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**Summary of 2003-2004 Citrus Budget for the Central Florida (Ridge) Production Region**

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Annually, citrus budgets are tabulated for the Central, Southwest and Indian River citrus production regions of Florida. The attached budget costs are for the example grove situation described in the expanded citrus budget series titled: "Budgeting Costs and Returns for the Central Florida" region. The budget costs may not represent your particular grove situation. However, they represent the most current comparative cost estimates for Florida citrus. The budget costs items for **Central Florida** represent a **custom managed operation**.

The 2003-2004 comparative budgets are presented in three scenarios: 1) Low Cost Processed Cultural Program Alternative; 2) Processed/Reduced Fresh Cost Cultural Program; and 3) Typical/Historical Fresh Cultural Program. Scenario one represents a possible "one year" low cost alternative that would allow growers to provide a maintenance cultural program in a low on-tree price situation. Scenario two represents a typical processed orange cultural program and/or reduced cost fresh fruit program. The third scenario represents typical costs of grove practices which have been performed for citrus grown for the fresh fruit market.

Budget analysis provides the basis for many grower decisions. Budget analysis can be used to calculate potential profits from an operation, determine cash requirements for an operation and determine break-even prices. The budget costs presented will serve as a format for growers to analyze costs from their own individual records. The cost data was developed by surveying custom operators, suppliers, growers, colleagues with UF/IFAS and County Extension Citrus Agents in each production region.

Each budget lists the cost of individual grove care practices normally performed in a citrus grove. These costs are categorized into cumulative sub-totals of irrigated processed and irrigated fresh fruit program and reflecting current grove practices being used by growers. The estimated costs are for a mature 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. For example, extensive tree loss due to blight or tristeza could at least double, if not increase more, the tree replacement and care costs. Also, travel and set-up costs may vary due to the size of a citrus grove and the distance from the grove equipment barn. The mandatory decontamination requirements to control the spread of citrus canker add to the total operational costs. These costs are shown in the expanded "delivered-in" cost table.

Included with the budget summaries are estimated **"delivered-in"** costs for Central Florida Valencia oranges. The "delivered-in" costs represent cultural programs for both the processed juice fruit and fresh fruit markets. The estimated delivered-in costs include total cultural/production, management, regulatory and harvesting costs.

Additional information on budgeting and cost analysis can be obtained by contacting the author or your County Extension Agent or going to the Extension or Economics section of the EDIS website: http://edis.ifas.ufl.edu

Table 1. A listing of estimated comparative Central Florida (Ridge) citrus production costs per acre for 2003-2004[z]

| **Costs represent a mature (10+ years old) Central Florida (Ridge) Orange 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:[y] | | | | | | |
| Weed Management/Control: | | | | | | |
| Discing (2 times per year) | | $ 20.00 | | $ 20.00 | | $ 20.00 |
| Mechanical Mow Middles (4 times per year) | | 40.76 | | 40.76 | | 40.76 |
| General Grove Work (2 labor hours per acre) | | 26.56 | | 26.56 | | 26.56 |
| Herbicide (1/2 tree acre treated): | | | | | | |
| Application (6 glyphosate or 2 residual applications) | $84.06 | | $28.02 | | $28.02 | |
| Material | 48.48 | | 74.40 | | 74.40 | |
| Spot Treatment (Material/application) | — | | 15.31 | | 15.31 | |
| Total Herbicide Cost | | 132.54 | | 117.73 | | 117.73 |
| Spray: | | | | | | |
| Summer Oil #1 (Processed @ 125 GPA) or | | | | | | |
| Post Bloom (Fresh @ 150 GPA): | | | | | | |
| Application | — | | 22.95 | | 22.95 | |
| Material | — | | 60.42 | | 60.83 | |
| Total Summer Oil #1 or Post Bloom Cost | | — | | 83.37 | | 83.78 |
| Summer Oil #2: Application (PTO – 125 GPA) | 22.95 | | 22.95 | | 29.67 | |
| Material | 69.30[x] | | 29.42[w] | | 65.92 | |
| Total Summer Oil #2 Cost | | 92.25 | | 52.37 | | 95.59 |
| Supplemental Fall Miticide: | | | | | | |
| Application (PTO – 150 GPA) | — | | — | | 22.95 | |
| Material | — | | — | | 9.60 | |
| Total Supplemental Fall Miticide Cost | | — | | — | | 32.55 |
| Fertilizer (Bulk): 3 Applications | 26.04 | | 26.04 | | 26.04 | |
| Material (16-0-16-4 MgO @ 180 lbs N and 204 lbs N per acre) | 123.75 | | 140.25 | | 140.25 | |
| Total Fertilizer Cost | | 149.79 | | 166.29 | | 166.29 |
| Dolomite (one ton applied every 4 years) | | | | | | |
| Material/Application | | 9.74 | | 9.74 | | 9.74 |
| Pruning: Topping ($36.17/A ÷ 2.5 yrs)[v] | 14.47 | | 14.47 | | 14.47 | |
| Hedging ($33.88/A ÷ 2 yrs)[v] | 16.94 | | 16.94 | | 16.94 | |
| Chop/Mow Brush after Hedging ($8.92/A÷2 yrs)[v] | 4.46 | | 4.46 | | 4.46 | |
| Total Pruning Cost | | 35.87 | | 35.87 | | 35.87 |
| Tree Replacement--1 thru 3 years of age: (3 trees/acre) | | | | | | |
| Remove Trees: Pull, Stack & Burn 3 Trees with Front-end Loader | 14.22 | | 14.22 | | 14.22 | |
| Prepare Site & Plant Tree (Includes 3 reset trees) | — | | 26.82 | | 26.82 | |
| Supplemental Fertilizer, Tree Wraps Maintenance, Sprout, Etc. (Trees 1-3 years old) | 18.63 | | 28.38 | | 28.38 | |
| Total Tree Replacement Cost | | 32.85 | | 69.42 | | 69.42 |
| Irrigation: Microsprinkler System[u] | | 152.07 | | 152.07 | | 152.07 |
| IRRIGATED PROCESSED FRUIT PRODUCTION COSTS | | $692.43 | | $774.18 | | |
| Fall Miticide: Application (125 GPA) | | | 22.95 | | 22.95 | |
| Material | | | 31.36 | | 31.36 | |
| Total Fall Miticide Cost | | | | 54.31 | | 54.31 |
| IRRIGATED FRESH FRUIT PRODUCTION COSTS | | | | $828.49 | | $904.67 |

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

SOURCE: Ronald P. Muraro, University of Florida-IFAS, Citrus Research and Education Center, Lake Alfred, FL, August 2004.

[y]Central Florida production area refers to Polk and Highlands counties. However, the costs presented in this report are applicable to other counties such as Hardee, Hillsborough, Lake-Orange, Osceola and Pasco counties.

Where **equipment use** or **application** is listed (discing, hedging, spray application, etc.), an **average custom charge** (cost) is used which includes a charge for equipment repairs, maintenance, labor and overhead management charges/costs. A **management charge** for equipment supervision and fruit marketing is not included. Management charges/costs could be based on a monthly charge ($3-$4/acre) or percentage of gross sales. In addition to these charges, a harvesting supervision cost (10¢/box to 20¢/box) for overseeing and coordinating harvesting may be charged. 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 establishment.

Included in the materials expense is a supervision (or handling) charge of 10% of cost/price of the materials.

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, hedging and topping practices, etc. Therefore, the revised costs for each grove practice shown may be higher, or lower, than previously reported.

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 $15.31 per acre; Diaprepes control could add $73.20 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 of such as Temik ($122.22/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 grove equipment barn and could add $25.98 per acre; etc.

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[x]Spray materials include copper (Cu), oil, miticide and nutritionals.

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[w]Spray materials include copper (Cu), oil and nutritionals.

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[v]Per acre costs shown in parenthesis are for 2003.

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[u]Irrigation Expense includes the following:

| | Microsprinkler |
|---|---|
| Variable Operating Expense (Diesel) | $ 48.28* |
| Fixed-Variable Expense (annual maintenance repairs to system) | 47.23 |
| Total Cash Expenses | $ 95.51 |
| Fixed-Depreciation Expense | 56.56 |
| Total Cash and Fixed Expense | $152.07 |

*Reflects the higher fuels costs.

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Source: Ronald P. Muraro, Extension Farm Management Economist, University of Florida, IFAS, CREC, Lake Alfred, Florida, August 2004.

Table 2. Estimated total delivered-in cost for Central Florida (Ridge) Valencia oranges grown for the processed market under three cultural cost programs, 2003-04

| Represents a mature (10+ year old) Central Florida (Ridge) Orange Grove | Processed Valencia Orange Low Cost Cultural Program | | | Processed Valencia Orange Reduced Cost Cultural Program | | | Fresh/Processed Valencia Orange Historical Cost Cultural Program | | |
|---|---|---|---|---|---|---|---|---|---|
| | $/Acre | $/Box | $/P.S. | $/Acre | $/Box | $/P.S. | $/Acre | $/Box | $/P.S. |
| Total Production/Cultural Costs | $692.43 | $1.455 | $0.2204 | $774.18 | $1.626 | $0.2464 | $828.49 | $1.741 | $0.2637 |
| Interest on Operating (Cultural) Costs | 19.04 | 0.040 | 0.0061 | 21.29 | 0.045 | 0.0068 | 22.78 | 0.048 | 0.0073 |
| Management Costs | 48.00 | 0.101 | 0.0153 | 48.00 | 0.101 | 0.0153 | 48.00 | 0.101 | 0.0153 |
| Taxes/Regulatory Costs: | | | | | | | | | |
| Property Tax and Water Management Tax | 61.87 | 0.130 | 0.0197 | 61.87 | 0.130 | 0.0197 | 61.87 | 0.130 | 0.0197 |
| Canker Decontamination | 5.52 | 0.012 | 0.0018 | 5.52 | 0.012 | 0.0018 | 5.52 | 0.012 | 0.0018 |
| Total Direct Grower Costs | $826.86 | $1.737 | $0.2632 | $910.86 | $1.914 | $0.2899 | $966.66 | $2.031 | $0.3077 |
| Interest on Average Capital Investment Costs | 321.22 | 0.675 | 0.1022 | 321.22 | 0.675 | 0.1022 | 321.22 | 0.675 | 0.1022 |
| Total Grower Costs | $1,148.07 | $2.412 | $0.3654 | $1,232.07 | $2.588 | $0.3922 | $1,287.87 | $2.706 | $0.4099 |
| Harvesting Costs: | | | | | | | | | |
| Pick/Spot Pick, Roadside & Haul and Canker Decontamination | 1,042.44 | 2.190 | 0.3318 | 1,042.44 | 2.190 | 0.3318 | 1,042.44 | 2.190 | 0.3318 |
| DOC Assessment | 71.40 | 0.150 | 0.0227 | 71.40 | 0.150 | 0.0227 | 71.40 | 0.150 | 0.0227 |
| Total Harvesting and Assessment Costs | 1,113.84 | 2.340 | 0.3545 | 1,113.84 | 2.340 | 0.3545 | 1,113.84 | 2.340 | 0.3545 |
| Total Delivered-In Cost | $2,261.91 | $4.752 | $0.7200 | $2,345.91 | $4.928 | $0.7467 | $2,401.71 | $5.046 | $0.7645 |
| P.S. = Pound Solids<br>Yield: 476 Boxes/Acre @ 6.6 P.S./Box<br>112 Trees Per Acre | Refer to cultural program shown on Table 1.<br>Only summer oil sprays with oil, copper and Agri-mek & nutritionals. | | | Refer to cultural program shown in Table 1. | | | Refer to cultural program shown on Table 1.<br>A Fall Miticide Spray added to the cultural program shown in Table 1. | | |