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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<sup>a</sup>

	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<u>Total revenue:</u>	20% deposit		Final payment									
<u>Less:</u>	Pick & haul cost		X									
	DOC advertisement tax		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			
<u>Spray:</u>				X	X							
	Post bloom/nutritional			X	X							
	Summer oil/greasy spot					X						
	Fall miticide							X				
	Supplemental miticide								X			X
<u>Fertilizer</u>			42# N/A		42# N/A					42# N/A	Dolomite	
<u>Hedging and topping</u>												
<u>Brush removal/chop brush</u>												
<u>Tree removal</u>		X										
<u>Young tree care</u>			X	X	X	X	X	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					

<sup>a</sup>This 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 <sup>a</sup>	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>

<sup>a</sup>Proportion 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<sup>a</sup>

Item	Description	Dollars	
		Amount	Your cost
I.	Revenue		1,099.40
II.	Expenses <sup>c</sup>		
	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>
	Spray program (Table 1-A, Options #1, #3, #4 @ 2, #8 & #12)		200.07
	Fertilizer (Table 3-A, Option #2)		405.43
	Dolomite (Table 7-A, Option #1)		140.18
	Pruning (maintenance)		14.65
	Topping	$(\$275.00/\text{hr.} \div 10 \text{ A/hr.}) \div 2 \text{ yrs.}$	13.75
	Hedging	$(\$257.50/\text{hr.} \div 10 \text{ A/hr.}) \div 1.5 \text{ yrs.}$	17.17
	Removing/chop brush	$(\$8.99/\text{A} \div 1.5 \text{ yrs.})$	6.00
	Raise skirts of trees	$(\$14.00/\text{A} \div 2 \text{ yrs.})$	<u>7.00</u>
	Tree replacement and care	(1 through 3 years)	43.92
	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	49.65
	Microsprinkler irrigation (Table 7-A, Option #4)		134.90
	Drainage ditch annual cost (Table 7-A, Option #5)		166.17
	Total grove care expenses		<u>42.46</u>
			1,147.78
III.	Management		48.00
IV.	Total specified costs <sup>e</sup>		<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		
		325	375
		425	475
		525	525
	\$ On-tree price per box		
		3.54	3.06
		2.70	2.42
		2.19	2.19
	\$ Delivered-in price per pound solids for eliminations <sup>f</sup>		
		1.54	1.44
		1.36	1.30
		1.25	1.25

<sup>a</sup>Although 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).

<sup>b</sup>On-tree price per box is preliminary; assumes average of all methods of sale (fresh and processed).

<sup>c</sup>Assumes material custom applied; therefore, a 10 percent handling and supervision charge is added to material cost.

<sup>d</sup>Other 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.

<sup>e</sup>Other 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.

<sup>f</sup>Assumes 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 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 <sup>a</sup>	<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 <sup>a</sup>	<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>

<sup>a</sup> "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 <sup>a</sup>	Yield	Gross revenue	Total grove care expenses	Total specified costs <sup>c</sup>	Net return to land, trees, and ownership
----- Dollars -----						
2000-01	\$2.15	425 <sup>c</sup>	913.75	974.46	1,022.46	(108.71)
2001-02	\$1.95	417 <sup>d</sup>	813.15	1,008.77	1,056.77	(243.62)
2002-03	\$2.08	417 <sup>d</sup>	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 <sup>b</sup>	92 <sup>c</sup>	1,099.40	1,147.78	1,195.78	(96.38)

<sup>a</sup>On-tree prices for all sales methods as reported by the Florida Agricultural Statistics Service.

<sup>b</sup>Preliminary estimate by FASS for 2004-05 season.

<sup>c</sup>The severe drought affected yields for the 2001-02 season and three hurricanes in 2004 reduced yields by 78.5%.

<sup>d</sup>Increased tree loss due to citrus tristeza virus reduced yields.

<sup>e</sup>A 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 <sup>a</sup>	Adjusted on-tree price/box	Yield	Gross revenue	Total specified costs <sup>b</sup>	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)

<sup>a</sup>Producer 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.

<sup>b</sup>A 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<sup>a</sup>

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

<sup>a</sup>The 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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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>	=====

<sup>a</sup>With 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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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<sup>a</sup></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 Applied	Amount /Acre	Cost/Acre	Your Cost/Acre
(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 Applied	Amount /Acre	Cost/Acre	Your Cost/Acre
(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 Applied	Amount /Acre	Cost/Acre	Your Cost/Acre
(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 Applied	Amount /Acre	Cost/Acre	Your Cost/Acre
	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 Applied	Amount /Acre	Cost/Acre	Your Cost/Acre
(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 Applied	Amount /Acre	Cost/Acre	Your Cost/Acre
(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		Average	Comments
		Reported		Rate <sup>y</sup>	
<u>CULTIVATION AND EQUIPMENT:</u>					
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 <sup>z</sup> (Strip/Band–Single Boom)	Hour	30.00-	32.00	31.33	Plus materials
Herbicide <sup>z</sup> (Strip/Band–Single Boom)	Acre	13.00-	13.75	13.39	Plus materials; \$35.00/hour
Herbicide <sup>z</sup> (Strip/Band–Double Boom)	Acre	12.00-	14.00	12.75	Plus materials
Herbicide <sup>z</sup> (Chemical Mow)	Acre	2.50-	3.50	3.07	Plus materials
Temik <sup>z</sup>	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	
<u>SPRAYING:<sup>z</sup></u>					
<u>PTO AIR BLAST SPRAYER</u>					
1,000 Gallon Tank					
with Electronic Sensing					
		<u>Low</u>	<u>High</u>	<u>Average</u>	<u>500 Gallon Tank</u>
					<u>Average</u>
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				
<u>FERTILIZING:<sup>z</sup></u>					
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: <sup>z</sup> 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 <sup>2</sup>	Comments
<b>IRRIGATION:</b>					
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
<b>REMOVING TREES:</b>					
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			
<b>PRUNING:</b>					
<b>Hedging:</b>					
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) <sup>x</sup>	Hour	—	—	185.00	5 to 15 A/H bed tops only; add 25% for furrows only
<b>Topping:</b>					
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
<b>Removing Brush:</b>					
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	
<b>OTHER CUSTOM RATES:</b>					
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	
<b>Grove Management Charge/Month:</b>					
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

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

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

<sup>x</sup>Low 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)
<b>Herbicides:</b>			
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	
<b>Glyphosate:</b>			
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	
<b>Growth Regulators:</b>			
Citrus Fix	gal.	494.00	
Pro-Gibb 3.91%	20 oz. bottle	33.16	
Tree-Hold	gal.	79.17	
<b>Other Spray Materials:</b>			
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 <sub>Mg</sub>	ton	238.82	_____
17-4-17-2.4 <sub>Mg</sub>	ton	243.35	_____
16-0-16	ton	218.35	_____
16-0-16-4 <sub>Mg</sub>	ton	239.49	_____
16-2-16-3 <sub>Mg</sub>	ton	240.45	_____
15-2-15-2.4 <sub>Mg</sub>	ton	224.47	_____
12-2-12-2.4 <sub>Mg</sub>	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 <sub>3</sub> , 36% MgCO <sub>3</sub> )	ton	19.75	_____
Muriate of Potash (60% K <sub>2</sub> O)	ton	242.29	_____
Potassium Nitrate (14% N; 46% K <sub>2</sub> O)	ton	453.57	_____
Sul-Po-Mag (SPM--21.9% K <sub>2</sub> O)	ton	202.43	_____
Super Phosphate (20% P <sub>2</sub> O <sub>5</sub> )	ton	214.25	_____
Triple Superphosphate (48% P <sub>2</sub> O <sub>5</sub> )	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: <sup>1</sup> 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 <sup>2</sup>	850 - 1,500	1,000		
– without Well	525 - 1,200	700		
Drip – with Well <sup>2</sup>	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 Trees</u> <sup>3</sup>	----- 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 Trees</u> <sup>4</sup>	Solidset = \$5.00		Reset = \$6.30	

<sup>1</sup> Land cost will vary from one county to another as well as from one parcel to another.

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

<sup>3</sup> 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%.

<sup>4</sup> 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<sup>a</sup></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>

<sup>a</sup>Site 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, 2004-2005<sup>2</sup>

<b>Costs represent a mature (10+ years old) Indian River Grapefruit Grove.</b>	<b>Low Cost Processed Cultural Program One Year Alternative</b>	<b>Processed and Reduced Fresh Cost Cultural Program</b>	<b>Typical/Historical Fresh Fruit Cultural Program</b>
<b>PRODUCTION/CULTURAL COSTS:<sup>y</sup></b>			
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<sup>x</sup></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) <sup>w</sup>	13.75	13.75	13.75
Hedging (\$25.75/A ÷ 1.5 yrs) <sup>w</sup>	17.17	17.17	17.17
Chop/Mow Brush after Hedging (\$8.99/A ÷ 1.5 yrs) <sup>w</sup>	6.00	6.00	6.00
Raise Skirts of Trees (\$14.00/A ÷ 2 yrs) <sup>w</sup>	—	<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 <sup>v</sup>	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
<b>IRRIGATED PROCESSED FRUIT PRODUCTION COSTS</b>	<b><u>\$850.02</u></b>	<b><u>\$ 986.19</u></b>	
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>
<b>IRRIGATED FRESH FRUIT PRODUCTION COSTS</b>		<b><u>\$1,124.82</u></b>	<b><u>\$1,147.78</u></b>

<sup>y</sup>The 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.

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

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<sup>a</sup>

	Domestic Grapefruit	Export Grapefruit	Oranges	Temples/ Tangelos	Tangerines
	----- \$/Carton -----				
Total Packing Charge <sup>b</sup>	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

<sup>a</sup>Packing charges represents a total of nine citrus packinghouses from both the Indian River and Interior production regions.

<sup>b</sup>Total 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<sup>a</sup> for selected citrus varieties

Crop year	Variety						
	Early <sup>b</sup> and mid <sup>c</sup> -season oranges	Late season oranges <sup>d</sup>	Temple oranges	All		Seedless grapefruit <sup>e</sup>	
				Tangerines	Tangelos	(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 <sup>f</sup>	2.56	4.34	2.48	12.02	2.45	11.95	13.65

<sup>a</sup>On-tree average price per box (1-3/5 bushel box equivalent) for all methods of sale minus pick and haul charges.

<sup>b</sup>Navel and Hamlin    <sup>c</sup>Parson Brown and Pineapple    <sup>d</sup>Valencia    <sup>e</sup>Marsh (white) or pink    <sup>f</sup>Preliminary

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 <sup>a</sup>	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 <sup>a</sup>	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	8,688	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	

<sup>a</sup>Example. 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).