -12.74 | 50.27 | -43.26 | 24.76 | 92.77 | -10.76 | 62.26 | 135.27 |
| 100 | -101.54 | -38.52 | 24.49 | -69.04 | -1.02 | 66.99 | -36.54 | 36.48 | 109.49 |
| 125 | -127.32 | -64.30 | -1.29 | -94.82 | -26.80 | 41.21 | -62.32 | 10.70 | 83.71 |
| 150 | -153.10 | -90.09 | -27.07 | -120.60 | -52.59 | 15.43 | -88.10 | -15.09 | 57.93 |

| Acres of This Crop | 1,000 | | | | | | | | | | | | |
|-----------------------------|----------------------|----------|---------------|-------|---------------------------------|---------|---------------|---------|-------------------------|---------------|--------------|--------------|--------------|
| New Price | Fixed Costs Per Year | | | | Fixed Costs Share For This Crop | | | | Repairs and Maintenance | | | | |
| | % 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 | 600 | 43.15 | 55 | 330 | 0.330 | 14.24 | 6000 | 3300 | 3.30 | |
| 190 HP | 186000 | 11.61 | 21595 | 600 | 35.99 | 65 | 390 | 0.390 | 14.04 | 4900 | 3185 | 3.19 | |
| 110 HP | 78000 | 11.61 | 9056 | 500 | 18.11 | 30 | 150 | 0.150 | 2.72 | 2000 | 600 | 0.60 | |
| Hi-clearance sprayer | | | | | | | | | | | | | |
| | 195000 | 14.17 | 27632 | 250 | 110.53 | 60 | 150 | 0.150 | 16.58 | 5300 | 3180 | 3.18 | |
| Picker | | | | | | | | | | | | | |
| | 465000 | 13.81 | 64217 | 165 | 389.19 | 100 | 165 | 0.165 | 64.22 | 12800 | 12800 | 12.80 | |
| Totals | | | 148389 | | | | 111788 | | | 111.79 | 31000 | 23065 | 23.07 |

| Job or Implement- Size | Total Farm | | Fixed Costs Per Year | | | | Fixed Costs This Crop | | Repairs and Maintenance | | | Fuel and Lube | | |
|------------------------------|------------|---------|----------------------|-----------|-------|--------------|-----------------------|--------------|-------------------------|-------------|-------------|---------------|--------|--------------|
| | Acres/Yr* | HP Used | Acres/Hr | New Price | % FC | Total FC | % Use | FC/Acre | Est RM | This Crop | Per Acre | Hrs/Ac | Gal/Hr | Cost/Ac |
| Disk- 30ft | 4000 | 230 | 17.0 | 52000 | 12.25 | 6370 | 50 | 3.19 | 1300 | 650 | 0.65 | 0.059 | 10.12 | 1.71 |
| Disk- 30ft | 4000 | 230 | 17.0 | 52000 | 12.25 | 6370 | 50 | 3.19 | 1300 | 650 | 0.65 | 0.059 | 10.12 | 1.71 |
| Rip and bed- 8-row | 2000 | 230 | 11.5 | 32000 | 12.25 | 3920 | 50 | 1.96 | 800 | 400 | 0.40 | 0.087 | 10.12 | 2.53 |
| Plant- 8 row w/PRE | 2000 | 190 | 11.5 | 41000 | 12.25 | 5023 | 50 | 2.51 | 1100 | 550 | 0.55 | 0.087 | 8.36 | 2.09 |
| 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 | 1400 | 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 | 1400 | 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 | |
| Picker- 6 row | 1000 | 350 | 6.20 | | | | | | | | | 0.161 | 15.40 | 7.14 |
| Boll 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 | | | | | | 25621 | | 24.55 | 7990 | 5518 | 5.52 | 1.181 | | 31.72 |

* 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.

March 2019

ACKNOWLEDGEMENT

Thanks to County Extension Agents, UGA Cotton Team, and industry representatives for providing data, input, and review/suggestions.
 Thanks to the Georgia Cotton Commission for funding support.

