

Projections for Planning Purposes Only -- Not to be Used without Updating
2020 Estimated Costs and Returns per Acre
Grapefruit, Year 8, Orchard Establishment, Flood Irrigated, Rio Grande Valley
South Extension District - 12

| Crop Acres | | 100 | | | |
|---|----------|-----------|-----------------|-------------------|---------------------|
| REVENUE | Quantity | Units | \$/Unit | Total | Enterprise Total |
| Grapefruit (Rio Red) | 20.00 | Ton | \$230.00 | \$4,600.00 | \$460,000.00 |
| Total Revenue | | | | \$4,600.00 | \$460,000.00 |
| VARIABLE COSTS | Quantity | Units | \$/Unit | Total | Enterprise Total |
| Production Costs | | | | | |
| Fertilizer | | | | | |
| Urea (46%) | 2.5 | CTW | \$21.80 | \$54.50 | \$5,450.00 |
| Foliar N (Urea) | 5 | Pound | \$0.61 | \$3.05 | \$305.00 |
| Foliar 3-18-18 | 1 | Gallon | \$22.00 | \$22.00 | \$2,200.00 |
| Foliar Zn | 2 | Pound | \$0.80 | \$1.60 | \$160.00 |
| Foliar 11-8-5 | 2 | Gallon | \$15.50 | \$31.00 | \$3,100.00 |
| Custom | | | | | |
| Topping and Hedging | 1 | Acre | \$120.00 | \$120.00 | \$12,000.00 |
| Foliar Application | 7 | Acre | \$42.00 | \$294.00 | \$29,400.00 |
| Miscellaneous | | | | | |
| Citrus Assessment | 1 | Acre | \$45.00 | \$45.00 | \$4,500.00 |
| Insurance, Grapefruit | 1 | Acre | \$30.00 | \$30.00 | \$3,000.00 |
| Insecticide | | | | | |
| Vendex | 8 | Pound | \$17.89 | \$143.12 | \$14,312.00 |
| Agri-Mek SC | 0.32 | Gallon | \$499.91 | \$159.97 | \$15,997.03 |
| Movento | 30 | Ounce | \$7.25 | \$217.50 | \$21,750.00 |
| Micromite | 18.8 | Ounce | \$3.88 | \$72.94 | \$7,294.40 |
| Actara | 11 | Ounce | \$2.35 | \$25.85 | \$2,585.00 |
| Sivanto | 10 | Ounce | \$2.30 | \$23.00 | \$2,300.00 |
| Esteem | 10 | Ounce | \$4.70 | \$47.00 | \$4,700.00 |
| Danitol | 16 | Ounce | \$1.58 | \$25.28 | \$2,528.00 |
| Admire Pro | 0.44 | Pint | \$27.74 | \$12.20 | \$1,220.42 |
| Herbicide | | | | | |
| Simazine 4L | 1.25 | Gallon | \$21.46 | \$26.83 | \$2,682.60 |
| Krovar I 80 DF | 3 | Pound | \$15.65 | \$46.96 | \$4,696.13 |
| Roundup/Glyphosate | 3.4 | Gallon | \$20.00 | \$68.00 | \$6,800.00 |
| Other Chemicals | | | | | |
| Surfactant - Citrus | 7.98 | Pint | \$8.00 | \$63.84 | \$6,384.00 |
| Other Labor | | | | | |
| Costum Soil Fert. Citrus | 6 | Hour | \$12.00 | \$72.00 | \$7,200.00 |
| Unallocated Labor | 1 | Hour | \$12.00 | \$12.00 | \$1,200.00 |
| Seed | | | | | |
| Young Citrus Trees | 3 | Tree | \$10.00 | \$30.00 | \$3,000.00 |
| Layout and Plant | 3 | Tree | \$5.00 | \$15.00 | \$1,500.00 |
| Removal Citrus | 3 | Tree | \$25.00 | \$75.00 | \$7,500.00 |
| Treatment Removed citrus | 3 | Tree | \$5.00 | \$15.00 | \$1,500.00 |
| Tree Wrap/Unwrap | 3 | Tree | \$2.00 | \$6.00 | \$600.00 |
| Fungicides | | | | | |
| Quadris Top | 10 | Ounce | \$1.50 | \$15.00 | \$1,500.00 |
| GEM | 3.8 | Ounce | \$4.88 | \$18.54 | \$1,854.40 |
| Headline | 24 | Ounce | \$2.66 | \$63.84 | \$6,384.00 |
| Pristine | 16 | Ounce | \$4.88 | \$78.08 | \$7,808.00 |
| Irrigation | | | | | |
| Water Cost | 4.00 | Acre/Foot | \$20.00 | \$80.00 | \$8,000.00 |
| Irrigation Labor | 14.00 | Hour | \$12.00 | \$168.00 | \$16,800.00 |
| Machinery Labor | | | | | |
| Tractors/Self-Propelled | 0.8 | Hour | \$12.00 | \$9.60 | \$960.00 |
| Other Labor | 0.4 | Hour | \$12.00 | \$4.80 | \$480.00 |
| Diesel Fuel | | | | | |
| Tractors/Self-Propelled | 3.66 | Gallon | \$2.30 | \$8.42 | \$841.80 |
| Repairs & Maintenance | | | | | |
| Tractors/Self-Propelled | 1 | Acre | \$8.43 | \$8.43 | \$842.88 |
| Implements | 1 | Acre | \$2.86 | \$2.86 | \$285.88 |
| Interest on Credit Line | | | 5.00% | \$59.37 | \$5,937.02 |
| Total Variable Costs | | | | \$2,275.59 | \$227,558.56 |
| Planned Returns Above Variable Costs: | | | | \$2,324.41 | \$232,441.44 |
| Breakeven Price to Cover Variable Costs | | | \$113.78 | Ton | |
| FIXED COSTS | Quantity | Units | \$/Unit | Total | Enterprise Total |
| Machinery Depreciation | | | | | |
| Tractors/Self-Propelled | 1 | Acre | \$8.71 | \$8.71 | \$870.98 |
| Implements | 1 | Acre | \$3.06 | \$3.06 | \$305.59 |
| Equipment Investment | | | | | |
| Tractors/Self-Propelled | \$67.85 | Dollars | 7.00% | \$4.75 | \$474.96 |
| Implements | \$13.07 | Dollars | 7.00% | \$0.92 | \$91.51 |
| Allocated Establishment Cost | 1 | Acre | \$120.66 | \$120.66 | \$12,065.54 |
| Land Cost, Orchard | 1 | Acre | \$100.00 | \$100.00 | \$10,000.00 |
| Total Fixed Costs | | | | \$238.09 | \$23,808.59 |
| Total Specified Costs | | | | \$2,513.67 | \$251,367.15 |
| Returns Above Specified Costs | | | | \$2,086.33 | \$208,632.85 |
| Breakeven Price to Cover Total Costs | | | \$125.68 | Ton | |

| Example Breakeven Prices | | | |
|--------------------------|-------------------|-------------------------|----------------------|
| Example Yield Percent | Example Yield Ton | To Cover Variable Costs | To Cover Total Costs |
| 75% | 15.00 | \$151.71 | \$167.58 |
| 90% | 18.00 | \$126.42 | \$139.65 |
| 100% | 20.00 | \$113.78 | \$125.68 |
| 110% | 22.00 | \$103.44 | \$114.26 |
| 125% | 25.00 | \$91.02 | \$100.55 |

Developed by Samuel Zapata, Assistant Professor and Extension Economist, Texas A&M AgriLife Extension, 956-968-5581.

Information presented is prepared solely as a general guide and not intended to recognize or predict the costs and returns from any one operation. Brand names are mentioned only as examples and imply no endorsement.