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Budgeting Costs and Returns for Indian River Citrus Production, 2004-05



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ABSTRACT

Estimated costs and returns of growing seedless grapefruit in the Indian River area of Florida are presented for the twenty-second year. The format presented may be used by individual growers to budget costs and returns, utilizing individual data on specific groves.

Key words: citrus, Indian River, budgeting, costs and returns, seedless grapefruit.

NOTE: The Indian River production area refers to the citrus producing counties on Florida's east coast including Brevard, Indian River, Martin, Palm Beach, and St. Lucie counties.

The budgeted cost information presented herein is the most current available. The budget cost items have been revised to reflect current grove practices being used by growers--e.g., chemical mowing, different spray materials and rates of fertilization, microsprinkler irrigation, more reset trees, etc. The 2004-2005 budgets reflect major cost increases in all production inputs: fuel averaged a 22% increase; fertilizer products increased 15%; chemicals averaged an 8% increase; and equipment operation costs increased 7%. Along with the increased costs, three major hurricanes (storms) during August and September 2004 resulted in wide tree damage and fruit loss. The Indian River region experienced fruit loss of 70% to 80% on red and white grapefruit, respectively. Hamlin orange losses in the Central Florida (ridge) region were 30% to 40% with Valencia orange losses between 20% and 30%. The only citrus growing region that was not significantly affected by the three storms was the Southwest Florida citrus region. As a result of the excessive fruit loss, the per box, per pound solid and per carton costs for the Indian River and Central (ridge) growing regions were substantially higher than in recent years.

The budget costs in this report represent a **custom-managed operation**. **Therefore, all equipment costs are based on the average custom rate costs and a 10 percent handling and supervision charge is added to the material cost.**

Although the estimated annual per acre grove costs listed are representative for a mature citrus grove (10+ years old), the grove care costs for a specific grove site may differ depending upon the tree age, tree density and the grove practices performed; e.g., spot herbicide for grass/brush regrowth under trees could add an additional \$16.60 per acre; Diaprepes control could add \$84.18 per acre for each foliar application; extensive tree loss due to blight or tristeza could substantially increase the tree replacement and care costs; spray applications to control citrus leafminer and nematicide applications such as Temik (\$127.50/acre) could increase the total cultural costs per acre above the average costs shown in the comparative budgets; travel and set-up costs may vary due to size of the citrus grove and distance from the grove equipment barn and could add \$28.86 per acre; etc.

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NOTE: The ADDENDA include a Listing of Grove Care Options for Indian River Citrus Production for Both Round Oranges and Grapefruit; 2005 custom rate summary report; cost of establishing a citrus grove; etc. Page 12 is a list of the tables included in the ADDENDA.

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BUDGETING COSTS AND RETURNS FOR INDIAN RIVER CITRUS PRODUCTION, 2004-05

Ronald P. Muraro and John W. Hebb

INTRODUCTION

Budget analysis provides the basis for many grower decisions. Budget analysis can be used to calculate potential profits from an operation, to determine cash requirements for an operation, and to determine break-even prices. This report presents a budget constructed from current data and serves as a format for growers to analyze costs and returns from their individual records.

The 2004-2005 budgets reflect major cost increases in all production inputs: fuel averaged a 22% increase; fertilizer products increased 15%; chemicals averaged an 8% increase; and equipment operation costs increased 7%. Along with the increased costs, three major hurricanes (storms) during August and September 2004 resulted in wide tree damage and fruit loss. The Indian River region experienced fruit loss of 70% to 80% on red and white grapefruit, respectively. Hamlin orange losses in the Central Florida (ridge) region were 30% to 40% with Valencia orange losses between 20% and 30%. The only citrus growing region that was not significantly affected by the three storms was the Southwest Florida citrus region. As a result of the excessive fruit loss, the per box, per pound solid and per carton costs for the Indian River and Central (ridge) growing regions were substantially higher than in recent years.

METHOD OF DATA COLLECTION

The data presented here were developed by surveying custom operators, input suppliers, growers, and colleagues at both the Indian River Research and Education Center in Ft. Pierce and the Citrus Research and Education Center in Lake Alfred and County Extension Citrus Agents in the Indian River production region. The survey is conducted annually in February and March.

COSTS AND INPUTS

Costs for various production inputs are those collected from citrus growers as well as the average of the data obtained from annual custom rate, chemical, and fertilizer surveys. Growers' costs are shown in the ADDENDA, Tables 1-A through 7-A. The custom rate costs are shown in Table 8-A and the various chemical and fertilizer costs are shown in Table 9-A and 10-A in the ADDENDA. **The**

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budget costs represent a custom-managed operation. Therefore, all equipment costs are based upon the average custom-rate costs and a 10 percent handling and supervision charge is added to the material cost.

Although brand names are used in many of the tables in the ADDENDA, this does not imply endorsement by the University of Florida. It is merely an attempt to depict typical production practices.

All tables have a column reserved for the individual growers to insert data from a particular grove allowing a comparison of the grower's costs with those presented.

THE GROVE SITUATION

Production practices for an Indian River grapefruit grove are shown in Table 1 with times during the year when they would likely be performed. There are two benefits to developing such a table for an individual grove. First, it shows what work is needed and when, so that operations can be planned well in advance. Second, it can be helpful if an annual cash flow analysis is developed to plan financing. The individual grower may benefit from developing a plan for a particular grove.

Specific production practices vary from grove to grove making it difficult to define a "typical" grove. Many combinations of practices and various tree variety combinations produce acceptable yields and returns. Although the example represents a white seedless grapefruit grove, the cost and return data are designed to be applicable to most grove situations. A grower, realtor, or land appraiser can substitute individual grove costs and expected returns into the budget format and develop a budget for a particular grove. A "your cost" column is appropriately provided for this purpose in subsequent tables.

In the following budget, above average management and cultural practices are assumed. Beyond this general assumption, the following specifics are assumed.

1. A mature (10+ years old), low volume-irrigated grove;
2. Variety is white seedless on sour orange rootstock;
3. Tree loss is 5.0 percent annually;
4. Trees are pulled and replaced when production falls below 50 percent of expected yield;
5. Production is for fresh market;
6. Tree density is 95 trees per acre; and
7. Custom-caretaker is providing grove management.

As a result of tree losses and replacement, the tree ages will vary. The budget reflects the following age distribution and yield for Indian River white seedless grapefruit:

Table 1.--Schedule of production practices and budget items for an Indian River Florida grapefruit grove, 2004-05^a

| | Month | | | | | | | | | | | |
|---|-------------|---------|---------------|-----|------------|--------------|-----|--------------|-----|---------|-----|----------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| <u>Total revenue:</u> | 20% deposit | | Final payment | | | | | | | | | |
| Less: <u>Pick & haul cost</u> | | | X | | | | | | | | | |
| <u>DOC advertisement tax</u> | | | X | | | | | | | | | |
| <u>Grove expenses:</u> | | | | | | | | | | | | |
| <u>Mow</u> | | X | | | X | Chemical Mow | | Chemical Mow | | | X | |
| <u>Labor, general grove work, pull vines</u> | X | | | | | | | | X | | | |
| <u>Herbicide (sprayed strip estimated as 1/2 grove acre equivalent)</u> | | | X | | | X | | | | X | | |
| Spray: <u>Post bloom/nutritional</u> | | | | X | X | | | | | | | |
| <u>Summer oil/greasy spot</u> | | | | | | | X | | | | | |
| <u>Fall miticide</u> | | | | | | | | | X | | | |
| <u>Supplemental miticide</u> | | | | | | | | | | | X | |
| <u>Fertilizer</u> | | 42# N/A | | | | 42# N/A | | | | 42# N/A | | Dolomite |
| <u>Hedging and topping</u> | | | | | Hedge | | | | | | | |
| <u>Brush removal/chop brush</u> | | | | | Chop brush | | | | | | | |
| <u>Tree removal</u> | | X | | | | | | | | | | |
| <u>Young tree care</u> | | | X | X | | X | X | | X | | | |
| <u>Microjet irrigation (times/week)</u> | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 |
| <u>Miscellaneous (clean ditches)</u> | | X | | | | | | | | | | |
| <u>Grove taxes including water management</u> | | | | | | | | | | | X | |
| <u>Interest expense</u> | | | | | | | X | | | | | |
| <u>Annual principal payment on mortgage</u> | | | | | | | X | | | | | |

^aThis is a suggested schedule of practices. Actual practices would not necessarily be done on the exact schedule shown here.

| <u>% of grove</u> | <u>Tree age and condition</u> | <u>Yield boxes/tree</u> |
|-------------------|---------------------------------|-------------------------|
| 5.0% | pulled and reset | 0.0 |
| 5.0% | 1 year old | 0.0 |
| 5.0% | 2 years old | 0.0 |
| 5.0% | 3 years old | 1.0 |
| 5.0% | 4 years old | 1.7 |
| 55.0% | 5-15 years old | 5.7 |
| 5.0% | producing 50% of expected yield | 3.5 |
| 15.0% | over 15 years | 7.0 |

Calculation of normal production per acre is shown in Table 2. Note that the proportion-of-trees-by-age column only adds to 85 percent since 15 percent of the trees are non-bearing. The impact of the three hurricanes in 2004 is reflected in a 78.5% reduction in normal yields.

Table 2.--Calculation of normal production per acre, 2004-05

| Age of Tree | Trees | | | Boxes /tree | Total boxes |
|--|--------------------|---------------------------------|-------------|-------------|----------------|
| | Total no. all ages | Proportion ea. age ^a | No. ea. age | | |
| 3 years | 95 | x 0.05 | = 4.75 | x 1.0 | = 4.8 |
| 4 years | 95 | x 0.05 | = 4.75 | x 1.7 | = 8.1 |
| 5-15 years | 95 | x 0.55 | = 52.30 | x 5.7 | = 298.1 |
| Prod. 50% of exp. yield | 95 | x 0.05 | = 4.75 | x 3.5 | = 16.6 |
| Over 15 years | 95 | x 0.15 | = 14.30 | x 7.0 | = <u>100.1</u> |
| | | | | Total boxes | = <u>427.7</u> |
| Yields adjusted to 21.5% of normal yields due to three hurricanes in 2004. | | | | | <u>92.0</u> |

^aProportion adds up to 0.85 (85 percent) as 15 percent of the trees were non-bearing (pulled and reset, 1 and 2 year old trees).

BUDGET COSTS AND RETURNS

The estimated budget costs and returns for the Indian River grove situation are shown in Table 3. The budgeted costs represent one possible citrus production program and were selected from the costs shown in the ADDENDA tables. The gross revenue estimates are based on the projected yields in Table 3 and estimated preliminary on-tree prices for the 2004-05 season. Grove establishment and reset costs, alternative cost scenarios, harvesting and packing charges can be found in Tables 11-A through 15-A in the ADDENDA. Also, historical on-tree prices for selected Florida citrus varieties are shown in Table 16-A of the ADDENDA.

As shown in Table 3, the total revenue for fresh-market white seedless grapefruit is estimated to be \$1,099.40 per acre. Total specified costs are \$1,195.78 and are comprised of grove care costs of \$1,147.78, plus management cost of \$48.00. Return to land, trees, and ownership, which represents net return above variable costs, was estimated to be a \$96.38 per acre loss. At 325 and 525 boxes per acre, respectively, the break-even price required to cover grove care costs for seedless white grapefruit range from \$3.54 to \$2.19 per box on-tree and \$1.54 to \$1.25 per pounds solids delivered-in for eliminations.

Ad valorem taxes, and overhead and administrative costs (such as water drainage district taxes, crop insurance, and other grower assessments) can add up to 12 percent of the total grove care costs. These costs vary from grove to grove depending on age, location, variety of fruit, etc. and should be considered in arriving at a net return to land, trees, and ownership (total return minus total costs). Harvest costs (pick, roadside, and hauling costs) also add to the total fruit cost delivered to either a processing plant or fresh fruit packinghouse. Also, average annual debt payment (principal and interest) may be as high as \$460 per acre (\$3,900 average debt per acre @ 10 percent interest amortized over 20 years) which would reduce total available cash for grove expansion or other investment.

Estimated "delivered-in" costs are shown for fresh packed white grapefruit in Table 4. "Delivered-in" costs include grove care costs (Table 3) plus harvesting, regulatory, and grower assessment costs. The "delivered-in" cost is presented as a cost per acre, per box, per carton, and per pound solids. Three possible budget cost scenarios are presented (Refer to Table 13-A): 1) Low Cost Processed Cultural Program; 2) Processed and Reduced Cost Fresh Cultural Program; and 3) Typical/Historical Fresh Fruit Cultural Program. The first scenario represents costs of a cultural program directed toward reducing the expenditures for fruit grown primarily for the processed market. Scenario 2 represents a program using reduced inputs but with production directed at the fresh market. And the third scenario represents typical costs for grove practices which have been performed for citrus grown for the fresh fruit market. Modified herbicide and/or spray and fertilizer programs account for the reduced costs. NOTE: Before modifying a grove management program to reduce costs, an evaluation of the market program (processed or fresh), yield, and specific cultural problems (nutrition, disease, etc.) for the specific grove site should be made. Also, in Table 5, the total estimated F.O.B. cost for fresh packed white grapefruit is shown. The F.O.B. costs are presented for "fresh fruit packout percentage rates" ranging from 50 percent to 100 percent.

HISTORICAL COST TRENDS

Annual budgets of costs and returns for mature, fresh, white seedless grapefruit in the Indian River area have been developed and published the past four years. Estimated cost and return histories for 2000-01 through 2003-04 along with 2004-05, and a five-year average are presented in Table 6. The affects of over planting following the 1980s freezes on Florida's annual grapefruit supply has resulted in a fluctuating on-tree price per box. Despite general reduction in operating costs, annual net return to land and trees has decreased over the five-year period. To allow comparisons in current values, these same costs and returns, adjusted to 2005 dollars, are presented in Table 7.

Table 3.--Estimated annual per acre costs and returns for a mature, white seedless grapefruit grove producing for the fresh market, Indian River area, 2004-05^a

| Item | Description | Amount | | Your cost | | |
|---|--|--|-----------------|------------|------------|------------|
| | | Dollars | | | | |
| I. Revenue | 92 boxes @ \$11.95 ^b | 1,099.40 | | | | |
| II. Expenses ^c | | | | | | |
| Weed control | | | | | | |
| Mow middles | 3 times per year | 29.91 | | | | |
| Chemical mow (Table 2-A, Option #9) | 2 times per year | 10.16 | | | | |
| General grove work/sprouting, etc. | (2 labor hours per acre) | 27.12 | | | | |
| Herbicide (Table 2-A, Options #1, #6 & #7) | | <u>132.88</u> | 200.07 | | | |
| Spray program (Table 1-A, Options #1, #3, #4 @ 2, #8 & #12) | | | 405.43 | | | |
| Fertilizer (Table 3-A, Option #2) | | | 140.18 | | | |
| Dolomite (Table 7-A, Option #1) | | | 14.65 | | | |
| Pruning (maintenance) | | | | | | |
| Topping | (\$275.00/hr. ÷ 10 A/hr.) ÷ 2 yrs. | 13.75 | | | | |
| Hedging | (\$257.50/hr. ÷ 10 A/hr.) ÷ 1.5 yrs. | 17.17 | | | | |
| Removing/chop brush | (\$8.99/A ÷ 1.5 yrs.) | 6.00 | | | | |
| Raise skirts of trees | (\$14.00/A ÷ 2 yrs.) | <u>7.00</u> | 43.92 | | | |
| Tree replacement and care | (1 through 3 years) | | | | | |
| Remove trees (Table 12-A) | 5 trees per acre | 25.40 | | | | |
| Prepare sites, repair mound, and plant resets | Including 5 trees per acre | 59.85 | | | | |
| Supplemental fertilizer, sprout, etc. (Trees 1-3 years) | Including application | <u>49.65</u> | 134.90 | | | |
| Microsprinkler irrigation (Table 7-A, Option #4) | | | 166.17 | | | |
| Drainage ditch annual cost (Table 7-A, Option #5) | | | <u>42.46</u> | | | |
| Total grove care expenses | | | 1,147.78 | | | |
| III. Management | \$4.00 per acre per month ^d | | <u>48.00</u> | | | |
| IV. Total specified costs ^e | | | <u>1,195.78</u> | | | |
| V. Return (loss) to land, trees, and ownership | | | <u>(96.38)</u> | | | |
| VI. Break-even price for total grove care expenses | | | | | | |
| | Boxes per acre | Boxes per acre | | | | |
| | <u>325</u> <u>375</u> <u>425</u> <u>475</u> <u>525</u> | <u>325</u> | <u>375</u> | <u>425</u> | <u>475</u> | <u>525</u> |
| | \$ On-tree price per box | \$ Delivered-in price per pound solids for eliminations ^f | | | | |
| | 3.54 3.06 2.70 2.42 2.19 | 1.54 | 1.44 | 1.36 | 1.30 | 1.25 |

^aAlthough the estimated annual per acre grove costs shown in Table 3 are representative for a mature Indian River white seedless grapefruit grove, the grove care costs for a specific grove site may differ depending upon the grove practices performed; e.g., a Temik application would add \$127.50 per acre; extensive tree loss due to blight or tristeza may double the tree replacement and care costs; travel and set-up costs may vary due to size of citrus grove and distance from grove equipment barn; etc.; truck watering of resets could add another \$7.95 per acre (average 5 waterings).

^bOn-tree price per box is preliminary; assumes average of all methods of sale (fresh and processed).

^cAssumes material custom applied; therefore, a 10 percent handling and supervision charge is added to material cost.

^dOther methods to estimate a management cost--e.g., 5% of gross sales or 10% of total grove care costs--are used in the industry. Other methods will give a different return to land and trees than reported here.

^eOther cost items which are not included in the budget are ad valorem taxes and interest on grove investment. In addition to these cost items, overhead and administrative costs, such as water drainage/district taxes, crop insurance, and other grower assessments, can add up to 12 percent to the total grove care costs. These costs vary from grove to grove depending on age, location, and time of purchase or grove establishment.

^fAssumes 4.7 pounds solids per box, \$2.63 pick and haul cost per box (includes spot picking and fruit drenching plus D.O.C. \$0.25 advertising tax and canker decontamination costs), \$0.55 per box handling through packinghouse, and \$0.45 per box delivery to processing plant.

Table 4. Estimated total delivered-in cost for Indian River White grapefruit grown for the fresh/processed market under three cultural cost programs, 2004-05

| Represents a mature (10+ years old) Indian River White Grapefruit Grove | Processed White Grapefruit Low Cost Cultural Program | | | Fresh Packed White Grapefruit Reduced Cost Cultural Program | | | Fresh Packed White Grapefruit Typical/Historical Cultural Program | | |
|--|--|-----------------|-----------------|---|-----------------|-----------------|--|-----------------|------------------|
| | \$/Acre | \$/Box | \$/P.S. | \$/Acre | \$/Box | \$/Carton | \$/Acre | \$/Box | \$/Carton |
| Total Production/Cultural Costs | \$ 850.02 | \$9.239 | \$1.9658 | \$1,124.82 | \$2.528 | \$1.2638 | \$1,147.78 | \$12.476 | \$6.2379 |
| Interest on Operating (Cultural) Costs | 23.38 | 0.254 | 0.0541 | 56.24 | 0.126 | 0.0632 | 57.39 | 0.624 | 0.3119 |
| Management Costs | 48.00 | 0.522 | 0.1110 | 48.00 | 0.522 | 0.2609 | 48.00 | 0.522 | 0.2609 |
| Taxes/Regulatory Costs: | | | | | | | | | |
| Property Tax/Water Management Tax | 47.04 | 0.511 | 0.1088 | 44.80 | 0.487 | 0.2435 | 44.80 | 0.487 | 0.2435 |
| Water Drainage District Tax | 63.00 | 0.685 | 0.1457 | 60.00 | 0.652 | 0.3261 | 60.00 | 0.652 | 0.3261 |
| Fly Protocol Cost | – | – | – | 54.73 | 0.595 | 0.2974 | 52.13 | 0.567 | 0.2833 |
| Canker Decontamination Costs | <u>6.18</u> | <u>0.067</u> | <u>0.0143</u> | <u>6.18</u> | <u>0.067</u> | <u>0.0336</u> | <u>6.18</u> | <u>0.067</u> | <u>0.0336</u> |
| Total Taxes/Regulatory Costs | <u>116.22</u> | <u>1.263</u> | <u>0.2688</u> | <u>165.71</u> | <u>1.801</u> | <u>0.9006</u> | <u>163.11</u> | <u>1.773</u> | <u>0.8865</u> |
| Total Direct Grower Costs | \$1,037.62 | \$11.278 | \$2.3997 | \$1,394.77 | \$4.977 | \$2.4885 | \$1,416.28 | \$15.394 | \$7.6972 |
| Interest on Average Capital Investment Costs | <u>321.22</u> | <u>3.491</u> | <u>1.7457</u> | <u>321.22</u> | <u>3.491</u> | <u>1.7457</u> | <u>321.22</u> | <u>3.491</u> | <u>1.7457</u> |
| Total Grower Costs | \$1,358.83 | \$14.770 | \$4.1454 | \$1,715.99 | \$8.468 | \$4.2342 | \$1,737.49 | \$18.886 | \$9.4429 |
| Harvesting and Assessment Costs: | | | | | | | | | |
| Pick/Spot Pick, Roadside & Haul and Canker Decontamination | 191.54 | 2.082 | 0.4430 | 218.41 | 2.374 | 1.1870 | 218.41 | 2.374 | 1.1870 |
| Fruit Drenching (Fresh) | – | – | – | 17.02 | 0.185 | 0.0925 | 17.02 | 0.185 | 0.0925 |
| DOC Assessment | <u>22.08</u> | <u>0.240</u> | <u>0.0511</u> | <u>23.00</u> | <u>0.250</u> | <u>0.1250</u> | <u>23.00</u> | <u>0.250</u> | <u>0.1250</u> |
| Total Harvesting and Assessment Costs | 213.62 | 2.322 | 0.4940 | 258.43 | 2.809 | 1.4045 | 258.43 | 2.809 | 1.4045 |
| Total Delivered-In Cost | <u>\$1,572.45</u> | <u>\$17.092</u> | <u>\$4.6394</u> | <u>\$1,974.41</u> | <u>\$11.277</u> | <u>\$5.6387</u> | <u>\$1,995.92</u> | <u>\$21.695</u> | <u>\$10.8474</u> |
| Two cartons per box P.S. = Pound Solids Yield: 92 boxes/acre @ 4.7 P.S. per box 95 trees per acre | Refer to cultural program shown on Table 13-A. Two summer oil sprays with oil, copper, and Agri-mek | | | Refer to cultural program shown in Table 13-A. Assumes 100% packout | | | Refer to cultural program shown in Table 3. Assumes 100% packout | | |

Table 5.--Estimated F.O.B. cost for fresh market Indian River White grapefruit, 2004-05

| | Percent Packout 50.00% | | | Percent Packout 60.00% | | | Percent Packout 70.00% | | |
|---|------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|-------------------------|-----------------|-----------------|
| | Box Yield Per Acre 445 | | | Box Yield Per Acre 445 | | | Box Yield Per Acre 445 | | |
| | Per Acre | Per Packed Box | Per Carton | Per Acre | Per Packed Box | Per Carton | Per Acre | Per Packed Box | Per Carton |
| Total Production/ Cultural Costs | \$1,147.78 | \$5.159 | \$2.5793 | \$1,147.78 | \$4.299 | \$2.1494 | \$1,147.78 | \$3.685 | \$1.8423 |
| Interest on Operating (Cultural) Costs | 57.39 | 0.258 | 0.1290 | 57.39 | 0.215 | 0.1075 | 57.39 | 0.184 | 0.0921 |
| Management | 48.00 | 0.216 | 0.1079 | 48.00 | 0.180 | 0.0899 | 48.00 | 0.154 | 0.0770 |
| Taxes/Regulatory | 163.11 | 0.733 | 0.3665 | 163.11 | 0.611 | 0.3054 | 163.11 | 0.524 | 0.2618 |
| Interest on Average Capital Investment | 321.22 | 1.444 | 0.7218 | 321.22 | 1.203 | 0.6015 | 321.22 | 1.031 | 0.5156 |
| Harvesting (Pick/Spot Pick, Haul, DOC Tax, Etc.) | <u>1,250.01</u> | <u>5.618</u> | <u>2.8090</u> | <u>1,250.01</u> | <u>4.682</u> | <u>2.3408</u> | <u>1,250.01</u> | <u>4.013</u> | <u>2.0064</u> |
| Total Delivered-In Cost | \$2,987.50 | \$13.427 | \$6.7135 | \$2,987.50 | \$11.189 | \$5.5946 | \$2,987.50 | \$9.591 | \$4.7953 |
| Packing & Selling (Export) | 1,642.05 | 7.380 | 3.6900 | 1,970.46 | 7.380 | 3.6900 | 2,298.87 | 7.380 | 3.6900 |
| Net Fresh Eliminations Costs ^a | <u>-1,743.51</u> | <u>-7.836</u> | <u>-3.9180</u> | <u>-1,394.81</u> | <u>-5.224</u> | <u>-2.6120</u> | <u>-1,046.11</u> | <u>-3.358</u> | <u>-1.6791</u> |
| Total F.O.B. Costs | <u>\$2,886.04</u> | <u>\$12.971</u> | <u>\$6.4855</u> | <u>\$3,563.15</u> | <u>\$13.345</u> | <u>\$6.6726</u> | <u>\$4,240.26</u> | <u>\$13.612</u> | <u>\$6.8062</u> |
| | Percent Packout 80.00% | | | Percent Packout 90.00% | | | Percent Packout 100.00% | | |
| | Box Yield Per Acre 445 | | | Box Yield Per Acre 445 | | | Box Yield Per Acre 445 | | |
| | Per Acre | Per Packed Box | Per Carton | Per Acre | Per Packed Box | Per Carton | Per Acre | Per Packed Box | Per Carton |
| Total Production/ Cultural Costs | \$1,147.78 | \$3.224 | \$1.6121 | \$1,147.78 | \$2.866 | \$1.4329 | \$1,147.78 | \$2.579 | \$1.2896 |
| Interest on Operating (Cultural) Costs | 57.39 | 0.161 | 0.0806 | 57.39 | 0.143 | 0.0716 | 57.39 | 0.129 | 0.0645 |
| Management | 48.00 | 0.135 | 0.0674 | 48.00 | 0.120 | 0.0599 | 48.00 | 0.108 | 0.0539 |
| Taxes/Regulatory | 163.11 | 0.458 | 0.2291 | 163.11 | 0.407 | 0.2036 | 163.11 | 0.367 | 0.1833 |
| Interest on Average Capital Investment | 321.22 | 0.902 | 0.4511 | 321.22 | 0.802 | 0.4010 | 321.22 | 0.722 | 0.3609 |
| Harvesting (Pick/Spot Pick, Haul, DOC Tax, Etc.) | <u>1,250.01</u> | <u>3.511</u> | <u>1.7556</u> | <u>1,250.01</u> | <u>3.121</u> | <u>1.5606</u> | <u>1,250.01</u> | <u>2.809</u> | <u>1.4045</u> |
| Total Delivered-In Cost | \$2,987.50 | \$8.392 | \$4.1959 | \$2,987.50 | \$7.459 | \$3.7297 | \$2,987.50 | \$6.713 | \$3.3567 |
| Packing & Selling (Export) | 2,627.28 | 7.380 | 3.6900 | 2,955.69 | 7.380 | 3.6900 | 3,284.10 | 7.380 | 3.6900 |
| Net Fresh Eliminations Costs ^a | <u>-697.40</u> | <u>-1.959</u> | <u>-0.9795</u> | <u>-348.70</u> | <u>-0.871</u> | <u>-0.4353</u> | <u>0.00</u> | <u>0.000</u> | <u>0.0000</u> |
| Total F.O.B. Costs | <u>\$4,917.38</u> | <u>\$13.813</u> | <u>\$6.9064</u> | <u>\$5,594.49</u> | <u>\$13.969</u> | <u>\$6.9844</u> | <u>\$6,271.60</u> | <u>\$14.093</u> | <u>\$7.0467</u> |

^a "Net Eliminations Cost" equals the average yield of 4.70 pound solids per box times \$1.88 per pound solids less packinghouse elimination charge and cannery hauling charge of \$1.00 per box.

Table 6.--Estimated annual per acre costs and returns for a mature, white seedless grapefruit grove producing citrus for fresh fruit market in the Indian River area, 2000-01–2004-05

| Year | On-tree price/box ^a | Yield | Gross revenue | Total grove care expenses | Total specified costs ^e | Net return to land, trees, and ownership |
|---------|--------------------------------|------------------|---------------------|---------------------------|------------------------------------|--|
| | | | ----- Dollars ----- | | | |
| 2000-01 | \$2.15 | 425 ^c | 913.75 | 974.46 | 1,022.46 | (108.71) |
| 2001-02 | \$1.95 | 417 ^d | 813.15 | 1,008.77 | 1,056.77 | (243.62) |
| 2002-03 | \$2.08 | 417 ^d | 867.36 | 1,024.54 | 1,072.54 | (205.18) |
| 2003-04 | \$1.88 | 445 | 836.60 | 1,041.13 | 1,089.13 | (252.53) |
| 2004-05 | \$11.95 ^b | 92 ^c | 1,099.40 | 1,147.78 | 1,195.78 | (96.38) |

^aOn-tree prices for all sales methods as reported by the Florida Agricultural Statistics Service.

^bPreliminary estimate by FASS for 2004-05 season.

^cThe severe drought affected yields for the 2001-02 season and three hurricanes in 2004 reduced yields by 78.5%.

^dIncreased tree loss due to citrus tristeza virus reduced yields.

^eA management cost of \$4.00 per acre per month is included. Fixed costs such as taxes, debt service, and crop insurance are not included.

Table 7.--Estimated annual per acre costs and returns (adjusted to 2005 dollars) for a mature, white seedless grapefruit grove producing citrus for fresh fruit market in the Indian River area, 2000-01–2004-05

| Year | Inflation factor index ^a | Adjusted on-tree price/box | Yield | Gross revenue | Total specified costs ^b | Net return to land, trees, and ownership |
|---------|-------------------------------------|----------------------------|-------|---------------------|------------------------------------|--|
| | | | | ----- Dollars ----- | | |
| 2000-01 | 117.9 | \$2.54 | 425 | 1,079.50 | 1,205.48 | (125.98) |
| 2001-02 | 120.7 | \$2.36 | 417 | 984.12 | 1,275.53 | (291.41) |
| 2002-03 | 114.6 | \$2.39 | 417 | 996.63 | 1,229.13 | (232.50) |
| 2003-04 | 107.9 | \$2.03 | 445 | 903.35 | 1,175.18 | (271.83) |
| 2004-05 | 100.0 | \$11.95 | 92 | 1,099.40 | 1,195.78 | (96.38) |

^aProducer price index for each year adjusted to 2005 prices (2005 = 100), with 2005 consumer price index estimated to be 158.2. Producer price index for other years are: 2001 =134.2; 2002 = 131.1; 2003 = 138.1; and 2004 = 146.7.

^bA management cost of \$4.00 per acre per month is included. Fixed costs such as taxes, debt service, and crop insurance are not included. (Refer to Table 6.)

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ADDENDA: Listing of Grove Care Options for Indian River Citrus Production for Both Round Oranges and Grapefruit^a

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Abbreviations for important chemicals are:
 Cu = Copper Mg = Magnesium N = Nitrogen
 Fe = Iron Mn = Manganese Zn = Zinc

^aThe costs in the ADDENDA represent a custom managed operation. Therefore, all equipment costs are based upon the average custom rate costs and a 10 percent handling and supervision charge is added to the material cost.

Table 1-A.--Spray options

POST BLOOM SPRAY

| Spray Option #1 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|-----------------|---|-------------------------------|------------------|---------------------------------|
| | Micromite | 1.25 lbs | \$ 42.65 | _____ |
| | Oil 97+% | 5 gals | 12.30 | _____ |
| | Cu (50% metallic) | 7 lbs | 10.92 | _____ |
| | Zn | 5 lbs | 4.60 | _____ |
| | Mn | 10 lbs | 3.60 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>32.92</u> | _____ |
| | Total per Application | | <u>\$106.99</u> | ===== |

| Spray Option #2 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|-----------------|--|-------------------------------|------------------|---------------------------------|
| | Agri-Mek | 10 ozs | \$48.60 | _____ |
| | Cu (50% metallic) | 10 lbs | 15.60 | _____ |
| | Oil 97+% | 3 gals | 7.38 | _____ |
| | Ground Application (Curtec sprayer) | 25 GPA | <u>22.00</u> | _____ |
| | Total per Application | | <u>\$93.58</u> | ===== |

| Spray Option #3 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|-----------------|---|-------------------------------|------------------|---------------------------------|
| | Cu (50% metallic) | 7 lbs | \$10.92 | _____ |
| | Oil 97+% | 5 gals | 12.30 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>32.92</u> | _____ |
| | Total per Application | | <u>\$56.14</u> | ===== |

| Spray Option #4 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|-----------------|---|-------------------------------|------------------|---------------------------------|
| | Cu (50% metallic) | 7 lbs | \$10.92 | _____ |
| | Ground Application (PTO driven airblast) | 125 gals | <u>28.03</u> | _____ |
| | Total per Application | | <u>\$38.95</u> | ===== |

Table 1-A.--Spray options (cont'd.)

SUMMER SPRAY

| Spray Option #5 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|-----------------|---|-------------------------------|------------------|---------------------------------|
| | Oil 97+% | 5 gals | \$12.30 | _____ |
| | Cu (50% metallic) | 7 lbs | 10.92 | _____ |
| | Micromite | 1.25 lbs | 42.65 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>39.92</u> | _____ |
| | Total per Application | | <u>\$98.59</u> | ===== |
| ----- | | | | |
| Spray Option #6 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
| | Cu (50% metallic) | 7 lbs | \$ 10.92 | _____ |
| | Oil 97+% | 5 gals | 12.30 | _____ |
| | Agri-Mek | 10 ozs | 48.60 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>32.92</u> | _____ |
| | Total per Application | | <u>\$104.74</u> | ===== |
| ----- | | | | |
| Spray Option #7 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
| | Cu (50% metallic) | 7 lbs | \$10.92 | _____ |
| | Oil 97+% | 10 gals | 24.60 | _____ |
| | Agri-Mek | 5 ozs | 24.30 | _____ |
| | Ground Application (PTO driven airblast) | 500 gals | <u>38.00</u> | _____ |
| | Total per Application | | <u>\$97.82</u> | ===== |
| ----- | | | | |
| Spray Option #8 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
| | Enable | 8 oz | \$ 15.80 | _____ |
| | Oil 97+% | 5 gals | 12.30 | _____ |
| | Micromite | 1.25 lbs | 42.65 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>32.92</u> | _____ |
| | Total per Application | | <u>\$103.67</u> | ===== |
| ----- | | | | |
| Spray Option #9 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
| | Cu (50% metallic) | 7 lbs | \$10.92 | _____ |
| | Oil 97+% | 5 gals | 12.30 | _____ |
| | Zn | 5 lbs | 4.60 | _____ |
| | Mn | 10 lbs | 3.60 | _____ |
| | B | 0.25 lbs | 1.34 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>32.92</u> | _____ |
| | Total per Application | | <u>\$65.68</u> | ===== |

Table 1-A.--Spray options (cont'd.)

SUMMER SPRAY (cont'd.)

| Spray Option #10 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|------------------|--|-------------------------------|------------------|---------------------------------|
| (Scale insects) | Lorsban 4EC | 5 pts | \$23.50 | _____ |
| | Ground Application (engine driven airblast) | 500 gals | <u>38.00</u> | _____ |
| | Total per Application | | <u>\$61.50</u> | ===== |

FALL SPRAY

| Spray Option #11 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|------------------|---|-------------------------------|------------------|---------------------------------|
| | Vendex 50WP | 2 lbs | \$32.70 | _____ |
| | Microthiol (sulfur) | 15 lbs | 11.55 | _____ |
| | Ground Application (PTO driven airblast) | 250 gals | <u>32.92</u> | _____ |
| | Total per Application | | <u>\$77.17</u> | ===== |

| Spray Option #12 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|------------------|---|-------------------------------|------------------|---------------------------------|
| | Vendex WP | 2 lbs | \$32.70 | _____ |
| | Ground Application (PTO driven airblast) | 125 GPA | <u>28.03</u> | _____ |
| | Total per Application | | <u>\$60.73</u> | ===== |

| Spray Option #13 | <u>Materials/Ingredients</u> | <u>Amount</u> <u>/Acre</u> | <u>Cost/Acre</u> | <u>Your</u> <u>Cost/Acre</u> |
|------------------|------------------------------|-------------------------------|------------------|---------------------------------|
| | Microthiol (sulfur) | 15 lbs | \$11.55 | _____ |
| | Aerial Application | 15 GPA | <u>8.82</u> | _____ |
| | Total per Application | | <u>\$20.37</u> | ===== |

Table 2-A.--Herbicide options

| Herbicide Option #1 | <u>Materials</u> | <u>Amount/</u> <u>Treated Acre</u> | <u>Cost/</u> <u>Grove Acre^a</u> | <u>Your Cost/</u> <u>Grove Acre</u> |
|---------------------|--------------------------------|---------------------------------------|---|--|
| (Strip/band) | Solicam 80DF | 3 lbs | \$23.51 | _____ |
| | Karmex WP | 4 lbs | 8.52 | _____ |
| | Roundup Ultra Max | 2 qts | 8.02 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$52.80</u> | ===== |

Table 2-A.—Herbicide options (cont'd.)

| Herbicide Option #2 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
|---------------------|--------------------------------|---------------------------------|---|----------------------------------|
| (Strip/band) | Surflan A80 DF | 2 qts | \$22.48 | _____ |
| | Simazine 4L | 4 qts | 7.56 | _____ |
| | Roundup Ultra Max | 2 qts | 8.02 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$50.81</u> | ===== |
| ----- | | | | |
| Herbicide Option #3 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Strip/band) | Karmex WP | 4 lbs | \$ 8.52 | _____ |
| | Roundup Ultra Max | 2 qts | 8.02 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$29.29</u> | ===== |
| ----- | | | | |
| Herbicide Option #4 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Strip/band) | Solicam 80DF | 4 lbs | \$23.51 | _____ |
| | Simazine 4L | 4 qts | 7.56 | _____ |
| | Roundup Ultra Max | 2 qts | 8.02 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$51.84</u> | ===== |
| ----- | | | | |
| Herbicide Option #5 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Strip/band) | Roundup Ultra Max | 2 qts | \$ 8.02 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$20.77</u> | ===== |
| ----- | | | | |
| Herbicide Option #6 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Strip/band) | Krovar I | 5 lbs | \$31.30 | _____ |
| | Roundup Ultra Max | 2 qts | 8.02 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$52.07</u> | ===== |

^aWith respect to herbicide materials, Amount Per Grove Acre does not equal Amount Per Treated Acre shown on the label. Only a strip or band is being treated. In this report, it is assumed that only one-half of a grove surface is being treated.

Table 2-A.—Herbicide options (cont'd.)

| Herbicide Option #7 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
|---|--------------------------------|---------------------------------|---|----------------------------------|
| (Strip/band) | Roundup Ultra Max | 2 qts | \$ 8.02 | _____ |
| | Princep (Caliber 90) | 4 lbs | 7.24 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$28.01</u> | ===== |
| ----- | | | | |
| Herbicide Option #8 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Strip/band) | Direx 4L | 3 qts | \$ 6.84 | _____ |
| | Solicam | 3 lbs | 23.51 | _____ |
| | Ground Application (1 time) | | <u>12.75</u> | _____ |
| | Total for 1 Application | | <u>\$43.10</u> | ===== |
| ----- | | | | |
| Herbicide Option #9 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Chemical mow) | Roundup Ultra Max | 1 pt | \$ 2.01 | _____ |
| | Ground Application (1 time) | | <u>3.07</u> | _____ |
| | Total for 1 Application | | <u>\$ 5.08</u> | ===== |
| ----- | | | | |
| Herbicide Option #10 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Chemical mow) | Roundup Ultra Max | 1.5 pts | \$ 3.02 | _____ |
| | Ground Application (1 time) | | <u>3.07</u> | _____ |
| | Total for 1 Application | | <u>\$ 6.09</u> | ===== |
| ----- | | | | |
| Herbicide Option #11 | <u>Materials</u> | <u>Amount/ Treated Acre</u> | <u>Cost/ Grove Acre^a</u> | <u>Your Cost/ Grove Acre</u> |
| (Spot treatment for grass/brush regrowth under trees) | Roundup Ultra Max | 2 qts | \$ 8.02 | _____ |
| | Ground Application (1 time) | | <u>4.56</u> | _____ |
| | Total for 1 Application | | <u>\$12.58</u> | ===== |

Table 3-A.--Dry fertilizer options

| Option #1 | <u>Analysis/Material Applied</u> | <u>Amount /Acre</u> | <u>Cost/Acre</u> | <u>Your Cost/Acre</u> |
|------------------|----------------------------------|---------------------|------------------|-----------------------|
| (100 lbs N/Acre) | 12-2-12-2.4 MgO | 835 lbs | \$ 93.52 | _____ |
| | Application | 3 times | <u>23.70</u> | _____ |
| | Total for 3 Applications | | <u>\$117.22</u> | ===== |
| ----- | | | | |
| Option #2 | <u>Analysis/Material Applied</u> | <u>Amount /Acre</u> | <u>Cost/Acre</u> | <u>Your Cost/Acre</u> |
| (125 lbs N/Acre) | 12-2-12-2.4 MgO | 1040 lbs | \$116.48 | _____ |
| | Application | 3 times | <u>23.70</u> | _____ |
| | Total for 3 Applications | | <u>\$140.18</u> | ===== |
| ----- | | | | |
| Option #3 | <u>Analysis/Material Applied</u> | <u>Amount /Acre</u> | <u>Cost/Acre</u> | <u>Your Cost/Acre</u> |
| (162 lbs N/Acre) | 12-2-12-2.4 MgO | 1350 lbs | \$151.20 | _____ |
| | Application | 3 times | <u>23.70</u> | _____ |
| | Total for 3 Applications | | <u>\$174.90</u> | ===== |
| ----- | | | | |
| Option #4 | <u>Analysis/Material Applied</u> | <u>Amount /Acre</u> | <u>Cost/Acre</u> | <u>Your Cost/Acre</u> |
| (180 lbs N/Acre) | 15-2-15-2.4 MgO | 1200 lbs | \$150.00 | _____ |
| | Application | 3 times | <u>23.70</u> | _____ |
| | Total for 3 Applications | | <u>\$173.70</u> | ===== |
| ----- | | | | |
| Option #5 | <u>Analysis/Material Applied</u> | <u>Amount /Acre</u> | <u>Cost/Acre</u> | <u>Your Cost/Acre</u> |
| (204 lbs N/Acre) | 17-4-17-2.4 MgO | 1200 lbs | \$157.20 | _____ |
| | Application | 3 times | <u>23.70</u> | _____ |
| | Total for 2 Applications | | <u>\$180.90</u> | ===== |
| ----- | | | | |
| Option #6 | <u>Analysis/Material Applied</u> | <u>Amount /Acre</u> | <u>Cost/Acre</u> | <u>Your Cost/Acre</u> |
| (225 lbs N/Acre) | 15-2-15-2.4 MgO | 1500 lbs | \$187.50 | _____ |
| | Application | 3 times | <u>23.70</u> | _____ |
| | Total for 3 Applications | | <u>\$211.20</u> | ===== |

Table 4-A.--Liquid fertilizer (Double boom application)

| Option #1 | Analysis/Material <u>Applied</u> | Amount <u>/Acre</u> | <u>Cost/Acre</u> | Your <u>Cost/Acre</u> |
|------------------|-------------------------------------|------------------------|------------------|--------------------------|
| (180 lbs N/Acre) | 10-0-10 | 1800 lbs | \$167.40 | ----- |
| | Double Boom Application | 3 times | <u>37.65</u> | ----- |
| | Total for 3 Applications | | <u>\$205.05</u> | ===== |
| ----- | | | | |
| Option #2 | Analysis/Material <u>Applied</u> | Amount <u>/Acre</u> | <u>Cost/Acre</u> | Your <u>Cost/Acre</u> |
| (180 lbs N/Acre) | 10-2-10 | 1800 lbs | \$176.40 | ----- |
| | Double Boom Application | 3 times | <u>37.65</u> | ----- |
| | Total for 3 Applications | | <u>\$214.05</u> | ===== |
| ----- | | | | |
| Option #3 | Analysis/Material <u>Applied</u> | Amount <u>/Acre</u> | <u>Cost/Acre</u> | Your <u>Cost/Acre</u> |
| (180 lbs N/Acre) | 10-0-10 | 1800 lbs | \$167.40 | ----- |
| | Solicam 80DF | 3 lbs* | 23.51 | ----- |
| | Karmex WP | 4 lbs* | 8.52 | ----- |
| | Double Boom Application | 3 times | <u>37.65</u> | ----- |
| | Total for 3 Applications | | <u>\$237.08</u> | ===== |

*Treated acre (one herbicide application)

Table 5-A.--Nematicides options

| Option #1 | Analysis/Material <u>Applied</u> | Amount <u>/Acre</u> | <u>Cost/Acre</u> | Your <u>Cost/Acre</u> |
|-----------|-------------------------------------|------------------------|------------------|--------------------------|
| | Temik 15G | 33 lbs | \$116.16 | ----- |
| | Application | 1 time | <u>11.34</u> | ----- |
| | Total per Application | | <u>\$127.50</u> | ===== |

Table 6-A.--Soil amendment options

| Option #1 | Analysis/Material <u>Applied</u> | Amount <u>/Acre</u> | <u>Cost/Acre</u> | Your <u>Cost/Acre</u> |
|-----------------|-------------------------------------|------------------------|------------------|--------------------------|
| (Every 3 years) | Dolomite (Delivered) | 1 ton | \$36.05 | ----- |
| | Application | 1 time | <u>7.90</u> | ----- |
| | Total for 1 Application | | <u>\$43.95</u> | ===== |
| | (Average 1/3 Ton Applied/Yr) | | <u>\$14.65</u> | ===== |
| ----- | | | | |
| Option #2 | Analysis/Material <u>Applied</u> | Amount <u>/Acre</u> | <u>Cost/Acre</u> | Your <u>Cost/Acre</u> |
| (Every year) | Dolomite (Delivered) | 1000 lbs | \$18.03 | ----- |
| | Application | 1 time | <u>7.90</u> | ----- |
| | Total per Application | | <u>\$25.93</u> | ===== |

Table 7-A.--Irrigation--annual cost per acre

DRIP

| | <u>Option #1</u> | <u>Your Cost/Acre</u> | <u>Option #2</u> | <u>Your Cost/Acre</u> |
|-------------------------------|------------------------|---------------------------|----------------------|---------------------------|
| Operating | (Electric) \$ 62.10 | _____ | (Diesel) \$ 55.87 | _____ |
| Maintenance of System | <u>44.04</u> | _____ | <u>43.82</u> | _____ |
| Total Cash Expenses | \$106.14 | _____ | \$ 99.69 | _____ |
| Fixed Depreciation Expense | <u>42.35</u> | _____ | <u>42.25</u> | _____ |
| Total Cash and Fixed Expenses | <u>\$148.49</u> | <u>_____</u> | <u>\$144.91</u> | <u>_____</u> |

MICROSPRINKLER

| | <u>Option #3</u> | <u>Your Cost/Acre</u> | <u>Option #4</u> | <u>Your Cost/Acre</u> |
|-------------------------------|------------------------|---------------------------|-----------------------|---------------------------|
| Operating | (Electric) \$ 70.60 | _____ | (Diesel) \$ 59.44* | _____ |
| Maintenance of System | <u>49.08</u> | _____ | <u>50.17</u> | _____ |
| Total Cash Expenses | \$119.68 | _____ | \$109.61 | _____ |
| Fixed Depreciation Expense | <u>52.94</u> | _____ | <u>56.56</u> | _____ |
| Total Cash and Fixed Expenses | <u>\$172.62</u> | <u>_____</u> | <u>\$166.17</u> | <u>_____</u> |

DRAINAGE DITCH ANNUAL COSTS

| | <u>Option #5</u> | <u>Your Cost/Acre</u> |
|---|------------------|---------------------------|
| Ditches/Canals Maintenance (\$45.17/acre ÷ 3 years) | \$15.06 | _____ |
| Weed Control in Ditches/Canals | 14.19 | _____ |
| Water Control: In/Out of Ditches and Canals | <u>13.21</u> | _____ |
| Total | <u>\$42.36</u> | <u>_____</u> |

*Indicates higher cost for fuel; diesel or electric.

Table 8-A.--A listing of 2005 custom rates reported by sixteen Indian River and South Florida citrus caretakers

| Grove Practice | Unit | Range of Rate Reported | | Average Rate ^y | Comments | |
|---|--|--|---------|---------------------------|---|---|
| CULTIVATION AND EQUIPMENT: | | | | | | |
| Labor | Hour | \$ 9.50- | \$17.50 | \$13.56 | Plus transportation and equipment | |
| Mechanic Labor | Hour | 30.00- | 50.00 | 39.56 | Labor and service truck | |
| Rotovate | Hour | 33.00- | 40.00 | 37.75 | | |
| Disc 7-8' | Hour | 27.50- | 38.50 | 33.00 | | |
| Disc 10-12' | Hour | 32.00- | 40.00 | 35.84 | | |
| Mow: 7-8' | Hour | 27.50- | 35.00 | 31.14 | | |
| 9-10' | Hour | 31.00- | 38.50 | 33.97 | | |
| 9-10' | Acre | 9.00- | 11.00 | 9.97 | | |
| 15-16' | Hour | 35.00- | 41.25 | 39.85 | \$9.00/acre | |
| V-Mower | Hour | 33.00- | 35.00 | 34.34 | | |
| Herbicide ^z (Strip/Band–Single Boom) | Hour | 30.00- | 32.00 | 31.33 | Plus materials | |
| Herbicide ^z (Strip/Band–Single Boom) | Acre | 13.00- | 13.75 | 13.39 | Plus materials; \$35.00/hour | |
| Herbicide ^z (Strip/Band–Double Boom) | Acre | 12.00- | 14.00 | 12.75 | Plus materials | |
| Herbicide ^z (Chemical Mow) | Acre | 2.50- | 3.50 | 3.07 | Plus materials | |
| Temik ^z | Acre | 10.50- | 12.50 | 11.34 | Plus materials | |
| Plow | Hour | 32.50- | 38.50 | 34.67 | | |
| Backhoe | Hour | 45.00- | 47.50 | 45.70 | | |
| Middle Buster | Hour | — | — | 38.50 | With tractor and driver | |
| Mound Builder | Hour | 31.00- | 38.50 | 34.84 | With tractor and driver | |
| Grader Blade | Hour | 28.00- | 38.50 | 33.60 | Tractor/blade and driver | |
| Water Truck with Driver | Hour | 30.00- | 35.00 | 32.75 | | |
| Pickup Truck with Driver | Hour | 28.00- | 35.00 | 31.67 | Average miles traveled per year: Pick-up truck – 21,298 miles | |
| Flatbed/Transport Truck with Driver | Hour | 35.00- | 50.00 | 45.00 | | |
| Tractor with Driver | Hour | 28.00- | 35.00 | 31.69 | | |
| ATV with Driver | Hour | 20.00- | 25.00 | 23.25 | | |
| SPRAYING:^z | | | | | | |
| PTO AIR BLAST SPRAYER | | | | | | |
| 1,000 Gallon Tank | | | | | | |
| with Electronic Sensing | | | | | | |
| | | Low | High | Average | 500 Gallon Tank Average | |
| 500 GPA | Acre | — | — | 38.00 | 39.00 | |
| 250 GPA | Acre | 29.00- | 36.00 | 32.92 | 29.00 | |
| 125 GPA | Acre | 25.00- | 29.00 | 28.03 | 27.00 | |
| Curtec (25 GPA) | Acre | — | — | 22.00 | | |
| Aerial | Fixed Wing: | \$ 5.13/acre @ 5 gallons per acre | | | | |
| Aerial | Fixed Wing: | \$ 7.17/acre @ 10 gallons per acre Bell Helicopter: \$20.00/acre @ 10 GPA | | | | |
| Aerial | Fixed Wing: | \$ 8.82/acre @ 15 gallons per acre | | | | |
| Aerial | Fixed Wing: | \$11.25/acre @ 20 gallons per acre | | | | |
| | Hand Sprayer (500 gallon tank) with tractor and 2 workers – \$45.00/hour | | | | | |
| FERTILIZING:^z | | | | | | |
| Liquid Boom Application: Double Boom | Acre | 12.00- | 13.40 | 12.55 | | |
| Dry (Bulk) | Acre | 7.00- | 8.75 | 7.90 | Average with VRT: \$10.38/acre | |
| Lime or Dolomite | Acre | 7.50- | 8.75 | 7.90 | | |
| Fertilize Young Trees: ^z | Hand Spread | Hour | 9.50- | 17.50 | 13.56 | Plus transportation and materials; 15¢/tree |
| | Fert. Spreader | Average: \$7.25/acre; \$26.00/hour | | | | Plus materials |

(OVER)

Table 8-A.--A listing of 2005 custom rates reported by sixteen Indian River and South Florida citrus caretakers (cont'd.)

| Grove Practice | Unit | Range of Rate Reported | | Average Rate ² | Comments |
|---|------------|---|----------|---------------------------|--|
| IRRIGATION: | | | | | |
| Ditch Mower | Hour | \$32.00- | \$44.50 | \$ 36.20 | |
| Water Furrow Disc | Hour | 30.00- | 38.50 | 34.67 | |
| Water Furrow Cleaner | Hour | 35.00- | 38.50 | 36.34 | |
| Water Furrow Shaper (Non-Laser Control) | Hour | — | — | 65.00 | |
| Water Furrow Shaper (Laser Control) | Hour | — | — | 80.00 | |
| Rotary Ditcher or Auger | Hour | 33.00- | 38.50 | 35.50 | |
| Microsprinkler/Drip Irrigation Maintenance | Acre/Month | 3.50- | 4.75 | 4.25 | Check & repair system; parts extra |
| REMOVING TREES: | | | | | |
| Front-end Loader | Hour | \$50.00- | \$65.00 | \$56.79 | Avg. range 3-15 trees per hour |
| Tree Shearing (Cutting Tree at Ground Level) | Hour | 50.00- | 65.00 | 56.25 | Avg. range 5-20 trees per hour |
| Prepare Site for Replanting | Tree | \$0.25 - \$1.00 | | | |
| PRUNING: | | | | | |
| Hedging: | | | | | |
| Single Side (Tractor Mounted) | Hour | \$ — | \$ — | \$ 55.00 | |
| Double Side (Tractor Pulled) | Hour | — | — | 65.00 | |
| Double Side (Self Propelled) | Hour | 250.00- | 265.00 | 257.50 | 8 to 20 A/H depending on wood size; \$14/A annual cut |
| Double Side Rotary (Self Propelled) ^x | Hour | — | — | 185.00 | 5 to 15 A/H bed tops only; add 25% for furrows only |
| Topping: | | | | | |
| Double Sided Topper (Self Propelled) | Hour | 265.00- | 285.00 | 275.00 | Avg. 8-15 ac depending on wood size type of cut;\$30/acre |
| Topping Self Propelled | Hour | — | — | 150.00 | |
| Limb Lifter/Tree Skirt Trimmer | Acre | — | — | 14.00 | 3 to 5 acres/hour |
| Limb Lifter/Tree Skirt Trimmer (Double Sided Rotary) | Hour | — | — | 120.00 | 6 to 20 acres/hour |
| Removing Brush: | | | | | |
| Haul Brush out of Grove (Front-End Loader) | Hour | 55.00- | 65.00 | 59.25 | |
| Mow/Chop Brush | Hour | 32.00- | 40.00 | 34.60 | |
| OTHER CUSTOM RATES: | | | | | |
| Install Tree Wraps | | 15¢-50¢/tree depending on type of wrap and number of trees; Annual maintenance cost: 35¢/tree | | | |
| Plant Trees (Solid Set) | Tree | \$ 0.90- | \$ 1.75 | \$ 1.32 | Varies as to density |
| Plant Trees (Resets) | Tree | 2.00- | 2.50 | 2.17 | Varies as to the number of resets |
| Travel/Setup Charge | Hour | — | — | 22.62 | |
| Grove Management Charge/Month: | | | | | |
| Supervising Grove Care Operations | Acre | 3.00- | 7.50 | 5.15 | In addition to caretaking charges |
| Handling Fruit Marketing | | \$0.10-\$0.25/box – For Supervising and Marketing fruit | | | |
| Supervising/Handling Chemicals/Fertilizer | | 5% to 15% of materials cost | | | |
| Charge for personnel to oversee harvesting operations and coordinate harvest in different blocks/groves and keeping of harvesting labor compliance records. | Box | \$ 0.05- | \$ 0.25 | \$ 0.15 | |
| Consulting | Hour | \$125.00- | \$200.00 | \$150.00 | Horticultural Evaluation and/or Financial Analysis/prospectus. |
| Total Reported Acreage Provided Grove Service to: | Acre | 1,000- | 14,000 | 4,870 | Total acres reporting: 48,700 |

²Plus materials. Caretakers reporting rates include labor, tractor and sprayer; supply truck included by most caretakers.

³Calculated by dividing the total number of caretakers reporting a grove practice rate into the sum reported. Unless otherwise stated, labor included with all charges.

^xLow acres is for 2 years regrowth hedging; high acres is for annual maintenance hedging.

Source: Ronald P. Muraro, Extension Farm Management Economist, Lake Alfred CREC, July 2005.

Table 9-A.--2005 summary of average chemical price estimates

| Item | Unit | Average Price | Your Price (2005) |
|----------------------------------|---------|---------------|-------------------|
| <u>Fungicides:</u> | | | |
| Abound EC | gal. | 218.12 | |
| Aliette 80WP | lb. | 11.59 | |
| Basic Copper Sulfate | lb. | 1.40 | |
| Copper (Kocide 101) | lb. | 1.80 | |
| Copper (Kocide 2000) | lb. | 2.33 | |
| Copper (Champ II Flowable) | gal. | 22.55 | |
| Cuprofix Disperss | lb. | 1.75 | |
| Nu-Cop 50 DF | lb. | 1.88 | |
| Enable | gal. | 57.55 | |
| Gem 25 | 40 ozs. | 120.59 | |
| Headline EC | gal. | 206.13 | |
| Oil - 435 or 455 | gal. | 2.21 | |
| Oil - 470 (Bio-lever) | gal. | 2.46 | |
| Ridomil Gold EC | gal. | 649.15 | |
| Safe-T-Oil | gal. | 3.15 | |
| Topsin | lb. | 14.08 | |
| <u>Insecticides/Nematicides:</u> | | | |
| Admire 2F | gal. | 520.28 | |
| Agri-Mek (0.15EC) | gal. | 563.52 | |
| Award Fire Ant Bait | lb. | 9.01 | |
| Bio-Vector | gal. | 412.50 | |
| Carbaryl 4L | gal. | 27.25 | |
| Carbaryl 80S | lb. | 4.47 | |
| Chlorpyrifos 4E | gal. | 57.26 | |
| Danitol | gal. | 147.58 | |
| Guthion 2L | gal. | 32.48 | |
| Guthion 50WP | lb. | 10.07 | |
| Imidan 70W (Diaprepes) | lb. | 8.25 | |
| Lorsban 4EC | gal. | 34.15 | |
| Lorsban 15G | lb. | 1.72 | |
| Malathion 5 EC | gal. | 25.18 | |
| Micromite 80 WG | gal. | 87.95 | |
| Microthiol | lb. | 0.70 | |
| Nexter 75WP | lb. | 89.56 | |
| Provado 1.6 F (nursery) | gal. | 417.75 | |
| Sevin 80S | lb. | 5.17 | |
| Sevin XLR | gal. | 30.96 | |
| Spintor 2 S C | gal. | 492.50 | |
| Sulphur 6F | gal. | 4.00 | |
| Temik 15G | lb. | 3.20 | |
| Vendex 50W | lb. | 14.86 | |
| Vydate | gal. | 56.28 | |

Table 9-A.--2005 summary of average chemical price estimates (cont'd.)

| Item | Unit | Average Price | Your Price (2005) |
|-------------------------------|---------------|---------------|-------------------|
| Herbicides: | | | |
| Aqua Master | gal. | 48.39 | |
| Diuron 4L | gal. | 16.04 | |
| Direx 4L | gal. | 16.50 | |
| Direx 80 DF | lb. | 3.87 | |
| Fusilade DX 2E | gal. | 131.14 | |
| Glyphosate: | | | |
| Glyphomax Plus | gal. | 18.22 | |
| Roundup (Original) | gal. | 23.60 | |
| Roundup - Ultra Max | gal. | 29.12 | |
| Roundup Weather Max | gal. | 50.16 | |
| Roundup Original Max | gal. | 43.50 | |
| Touchdown | gal. | 37.05 | |
| Gramoxone E (Paraquat) | gal. | 37.53 | |
| Hyvar X 80 WP | lb. | 18.93 | |
| Karmex 80 DF | lb. | 3.87 | |
| Krovar I | lb. | 11.38 | |
| Landmaster II | gal. | 18.66 | |
| Mandate 2E | gal. | 166.09 | |
| Pendimax | gal. | 24.37 | |
| Poast Plus 1.0 EC | gal. | 52.50 | |
| Princep (Caliber 90) | lb. | 3.29 | |
| Princep 4L | gal. | 14.51 | |
| Prowl | gal. | 22.12 | |
| Simazine 90 DF | lb. | 2.80 | |
| Simazine 4L | gal. | 13.66 | |
| Solicam 80 DF | lb. | 14.24 | |
| Simtrol | | 19.00 | |
| Surflan | gal. | 81.64 | |
| Growth Regulators: | | | |
| Citrus Fix | gal. | 494.00 | |
| Pro-Gibb 3.91% | 20 oz. bottle | 33.16 | |
| Tree-Hold | gal. | 79.17 | |
| Other Spray Materials: | | | |
| Borates (15%) | lb. | 0.70 | |
| Manganese (32%) | lb. | 0.32 | |
| Zinc (78%) | lb. | 0.83 | |
| Adjuvant (Surfactant) | gal. | 23.59 | |

SOURCE: Ronald P. Muraro, Extension Farm Management Economist, University of Florida, IFAS, CREC, Lake Alfred, Florida, August 2005.

Table 10-A.--2005 summary of average fertilizer price estimates

| Item | Unit | Average Price | Your Price (2005) |
|---------------------------------------|------|---------------|-------------------|
| <u>FERTILIZER (FOB Price @ Plant)</u> | | | |
| | | \$ | |
| <u>Dry Mix (Bulk)</u> | | | |
| 17-0-17-3 _{Mg} | ton | 238.82 | _____ |
| 17-4-17-2.4 _{Mg} | ton | 243.35 | _____ |
| 16-0-16 | ton | 218.35 | _____ |
| 16-0-16-4 _{Mg} | ton | 239.49 | _____ |
| 16-2-16-3 _{Mg} | ton | 240.45 | _____ |
| 15-2-15-2.4 _{Mg} | ton | 224.47 | _____ |
| 12-2-12-2.4 _{Mg} | ton | 201.02 | _____ |
| 8-8-8 w/minors* | ton | 182.90 | _____ |
| 8-4-8 w/minors* | ton | 170.29 | _____ |
| 8-2-8 w/minors* | ton | 162.12 | _____ |
| 6-6-6 w/minors* | ton | 159.99 | _____ |
| <u>Liquid Mix (Bulk)</u> | | | |
| 8-2-8 | ton | 151.53 | _____ |
| 8-4-8 | ton | 159.73 | _____ |
| 9-3-9 | ton | 166.33 | _____ |
| 9-4-9 | ton | 172.47 | _____ |
| 10-0-10 | ton | 166.62 | _____ |
| 10-2-10 | ton | 176.25 | _____ |
| 12-0-6 | ton | 166.89 | _____ |
| 12-3-6 | ton | 180.25 | _____ |
| 7-0-0-6 (Magnesium Nitrate) | ton | 218.00 | _____ |

*With organic nitrogen, the price averaged 25% higher.

Table 10-A.--2005 summary of average fertilizer price estimates (cont'd.)

| Item | Unit | Average Price | Your Price (2005) |
|--|------|---------------|-------------------|
| <u>Other Fertilizer Materials (Bulk)</u> | | | |
| Ammonium Nitrate (21% N Liquid) | ton | 179.88 | _____ |
| Ammonium Nitrate (33.5% N Dry) | ton | 259.38 | _____ |
| Ammonium Sulfate (21% N) | ton | 152.94 | _____ |
| Calcium Nitrate (19% Ca, 15.5% N) | ton | 288.13 | _____ |
| Dolomite (at mine--49% CaCO ₃ , 36% MgCO ₃) | ton | 19.75 | _____ |
| Muriate of Potash (60% K ₂ O) | ton | 242.29 | _____ |
| Potassium Nitrate (14% N; 46% K ₂ O) | ton | 453.57 | _____ |
| Sul-Po-Mag (SPM--21.9% K ₂ O) | ton | 202.43 | _____ |
| Super Phosphate (20% P ₂ O ₅) | ton | 214.25 | _____ |
| Triple Superphosphate (48% P ₂ O ₅) | ton | 242.92 | _____ |
| Average Delivery Cost | ton | 14.32 | _____ |
| <u>Foliar Macronutrients</u> | | | |
| Phos Might 0-22-20 | gal. | 24.29 | _____ |
| Nutriphite Magnum 2-40-16 | gal. | 35.00 | _____ |
| MKP (0-52-34) (Mono-Potassium Phosphate) | lb. | 0.80 | _____ |
| RSA ActaPhos 0-28-25 | gal. | 18.00 | _____ |
| Peter's 20-20-20 Foliar | lb. | 0.54 | _____ |
| MZF | gal. | 6.53 | _____ |
| <u>Slow Release Nitrogen (SRN)</u> | | | |
| <u>CitriBlen</u> | | | |
| 15-3-19 | ton | 245.15 | _____ |
| 17-5-12 | ton | 237.50 | _____ |
| 18-6-11 | ton | 243.80 | _____ |
| Sulfur Coated Urea (SCU) | ton | 586.80 | _____ |
| Agriform 20-10-5 (500 tablets/box) | box | 40.00 | _____ |

SOURCE: Ronald P. Muraro, Extension Farm Management Economist, University of Florida, IFAS, CREC, Lake Alfred, Florida, August 2005.

Table 11-A.--Cost for establishing, planting and maintaining a citrus grove through four years of age, South Florida flatwoods area

| | | Cost Per Acre | |
|--|---|----------------|---------|
| | | Range | Average |
| | | ----- \$ ----- | |
| Land Cost: ¹ | Improved Pasture Land | 1,700 - 2,500 | 2,050 |
| | Raw Land and Semi-improved Pasture | 1,150 - 1,800 | 1,450 |
| Land Preparation: | Pasture and Light Palmettos | 125 - 275 | 195 |
| (Clearing) | Raw Land (heavy pines, palmettos) | 350 - 600 | 465 |
| Leveling: | With Laser | 200 - 350 | 275 |
| | Without Laser | 100 - 250 | 160 |
| Bedding: | 2-rows (short rows – 1,350+ feet) | 100 - 195 | 130 |
| Soil Amendments: | Dolomite 1 ton | | 35 |
| | Super Phosphate, 400 lbs. | | 30 |
| Canals, Ditches and Dikes | | 150 - 260 | 195 |
| Reservoirs and Roads | | 130 - 180 | 155 |
| Throw-out Pumps for Water Movement | | 45 - 60 | 55 |
| Culverts | | 65 - 135 | 85 |
| Middle Drop Drainage Pipes | | 45 - 95 | 105 |
| Drainage Tile | | 140 - 160 | 150 |
| Cover Crop | | 9 - 16 | 12 |
| Irrigation System: | Microsprinkler – with Well ² | 850 - 1,500 | 1,000 |
| | – without Well | 525 - 1,200 | 700 |
| | Drip – with Well ² | 775 - 1,050 | 875 |
| | – without Well | 400 - 825 | 560 |
| Water Permits, Environmental Studies, and Engineering: | Cost | 40 - 90 | 70 |
| | Time in Months | 5 - 12 | 8 |
| Percent Land Utilization: | Planted to Citrus | 55% - 85% | 71% |
| | Ditches and Canals | 5% - 10% | 8% |
| | Water Retention | 10% - 30% | 15% |
| | Roads and Service Areas | 3% - 15% | 6% |

| South Florida | | | | |
|---|---------------------------|--------|----------------|--------|
| Year | | | | |
| | 1 | 2 | 3 | 4 |
| <u>Solidset Planted Trees³</u> | ----- Cost Per Tree ----- | | | |
| Microsprinkler Irrigation and Ditch Maintenance | \$0.40 | \$0.50 | \$0.65 | \$0.85 |
| Fertilize Tree | 0.25 | 0.40 | 0.55 | 0.56 |
| Supplemental Fertilization thru Irrigation | 0.15 | 0.20 | 0.25 | 0.29 |
| Spray | 0.30 | 0.40 | 0.47 | 0.50 |
| Insulated Tree Wrap (annual maintenance) | 0.25 | 0.25 | 0.25 | 0.00 |
| Sprouting (labor) | 0.20 | 0.20 | 0.00 | 0.00 |
| Cultivation/Mowing | 0.44 | 0.44 | 0.44 | 0.44 |
| Herbicide | 0.54 | 0.54 | 0.54 | 0.54 |
| Ridomil/Aliette | 0.35 | 0.35 | 0.00 | 0.00 |
| Miscellaneous | 0.43 | 0.49 | 0.42 | 0.48 |
| Total Cost Per Year | \$3.31 | \$3.77 | \$3.62 | \$3.66 |
| <u>Reset Trees</u> (annual additional grove care costs) | \$2.13 | \$2.47 | \$1.84 | -- |
| <u>Cost of Planting Trees⁴</u> | Solidset = \$5.00 | | Reset = \$6.30 | |

¹ Land cost will vary from one county to another as well as from one parcel to another.

² Irrigation costs include distribution system, power unit and well (where indicated.) The higher cost ranges reported also included a cost for fertigation equipment.

³ The per tree costs shown are applicable for tree densities of 145 to 165 trees per acre. The per tree costs should be decreased for higher density plantings and increased for lower density plantings; e.g., at 200 trees per acre decrease costs by 15%; at 115 trees per acre increase costs by 15%.

⁴ Tree cost (bare root) = \$3.25; stake, plant, and water tree = \$1.25 (solidset) and \$2.55 (resets); and uninsulated tree wrap = \$0.50.

Table 12-A.--Estimated cost of planting and maintaining a reset citrus tree through three years of age, Southwest Florida area, August 2005

| | Resets/Replacement Trees Per Acre | | | | | |
|---|-----------------------------------|--------------|--------------|--------------|--------------|--------------|
| | 1-2 | 3-5 | 6-10 | 11-25 | 26+ | |
| | ----- \$ Cost Per Tree ----- | | | | | |
| Tree Removal | 6.67 | 5.34 | 4.45 | 3.56 | 2.67 | |
| <u>Plant Reset Tree</u> | | | | | | |
| Tree Cost (Container Tree) | 4.50 | 4.50 | 4.35 | 4.35 | 4.35 | |
| Plant Tree and First Watering (Custom Charge) | <u>2.93</u> | <u>2.55</u> | <u>2.17</u> | <u>1.84</u> | <u>1.57</u> | |
| Total Planting Costs | 7.43 | 7.05 | 6.52 | 6.19 | 5.92 | |
| <u>Site Preparation^a</u> | | | | | | |
| Rotovate | 2.65 | 2.31 | 1.96 | 1.67 | 1.42 | |
| Re-Build Beds | <u>3.00</u> | <u>2.61</u> | <u>2.22</u> | <u>1.89</u> | <u>1.60</u> | |
| Total Site Preparation | 5.65 | 4.92 | 4.18 | 3.56 | 3.02 | |
| Total Planting and Site Preparation Costs | 13.08 | 11.97 | 10.70 | 9.75 | 8.94 | |
| ===== | | | | | | |
| <u>Supplemental Maintenance</u> | Year #1 | 4.13 | 3.82 | 3.59 | 3.39 | 3.19 |
| (Trees 1-3 years old) | Year #2 | 3.79 | 3.39 | 2.96 | 2.59 | 2.27 |
| (Fertilizer, Tree Wraps, Sprout, etc.) | Year #3 | <u>3.07</u> | <u>2.73</u> | <u>2.34</u> | <u>2.01</u> | <u>1.73</u> |
| Total Supplemental Maintenance Costs | | 10.99 | 9.94 | 8.89 | 7.99 | 7.19 |
| ===== | | | | | | |
| <u>Summary of Tree Replacement Costs</u> | | 1 | 3 | 6 | 6 | 6 |
| Tree Removal Costs | | 6.67 | 5.34 | 4.45 | 3.56 | 2.67 |
| Planting and Tree Removal Costs | | 13.08 | 11.97 | 10.70 | 9.75 | 8.94 |
| Supplemental Maintenance Costs (Years 1 thru 3) | | <u>10.99</u> | <u>9.93</u> | <u>8.90</u> | <u>7.99</u> | <u>7.19</u> |
| Total Three-Year Cumulative Costs | | <u>30.74</u> | <u>27.24</u> | <u>24.05</u> | <u>21.30</u> | <u>18.80</u> |

^aSite preparation for bedded citrus grove. Fumigate planting site would cost approximately \$2.50 per tree.

Source: Ronald P. Muraro, Farm Management Economist, CREC, Lake Alfred, FL, August 2005.

Table 13-A.--A listing of estimated comparative Indian River citrus production costs per acre for grapefruit, 2004-2005²

| Costs represent a mature (10+ years old) Indian River Grapefruit Grove. | Low Cost Processed Cultural Program One Year Alternative | Processed and Reduced Fresh Cost Cultural Program | Typical/Historical Fresh Fruit Cultural Program |
|--|---|--|--|
| PRODUCTION/CULTURAL COSTS:² | | | |
| Weed Management/Control: | | | |
| Mechanical Mow Middles (3 times per year) | \$ 29.91 | \$ 29.91 | \$ 29.91 |
| Chemical Mow Middles (2 times per year) | 10.16 | 10.16 | 10.16 |
| General Grove Work (2 labor hours per acre) | 27.12 | 27.12 | 27.12 |
| Herbicide (1/2 tree acre treated): | | | |
| Application (4 glyphosate or 3 residual applications) | \$51.00 | \$38.25 | \$38.25 |
| Material | <u>32.08</u> | <u>94.63</u> | <u>94.63</u> |
| Total Herbicide Cost | 83.08 | 132.88 | 132.88 |
| Spray: | | | |
| Post Bloom: Application (150 GPA) | — | 32.92 | 32.92 |
| Material | — | <u>74.07</u> | <u>74.07</u> |
| Total Post Bloom Cost | — | 106.99 | 106.99 |
| Summer Oil #1: Application (250 GPA) | 32.92 | 32.92 | 32.92 |
| Material | <u>65.87</u> | <u>70.75</u> | <u>70.75</u> |
| Total Summer Oil #1 Cost | 98.79 | 103.67 | 103.67 |
| Summer Oil #2: Application (PTO -- 250 GPA) | 32.92 | 32.92 | 32.92 |
| Material | <u>32.76^x</u> | <u>23.22</u> | <u>23.22</u> |
| Total Summer Oil #2 Cost | 65.68 | 56.14 | 56.14 |
| Fertilizer (Bulk): 3 Applications | 23.70 | 23.70 | 23.70 |
| Material (12-2-12-2.4 MgO @ 125 lbs N and 100 lbs N per acre) | <u>116.48</u> | <u>93.52</u> | <u>116.48</u> |
| Total Fertilizer Cost | 140.18 | 117.22 | 140.18 |
| Dolomite (one ton applied every 3 years) | | | |
| Material/Application | 14.65 | 14.65 | 14.65 |
| Pruning: Topping (\$27.50/A ÷ 2 yrs) ^w | 13.75 | 13.75 | 13.75 |
| Hedging (\$25.75/A ÷ 1.5 yrs) ^w | 17.17 | 17.17 | 17.17 |
| Chop/Mow Brush after Hedging (\$8.99/A ÷ 1.5 yrs) ^w | 6.00 | 6.00 | 6.00 |
| Raise Skirts of Trees (\$14.00/A ÷ 2 yrs) ^w | — | <u>7.00</u> | <u>7.00</u> |
| Total Pruning Cost | 36.92 | 43.92 | 43.92 |
| Tree Replacement — 1 thru 3 years of age: (5 trees/acre) | | | |
| Remove Trees: Pull, Stack & Burn 5 Trees with Front-end Loader | 25.40 | 25.40 | 25.40 |
| Prepare Site and Plant Tree (Includes 5 reset trees) | 59.85 | 59.85 | 59.85 |
| Supplemental Fertilizer, Tree Wraps Maintenance, Sprout, etc. (Trees 1-3 years old) | <u>49.65</u> | <u>49.65</u> | <u>49.65</u> |
| Total Tree Replacement Cost | 134.90 | 134.90 | 134.90 |
| Irrigation: Microsprinkler System ^v | 166.17 | 166.17 | 166.17 |
| Clean Ditches (Weed Control) | 14.19 | 14.19 | 14.19 |
| Ditch and Canal Maintenance | 15.06 | 15.06 | 15.06 |
| Water Control (Pump water in/out of Ditches and Canals) | <u>13.21</u> | <u>13.21</u> | <u>13.21</u> |
| Total Irrigation Cost | <u>208.63</u> | <u>208.63</u> | 208.63 |
| IRRIGATED PROCESSED FRUIT PRODUCTION COSTS | <u>\$850.02</u> | <u>\$ 986.19</u> | |
| Supplemental Post Bloom Spray: (2 Applications) | | | |
| Application (125 GPA) | | 56.06 | 56.06 |
| Material (Copper) | | <u>21.84</u> | <u>21.84</u> |
| Total Supplemental Post Bloom Spray Cost | | 77.90 | 77.90 |
| Fall Miticide Spray: Application (125 GPA) | | 28.03 | 28.03 |
| Material | | <u>32.70</u> | <u>32.70</u> |
| Total Fall Miticide Spray Cost | | <u>60.73</u> | <u>60.73</u> |
| IRRIGATED FRESH FRUIT PRODUCTION COSTS | | <u>\$1,124.82</u> | <u>\$1,147.78</u> |

²The listed estimated comparative costs are for the example grove situation described in the Economic Information Report Series entitled: "Budgeting Costs and Returns for Indian River Citrus Production" and may not represent your particular grove situation in Indian River.

Table 14-A.-- Estimated average picking, roadsiding and hauling charges for Florida citrus, 2004-05

| | Fresh Fruit | | Processed Fruit | |
|------------------------------|---------------|---------|-----------------|---------|
| | Range | Average | Range | Average |
| | \$/Box | \$/Box | \$/Box | \$/Box |
| <u>Picking Charges:</u> | | | | |
| Early and Mid-Season Oranges | 0.70 - 1.75 | 0.954 | 0.65 - 1.05 | 0.829 |
| Valencia Oranges | 0.70 - 1.25 | 0.938 | 0.65 - 1.25 | 0.870 |
| Pink/Red Grapefruit | 0.60 - 1.25 | 0.739 | 0.55 - 1.25 | 0.669 |
| White/Marsh Grapefruit | 0.60 - 1.25 | 0.744 | 0.55 - 1.25 | 0.667 |
| Temples/Tangelos | 0.85 - 1.65 | 1.163 | 0.80 - 1.50 | 1.043 |
| Tangerines | 1.25 - 2.00 | 1.529 | 1.00 - 1.70 | 1.204 |
| Add for Spot Picking | 0.10 - 0.50 | 0.314 | — | — |
| | Fresh Fruit | | Processed Fruit | |
| | Range | Average | Range | Average |
| | \$/Box | \$/Box | \$/Box | \$/Box |
| <u>Roadsiding Charges:</u> | | | | |
| Early and Mid-Season Oranges | 0.60 - 1.15 | 0.895 | 0.65 - 1.17 | 0.817 |
| Valencia Oranges | 0.67 - 1.12 | 0.899 | 0.65 - 1.17 | 0.836 |
| Pink/Red Grapefruit | 0.65 - 1.03 | 0.840 | 0.65 - 1.20 | 0.796 |
| White/Marsh Grapefruit | 0.65 - 1.03 | 0.854 | 0.65 - 1.20 | 0.789 |
| Temples/Tangelos | 0.70 - 1.35 | 1.003 | 0.75 - 1.23 | 0.890 |
| Tangerines | 0.75 - 1.35 | 1.095 | 0.85 - 1.70 | 1.054 |
| | Fresh Fruit | | Processed Fruit | |
| | All Varieties | | All Varieties | |
| | \$/Box | | \$/Box | |
| <u>Hauling Charges:</u> | | | | |
| 0 - 30 miles | 0.417 | | 0.393 | |
| 31 - 50 miles | 0.512 | | 0.464 | |
| 51 - 80 miles | 0.573 | | 0.515 | |
| 81 - 100 miles | 0.640 | | 0.632 | |
| 100 + miles | 0.746 | | 0.728 | |

Table 15-A.--Estimated Average Packing Charges for Florida Citrus, 2004-05^a

| | Domestic Grapefruit | Export Grapefruit | Oranges | Temples/ Tangelos | Tangerines |
|-------------------------------------|------------------------|----------------------|---------|----------------------|------------|
| | ----- \$/Carton ----- | | | | |
| Total Packing Charge ^b | 3.835 | 4.245 | 4.192 | 4.495 | 5.056 |
| | ----- \$/Box ----- | | | | |
| Drenching Charge | 0.178 | 0.178 | 0.186 | 0.186 | 0.186 |
| Packinghouse Elimination Charges | 0.594 | 0.594 | 0.571 | 0.571 | 0.571 |
| Hauling Charges for Eliminations | 0.425 | 0.425 | 0.410 | 0.410 | 0.410 |

^aPacking charges represents a total of nine citrus packinghouses from both the Indian River and Interior production regions.

^bTotal Packing Charge includes the following items:

1. Materials including mesh/plastic bags, labels/Price Lookup Codes (PLUs), etc.
2. Includes supervisor/foreman labor, grading, palletizing, shipping and general labor. Includes payroll taxes, workers' compensation, ground insurance, etc.
3. Other direct packing costs include: fruit treating; power, lights and water; repairs maintenance; miscellaneous supplies; etc.
4. Indirect packing costs include such items as: insurance-fire and casualty; taxes and licenses; depreciation and rent.
5. General and Administrative (G&A) costs include: office personnel (payroll taxes, w/comp); packinghouse and general manager; office supplies; telephone; etc.
6. Selling Expenses which include sales salaries, travel, telephone and telegraph and brokerage fees.
7. Special assessments include such items as: advertising taxes; inspection fees; a Florida Citrus Packers tax; and a Citrus Administrative Committee (CAC) tax.

SOURCE: Ronald P. Muraro, University of Florida-IFAS, Citrus Research and Education Center, Lake Alfred, FL, September 2005.

Table 16-A.--Historic prices^a for selected citrus varieties

| Crop year | Variety | | | | | | Seedless grapefruit ^e | |
|----------------------|---|-------------------------------------|-------------------|-------------------|----------|-------------------|----------------------------------|--|
| | Early ^b and mid ^c -season oranges | Late season oranges ^d | Temple oranges | All Tangerines | Tangelos | (white) (colored) | | |
| | | | | | | (white) | (colored) | |
| 1961-62 | \$1.93 | \$1.81 | \$2.17 | \$2.04 | \$3.36 | \$0.68 | \$0.86 | |
| 1962-63 | 2.17 | 3.50 | 3.09 | 3.02 | 4.66 | 1.29 | 1.81 | |
| 1963-64 | 4.43 | 4.45 | 4.45 | 3.18 | 4.83 | 2.24 | 2.54 | |
| 1964-65 | 2.57 | 2.28 | 2.77 | 2.68 | 4.00 | 1.51 | 1.82 | |
| 1965-66 | 1.44 | 1.79 | 1.80 | 2.14 | 2.85 | 1.39 | 1.64 | |
| 1966-67 | 0.81 | 1.08 | 0.88 | 1.06 | 1.64 | 0.73 | 0.94 | |
| 1967-68 | 1.86 | 2.28 | 2.79 | 4.29 | 3.22 | 2.05 | 2.48 | |
| 1968-69 | 1.56 | 1.83 | 2.22 | 2.55 | 2.47 | 0.98 | 1.15 | |
| 1969-70 | 1.15 | 1.13 | 1.47 | 2.23 | 1.13 | 1.72 | 1.92 | |
| 1970-71 | 1.10 | 1.91 | 1.91 | 1.88 | 1.04 | 1.89 | 2.15 | |
| 1971-72 | 1.98 | 2.11 | 1.95 | 2.97 | 1.69 | 2.27 | 2.69 | |
| 1972-73 | 1.43 | 1.71 | 1.95 | 2.37 | 1.39 | 2.06 | 2.53 | |
| 1973-74 | 1.38 | 1.59 | 1.64 | 2.82 | 1.25 | 1.58 | 2.12 | |
| 1974-75 | 1.46 | 1.82 | 1.68 | 3.05 | 1.45 | 1.55 | 2.59 | |
| 1975-76 | 1.69 | 1.88 | 1.79 | 3.02 | 1.42 | 1.29 | 2.23 | |
| 1976-77 | 1.89 | 2.63 | 2.16 | 3.29 | 1.42 | 1.49 | 2.04 | |
| 1977-78 | 3.90 | 4.40 | 3.92 | 4.79 | 3.29 | 1.47 | 2.09 | |
| 1978-79 | 4.44 | 4.95 | 4.89 | 4.99 | 3.90 | 2.21 | 3.13 | |
| 1979-80 | 3.59 | 3.89 | 2.89 | 4.25 | 2.87 | 3.12 | 3.80 | |
| 1980-81 | 3.67 | 4.63 | 4.21 | 5.45 | 3.92 | 3.46 | 4.22 | |
| 1981-82 | 4.27 | 4.29 | 4.01 | 6.23 | 3.58 | 1.92 | 2.80 | |
| 1982-83 | 4.88 | 5.41 | 3.99 | 7.57 | 4.37 | 1.51 | 3.20 | |
| 1983-84 | 5.09 | 6.72 | 5.34 | 5.93 | 4.28 | 2.08 | 4.05 | |
| 1984-85 | 7.30 | 6.88 | 5.59 | 15.91 | 7.08 | 3.02 | 4.84 | |
| 1985-86 | 3.92 | 3.97 | 3.01 | 12.69 | 4.06 | 3.56 | 4.98 | |
| 1986-87 | 4.56 | 6.02 | 3.60 | 10.92 | 3.72 | 4.45 | 5.80 | |
| 1987-88 | 6.72 | 8.73 | 5.69 | 12.99 | 5.58 | 5.35 | 5.93 | |
| 1988-89 | 6.63 | 8.41 | 5.46 | 12.64 | 6.31 | 4.33 | 4.71 | |
| 1989-90 | 6.01 | 6.53 | 5.64 | 15.28 | 5.10 | 5.21 | 6.30 | |
| 1990-91 | 5.38 | 6.58 | 6.31 | 17.10 | 6.11 | 4.59 | 6.85 | |
| 1991-92 | 5.44 | 6.65 | 6.51 | 18.00 | 7.16 | 6.46 | 6.87 | |
| 1992-93 | 3.23 | 3.88 | 2.99 | 13.75 | 3.31 | 2.22 | 3.11 | |
| 1993-94 | 3.76 | 4.61 | 2.73 | 9.83 | 2.38 | 3.23 | 3.38 | |
| 1994-95 | 3.25 | 4.41 | 3.47 | 11.98 | 2.64 | 2.58 | 1.66 | |
| 1995-96 | 3.62 | 5.57 | 4.44 | 12.59 | 3.63 | 2.14 | 1.77 | |
| 1996-97 | 3.18 | 4.07 | 3.22 | 7.99 | 2.19 | 1.12 | 1.91 | |
| 1997-98 | 2.81 | 4.88 | 3.07 | 8.49 | 1.66 | 0.93 | 1.50 | |
| 1998-99 | 4.35 | 5.58 | 5.12 | 12.07 | 4.53 | 1.95 | 2.65 | |
| 1999-00 | 3.19 | 4.33 | 2.55 | 6.67 | 2.52 | 3.87 | 3.36 | |
| 2000-01 | 2.60 | 4.02 | 2.05 | 6.40 | 1.27 | 2.07 | 2.28 | |
| 2001-02 | 2.88 | 4.20 | 2.19 | 7.81 | 2.47 | 1.96 | 2.54 | |
| 2002-03 | 2.62 | 3.85 | 2.01 | 8.40 | 2.60 | 1.59 | 2.79 | |
| 2003-04 | 2.20 | 3.64 | 1.07 | 7.46 | 7.48 | 1.88 | 3.28 | |
| 2004-05 ^f | 2.56 | 4.34 | 2.48 | 12.02 | 2.45 | 11.95 | 13.65 | |

^aOn-tree average price per box (1-3/5 bushel box equivalent) for all methods of sale minus pick and haul charges.^bNavel and Hamlin ^cParson Brown and Pineapple ^dValencia ^eMarsh (white) or pink ^fPreliminary

Source: Florida Agricultural Statistics Service.

Table 17-A.--Debt which can be supported per \$1,000.00 annual payment capacity

| Loan term (years) | Interest rate paid on the loan | | | | | | | | | | | | | | |
|-------------------|--------------------------------|--------|--------|--------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|
| | 8.0% | 8.5% | 9.0% | 9.5% | 10.0% | 10.5% | 11.0% | 11.5% | 12.0% | 12.5% | 13.0% | 13.5% | 14.0% | 14.5% | 15.0% |
| 1 | 926 | 922 | 917 | 913 | 909 | 905 | 901 | 897 | 893 | 889 | 885 | 881 | 877 | 873 | 870 |
| 2 | 1,783 | 1,771 | 1,759 | 1,747 | 1,754 | 1,724 | 1,713 | 1,701 | 1,690 | 1,679 | 1,668 | 1,657 | 1,647 | 1,636 | 1,626 |
| 3 | 2,577 | 2,554 | 2,531 | 2,509 | 2,487 | 2,465 | 2,444 | 2,423 | 2,402 | 2,381 | 2,361 | 2,341 | 2,322 | 2,302 | 2,283 |
| 4 | 3,312 | 3,276 | 3,240 | 3,204 | 3,170 | 3,136 | 3,102 | 3,070 | 3,037 | 3,006 | 2,974 | 2,944 | 2,914 | 2,884 | 2,855 |
| 5 | 3,993 | 3,941 | 3,890 | 3,840 | 3,791 | 3,743 | 3,696 | 3,650 | 3,605 | 3,561 | 3,517 | 3,475 | 3,433 | 3,392 | 3,352 |
| 6 | 4,623 | 4,554 | 4,486 | 4,420 | 4,355 | 4,292 | 4,230 | 4,170 | 4,111 | 4,054 | 3,998 | 3,942 | 3,889 | 3,836 | 3,784 |
| 7 | 5,206 | 5,119 | 5,033 | 4,950 | 4,868 | 4,789 | 4,712 | 4,640 | 4,564 | 4,492 | 4,423 | 4,355 | 4,288 | 4,224 | 4,160 |
| 8 | 5,747 | 5,639 | 5,535 | 5,433 | 5,335 | 5,239 | 5,146 | 5,056 | 4,968 | 4,882 | 4,799 | 4,718 | 4,639 | 4,562 | 4,487 |
| 9 | 6,247 | 6,119 | 5,995 | 5,875 | 5,759 | 5,646 | 5,537 | 5,431 | 5,328 | 5,228 | 5,132 | 5,038 | 4,946 | 4,858 | 4,772 |
| 10 | 6,710 | 6,561 | 6,418 | 6,279 | 6,145 | 6,015 | 5,889 | 5,768 | 5,650 | 5,536 | 5,426 | 5,319 | 5,216 | 5,116 | 5,019 |
| 11 | 7,139 | 6,969 | 6,805 | 6,647 | 6,495 | 6,348 | 6,207 | 6,070 | 5,938 | 5,810 | 5,687 | 5,568 | 5,453 | 5,341 | 5,234 |
| 12 | 7,536 | 7,345 | 7,161 | 6,984 | 6,814 | 6,650 | 6,492 | 6,341 | 6,194 | 6,054 | 5,918 | 5,787 | 5,660 | 5,538 | 5,421 |
| 13 | 7,904 | 7,691 | 7,487 | 7,291 | 7,103 | 6,923 | 6,750 | 6,583 | 6,424 | 6,270 | 6,122 | 5,979 | 5,842 | 5,710 | 5,583 |
| 14 | 8,244 | 8,010 | 7,786 | 7,572 | 7,367 | 7,170 | 6,982 | 6,801 | 6,628 | 6,462 | 6,302 | 6,149 | 6,002 | 5,861 | 5,724 |
| 15 | 8,559 | 8,304 | 8,061 | 7,828 | 7,606 | 7,394 | 7,191 | 6,997 ^a | 6,811 | 6,633 | 6,462 | 6,299 | 6,142 | 5,992 | 5,847 |
| 16 | 8,851 | 8,576 | 8,313 | 8,062 | 7,824 | 7,596 | 7,379 | 7,172 | 6,974 | 6,785 | 6,604 | 6,431 | 6,265 | 6,106 | 5,954 |
| 17 | 9,122 | 8,825 | 8,543 | 8,276 | 8,022 | 7,779 | 7,549 | 7,329 | 7,119 | 6,920 | 6,729 | 6,547 | 6,373 | 6,207 | 6,048 |
| 18 | 9,372 | 9,056 | 8,756 | 8,471 | 8,201 | 7,945 | 7,702 | 7,470 | 7,250 | 7,040 | 6,840 | 6,649 | 6,467 | 6,294 | 6,128 |
| 19 | 9,603 | 9,268 | 8,950 | 8,650 | 8,365 | 8,095 | 7,839 | 7,596 | 7,366 | 7,146 | 6,938 | 6,739 | 6,551 | 6,370 | 6,198 |
| 20 | 9,818 | 9,463 | 9,129 | 8,812 | 8,514 | 8,231 | 7,963 | 7,710 ^a | 7,469 | 7,241 | 7,025 | 6,819 | 6,623 | 6,437 | 6,259 |
| 25 | 10,675 | 10,234 | 9,823 | 9,438 | 9,077 | 8,739 | 8,422 | 8,123 | 7,843 | 7,579 | 7,330 | 7,095 | 6,873 | 6,663 | 6,464 |
| 30 | 11,258 | 10,747 | 10,274 | 9,835 | 9,427 | 9,047 | 8,868 | 8,364 | 8,055 | 7,766 | 7,496 | 7,242 | 7,003 | 6,778 | 6,566 |
| 35 | 11,655 | 11,088 | 10,567 | 10,087 | 9,644 | 9,234 | 8,855 | 8,503 | 8,175 | 7,870 | 7,586 | 7,320 | 7,070 | 6,836 | 6,617 |
| 40 | 11,925 | 11,315 | 10,757 | 10,247 | 9,779 | 9,348 | 8,951 | 8,587 | 8,244 | 7,928 | 7,634 | 7,361 | 7,105 | 6,866 | 6,642 |

^aExample. Assumes a \$10,000 after tax income at 11.5% interest rate and a 15-year term mortgage, the total debt which can be supported is \$69,970 (\$6,997 x 10). At 11.5% interest rate and a 20-year term mortgage, the total debt which can be supported is \$77,100 (\$7,710 x 10).