WHEAT FOR GRAIN, CONVENTIONAL GEORGIA, 2021-22

Estimated Costs and Returns

| Expected Yiel | ld: 55 | 5 bushel | | | Your Yield | | | | |
|---|--------------|-----------|----|------------|------------|---------------|-----|--------|-----------|
| Variable Costs** | Unit | Amount | ç | 5/Unit | Со | st/Acre | \$/ | bushel | Your Farm |
| Seed | pounds | 90 | \$ | 0.48 | \$ | 43.20 | \$ | 0.79 | |
| Lime | ton | 0.25 | \$ | 50.00 | \$ | 12.50 | \$ | 0.23 | |
| Fertilizer | | | | | | | | | |
| Nitrogen | pounds | 80 | \$ | 0.90 | \$ | 72.00 | \$ | 1.31 | |
| Phosphate | pounds | 40 | \$ | 0.70 | \$ | 28.00 | \$ | 0.51 | |
| Potash | pounds | 40 | \$ | 0.70 | \$ | 28.00 | \$ | 0.51 | |
| Weed Control | acre | 1 | \$ | 27.82 | \$ | 27.82 | \$ | 0.51 | |
| Insect Control | acre | 1 | \$ | 1.43 | \$ | 1.43 | \$ | 0.03 | |
| Disease Control | acre | 1 | \$ | 12.30 | \$ | 12.30 | \$ | 0.22 | |
| Disease Spray by Air | acre | 1 | \$ | 8.00 | \$ | 8.00 | \$ | 0.15 | |
| Preharvest Machinery | | | | | | | | | |
| Fuel | gallon | 3.3 | \$ | 3.10 | \$ | 10.35 | \$ | 0.19 | |
| Repairs and Maintenance | acre | 1 | \$ | 8.72 | \$ | 8.72 | \$ | 0.16 | |
| Harvest Machinery | | | | | | | | | |
| Fuel | gallon | 3.0 | \$ | 3.10 | \$ | 9.39 | \$ | 0.17 | |
| Repairs and Maintenance | acre | 1 | \$ | 6.37 | \$ | 6.37 | \$ | 0.12 | |
| Labor | hours | 0.7 | \$ | 13.50 | \$ | 10.07 | \$ | 0.18 | |
| Irrigation* | applications | | \$ | 9.25 | \$ | - | \$ | - | |
| Crop Insurance | acre | 1 | \$ | 13.00 | \$ | 13.00 | \$ | 0.24 | |
| Land Rent | acre | 1 | \$ | - | \$ | - | \$ | - | |
| Interest on Operating Capital | percent | \$ 145.57 | | 5.50% | \$ | 8.01 | \$ | 0.15 | |
| Drying - 2 Points | bushel | 60 | \$ | 0.09 | \$ | 5.43 | \$ | 0.10 | |
| Total Variable Costs: | | | | | \$ | 304.58 | \$ | 5.54 | |
| Fixed Costs | | | | | | | | | |
| Fixed Costs Machinery Depreciation, Taxes, Insurance and | nd Housing | | | | | | | | |
| Preharvest Machinery | acre | 1 | Ś | 23.90 | Ś | 23.90 | \$ | 0.43 | |
| Harvest Machinery | acre | 1 | • | 30.17 | | 30.17 | \$ | 0.55 | |
| Irrigation | acre | | • | 135.00 | \$ | - | \$ | - | |
| General Overhead | % of VC | \$ 304.58 | Ŧ | 5% | | 15.23 | \$ | 0.28 | |
| Management | % of VC | \$ 304.58 | | | | 15.23 | \$ | 0.28 | |
| | | | | | | | | | |
| Owned Land Cost, Taxes, Cash Payment, etc | | 1 | • | - | \$ | - | \$ | - | |
| Other | acre | 1 | \$ | - | \$ | - | \$ | - | |
| Total Fixed Costs | | | | | \$ | 84.53 | \$ | 1.54 | |
| Total Costs Excluding Land | | | | | \$ | 389.11 | \$ | 7.07 | |
| Your Profit Goal | | | | \$ /bushel | | | | oushel | |
| Price Needed for Profit | | | | \$ | | | /I | oushel | |

*Average of diesel and electric irrigation application costs. Electric is estimated at \$7/appl and diesel is estimated at \$13/appl when diesel costs \$3/gal.

**There is much volatility and uncertaintly in the markets. Prices may change 10% or more in a matter of days. These costs are relevant as of Nov 1, 2021

Developed by Amanda Smith.



Sensitivity Analysis of WHEAT FOR GRAIN, CONVENTIONAL

| Net Returns Above Variable Costs Per Acre | | | | | | | | |
|---|----------|---------|----------|----------|----------|--|--|--|
| Varying Prices and Yields (bushel) | | | | | | | | |
| | -25% | -10% | Expected | +10% | +25% | | | |
| Price \ bushel/Acre | 41 | 50 | 55 | 61 | 69 | | | |
| \$6.00 | -\$57.08 | -\$7.58 | \$25.42 | \$58.42 | \$107.92 | | | |
| \$6.25 | -\$46.77 | \$4.80 | \$39.17 | \$73.55 | \$125.11 | | | |
| \$6.50 | -\$36.45 | \$17.17 | \$52.92 | \$88.67 | \$142.30 | | | |
| \$6.75 | -\$26.14 | \$29.55 | \$66.67 | \$103.80 | \$159.48 | | | |
| \$7.00 | -\$15.83 | \$41.92 | \$80.42 | \$118.92 | \$176.67 | | | |
| \$7.25 | -\$5.52 | \$54.30 | \$94.17 | \$134.05 | \$193.86 | | | |
| \$7.50 | \$4.80 | \$66.67 | \$107.92 | \$149.17 | \$211.05 | | | |

Estimated Labor and Machinery Costs per Acre

Preharvest Operations

| | | Number | Labor | | | Fixed | | |
|---|------------|----------|----------|----------|---------|-------|---------|--|
| | | of Times | Use** | Fuel Use | Repairs | (| Costs | |
| Operation | Acres/Hour | Over | (hrs/ac) | (gal/ac) | (\$/ac) | (| (\$/ac) | |
| Disk Harrow 32' with Tractor (180-199 hp) MFWD 190 | 16.3 | 1 | 0.08 | 0.60 | \$ 1.97 | \$ | 5.72 | |
| Chisel Plow-Rigid 24' with Tractor (180-199 hp) MFWD 190 | 13.0 | 1 | 0.10 | 0.75 | \$ 1.55 | \$ | 4.34 | |
| Grain Drill 15' with Tractor (180-199 hp) MFWD 190 | 8.0 | 1 | 0.16 | 1.23 | \$ 3.47 | \$ | 9.78 | |
| Spray (Broadcast) 60' with Tractor (120-139 hp) 2WD 130 | 35.5 | 4 | 0.14 | 0.75 | \$ 1.72 | \$ | 4.06 | |
| | | | | | \$- | \$ | - | |
| | | | | | \$- | \$ | - | |
| Total Preharvest Values | | | 0.47 | 3.34 | \$ 8.72 | \$ | 23.90 | |

****Add ~\$3.70/ac in variable costs if you seed with spin spreader and disking it into the field as opposed to using a grain drill. Fixed costs would decrease by ~\$2/ac.

Harvest Operations

| | | Number | Labor | | | Fixed | |
|--|------------|----------|----------|----------|---------|----------|--|
| | | of Times | Use*** | Fuel Use | Repairs | Costs | |
| Operation | Acres/Hour | Over | (hrs/ac) | (gal/ac) | (\$/ac) | (\$/ac) | |
| Header Wheat/Sorghum 22' Rigid with | 7.9 | 1 | 0.16 | 2.11 | \$ 4.25 | \$ 24.31 | |
| Combine (300-349 hp) 325 hp | 7.9 | T | 0.10 | 2.11 | ş 4.25 | Ş 24.51 | |
| Grain Cart Wht/Sor 500 bu with Tractor (180- | 10.6 | 1 | 0.12 | 0.92 | \$ 2.12 | \$ 5.86 | |
| 199 hp) MFWD 190 | 10.0 | T | 0.12 | 0.92 | Ş 2.12 | Ş J.00 | |
| Total Harvest Values | | | 0.28 | 3.03 | \$ 6.37 | \$ 30.17 | |

*** Includes unallocated labor factor of 0.25. Unallocated labor factor is percentage allowance for additional labor required to move equipment and hook/unhook implements, etc.

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