

**Projections for Planning Purposes Only -- Not to be Used without Updating**  
**2015 Estimated Costs and Returns per Acre**  
**Grapefruit, Year 8+, Mature Orchard, Flood Irrigated, Rio Grande Valley - 100 Acres**  
**South Extension District - 12**

| Crop Acres                                  |          | 100       |                |                   |                     | Enterprise |
|---|----------|-----------|----------------|-------------------|---------------------|------------|
| REVENUE                                     | Quantity | Units     | \$/Unit        | Total             | Total               |            |
| Grapefruit (Rio Red)                        | 23.00    | Ton       | \$120.00       | \$2,760.00        | \$276,000.00        |            |
| <b>Total Revenue</b>                        |          |           |                | <b>\$2,760.00</b> | <b>\$276,000.00</b> |            |
| VARIABLE COSTS                              | Quantity | Units     | \$/Unit        | Total             | Enterprise          |            |
| <b>Production Costs</b>                     |          |           |                |                   |                     |            |
| Fertilizer                                  |          |           |                |                   |                     |            |
| Ammonium Sulfate (21% N)                    | 7.14     | CWT       | \$18.60        | \$132.80          | \$13,280.40         |            |
| Custom                                      |          |           |                |                   |                     |            |
| Hedging or Topping                          | 0.5      | Acre      | \$66.00        | \$33.00           | \$3,300.00          |            |
| Custom Fertilize Citrus                     | 2        | Acre      | \$4.40         | \$8.80            | \$880.00            |            |
| Custom Orchard Spray                        | 4        | Acre      | \$38.50        | \$154.00          | \$15,400.00         |            |
| Miscellaneous                               |          |           |                |                   |                     |            |
| Insurance, Established Grapefruit           | 1        | Acre      | \$115.00       | \$115.00          | \$11,500.00         |            |
| Herbicide                                   |          |           |                |                   |                     |            |
| Simazine 4L                                 | 1.25     | Gallon    | \$25.36        | \$31.70           | \$3,170.00          |            |
| Krovar I 80 DF                              | 3        | Pound     | \$14.25        | \$42.75           | \$4,275.00          |            |
| Insecticide                                 |          |           |                |                   |                     |            |
| Vydate                                      | 0.0625   | Gallon    | \$113.93       | \$7.12            | \$712.06            |            |
| Vendex                                      | 6        | Pound     | \$19.23        | \$115.38          | \$11,538.00         |            |
| Lorsban 4E                                  | 8        | Pint      | \$5.63         | \$45.04           | \$4,504.00          |            |
| Citrus Oil                                  | 5        | Gallon    | \$4.30         | \$21.50           | \$2,150.00          |            |
| Agri-Mek                                    | 0.1      | Gallon    | \$129.23       | \$12.92           | \$1,292.30          |            |
| Other Chemicals                             |          |           |                |                   |                     |            |
| Surfactant - Citrus                         | 2        | Pint      | \$3.60         | \$7.20            | \$720.00            |            |
| Other Labor                                 |          |           |                |                   |                     |            |
| Unallocated Labor                           | 0.0122   | Hour      | \$9.00         | \$0.11            | \$10.98             |            |
| Irrigation                                  |          |           |                |                   |                     |            |
| Water Cost                                  | 1.20     | Acre/Foot | \$20.00        | \$24.00           | \$2,400.00          |            |
| Irrigation Labor                            | 3.00     | Hour      | \$9.00         | \$27.00           | \$2,700.00          |            |
| Machinery Labor                             |          |           |                |                   |                     |            |
| Tractors/Self-Propelled                     | 0.24     | Hour      | \$9.00         | \$2.16            | \$216.00            |            |
| Diesel Fuel                                 |          |           |                |                   |                     |            |
| Tractors/Self-Propelled                     | 1.21     | Gallon    | \$3.00         | \$3.63            | \$363.00            |            |
| Repairs & Maintenance                       |          |           |                |                   |                     |            |
| Tractors/Self-Propelled                     | 1        | Acre      | \$2.33         | \$2.33            | \$232.91            |            |
| Implements                                  | 1        | Acre      | \$0.35         | \$0.35            | \$34.77             |            |
| Interest on Credit Line                     |          |           | 9.00%          | \$42.68           | \$4,268.35          |            |
| <b>Total Variable Costs</b>                 |          |           |                | <b>\$829.48</b>   | <b>\$82,947.76</b>  |            |
| Planned Returns Above Variable Costs:       |          |           |                | \$1,930.52        | \$193,052.24        |            |
| Breakeven Price to Cover Variable Costs     |          |           | \$36.06        | Ton               |                     |            |
| FIXED COSTS                                 | Quantity | Units     | \$/Unit        | Total             | Enterprise          |            |
| <b>Machinery Depreciation</b>               |          |           |                |                   |                     |            |
| Tractors/Self-Propelled                     | 1        | Acre      | \$2.41         | \$2.41            | \$240.67            |            |
| Implements                                  | 1        | Acre      | \$0.31         | \$0.31            | \$31.29             |            |
| <b>Equipment Investment</b>                 |          |           |                |                   |                     |            |
| Tractors/Self-Propelled                     | \$27.17  | Dollars   | 9.00%          | \$2.45            | \$244.55            |            |
| Implements                                  | \$2.43   | Dollars   | 9.00%          | \$0.22            | \$21.90             |            |
| Allocated Establishment Cost                | 1        | Acre      | \$254.04       | \$254.04          | \$25,404.00         |            |
| Land Cost, Orchard                          | 1        | Acre      | \$120.00       | \$120.00          | \$12,000.00         |            |
| <b>Total Fixed Costs</b>                    |          |           |                | <b>\$379.42</b>   | <b>\$37,942.42</b>  |            |
| <b>Total Specified Costs</b>                |          |           |                | <b>\$1,208.90</b> | <b>\$120,890.18</b> |            |
| Returns Above Specified Costs               |          |           |                | \$1,551.10        | \$155,109.82        |            |
| <b>Breakeven Price to Cover Total Costs</b> |          |           | <b>\$52.56</b> | <b>Ton</b>        |                     |            |

| Example Breakeven Prices |                   |  |              |   |              |          |
|--------------------------|-------------------|--|--------------|---|--------------|----------|
| Example Yield Percent    | Example Yield Ton | Price Needed to Cover Example Variable Costs |              | Price Needed to Cover Example Total Costs |              |          |
|                          |                   | Own/Rent                                     | Share Tenant | Own/Rent                                  | Share Tenant | Landlord |
| 75%                      | 17.25             | \$48.09                                      | \$48.09      | \$70.08                                   | \$70.08      | \$0.00   |
| 90%                      | 20.70             | \$40.07                                      | \$40.07      | \$58.40                                   | \$58.40      | \$0.00   |
| 100%                     | 23.00             | \$36.06                                      | \$36.06      | \$52.56                                   | \$52.56      | \$0.00   |
| 110%                     | 25.30             | \$32.79                                      | \$32.79      | \$47.78                                   | \$47.78      | \$0.00   |
| 125%                     | 28.75             | \$28.85                                      | \$28.85      | \$42.05                                   | \$42.05      | \$0.00   |

Developed by Luis Ribera, Associate Professor and Extension Economist, Texas A&M AgriLife Extension.

**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.**