

# *Fruit Growers of SWFL*



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NOVEMBER 2021



**Bonita Springs Tropical Fruit Club Meeting will be on  
Saturday, November 13 and November 27 at 4:30 pm.  
Location: Bonita Springs Fire Control & Rescue District Station  
27701 Bonita Grande Drive, Bonita Springs, FL 34135  
Both Events will be a Pot-Luck Dinner.  
Please bring a Dish or Dessert to Share.**

**Please always observe the wearing of masks and social distancing.  
Please remember to pay your 2022 renewal dues: \$15/ individual, \$25/ family.**

**Collier Fruit Growers' NEXT Meeting: Monday, November 15, 2021, at 7:00 pm.  
Life Center, Tree of Life Church  
2132 Shadowlawn Dr., Naples, FL 34112**

**Please practice social distancing. Wearing of masks at the participants discretion.  
Please remember that it is time to pay your \$15.00 renewal dues for 2022  
or risk not receiving the monthly newsletters.  
Please mail dues to: CFG, Inc. 1944 Piccadilly Circus, Naples, FL 34112.**



The November speaker will be Berto Silva who specializes in growing rare and unusual fruit trees. He grew up in the northeast portion of Brazil where he enjoyed the diverse types of fruits available in that region. During the past twenty-five years, Berto has experimented with growing rare fruit trees from all over the world, particularly those native to the Amazon basin and the Brazilian Atlantic Forest. Berto will discuss his experience with grafting various species of annonas onto pond apple (*Annona glabra*) and mountain soursop (*Annona montana*) rootstocks. Pond apple is well adapted to southern Florida and can withstand flooded conditions. Mountain soursop is a rootstock that is a bit cold hardy. After Berto's presentation, persons will have the opportunity of buying some fruit and rare fruit trees.

The UF/IFAC Extension Collier is sponsoring their annual 'Naples Home and Garden Show' at their facility, 14700 Immokalee Road, the weekend of November 13 & 14, 9 am to 4 pm. Club members of both organizations are asked to volunteer and help man the booth. Please come out and support this local cause. The Collier Fruit Growers are holding their semi-annual Fruit Tree Sale at Freedom Park on Golden Gate Parkway Saturday, November 20, from 9 am to 2 pm. Come right at 9 am for the best selection of trees. Volunteers are needed to help with the sale. - - - NO EARLY BIRDS. - - -

After nearly fifteen months of having to deal with COVID -19 we are all anxious for our lives to return to 'normal.' Memberships of both the Bonita Springs Tropical Fruit Club and the Collier Fruit Growers have significantly decreased during this time. Rebuilding interest and reevaluating the objectives of these and related organizations is 'Job One.' Interested persons are needed to service as Officers and Directors for both organizations.

Video recording of Crafton Cliff's many fruit related stories has been deemed a high priority. Volunteers are needed to record the videos of Crafton and post them on YouTube.

This issue of the 'Fruit Growers' newsletter is dedicated to the small local producers and farmers who typical sell their fruit at farmer markets, directly to individuals, and restaurants. Much help and assistance is available through the United States Department of Agriculture and University of Florida/ IFAS Extension Service.

Editor's Note: The prices and costs presented in the article entitled, "Economic Feasibility of Small-Scale Specialty Mango Production in South Florida" (Pages 7-9) may have been current at the time of its original publication in 2015. Readers should be aware that costs have increased by between 15 and 20 percent.



**Collier Fruit Growers, Inc.**  
**FRUIT TREE SALE**  
**Saturday, November 20, 2021**

**9:00am - 2:00pm**

**MANY VARIETIES, SIZES, AND  
PRICING TO MEET YOUR NEED  
AND BUDGET.**

**COME EARLY FOR THE BEST  
CHOICE BEFORE THE  
INVENTORY IS SOLD.**



**AT FREEDOM PARK  
1515 GOLDEN GATE PKWY.  
NAPLES, FL**

**UF** | IFAS Extension  
UNIVERSITY of FLORIDA

UF/IFAS Extension Collier County Master Gardener Volunteer

**Naples Yard and Garden Show**

**Saturday and Sunday, Nov. 13 & 14, 2021 | 9am - 4pm**

14700 Immokalee Road, Naples, FL 34120

**Huge Plant Sale**

**Adults \$5 - Under 12 free**

- Orchids
- Tropicals
- Palms
- Fruit Trees
- Native plants
- Butterfly Plants/Attractor
- Garden Art
- And much more

- @mgvcollier
- @NaplesYardAndGardenShow
- Pay in advance:

[naplesyardandgardenshow.eventbrite.com](https://www.naplesyardandgardenshow.eventbrite.com)

## BANANA CATSUP / BANANA CHUTNEY

Everyone loves bananas but when you have a whole stalk ripening at one time, you need to find a way to preserve them. Freezing them for use in baking or smoothies works well. Searching for other ways to preserve bananas led me to this recipe on [www.tropicalfruitforum.com](http://www.tropicalfruitforum.com). It was shared by "Treefrog" from Jefferson County, FL. It can be used as you would a condiment or chutney. It can be spicy, but you can adjust the heat to taste depending on the peppers that you use.

5 pounds peeled sliced bananas  
2 large onions, peeled and quartered  
1 bulb garlic separated and peeled  
1 dozen assorted hot/warm peppers cored  
2 heaping teaspoons ground turmeric  
2 heaping teaspoons ground allspice  
2 heaping teaspoons ground ginger  
2 heaping teaspoons West Indian style curry powder  
1 heaping teaspoon ground cloves  
4 cups distilled white vinegar 3 cups sugar  
1 pound raisins



Puree the onions, garlic, and peppers in a blender or food processor, and then combine all ingredients in a large pot (use one with thick walls, preferably enameled cast iron) and simmer, stirring frequently to prevent scorching on the bottom, until the bananas break down into a chutney-like consistency. Leave with a few lumps left for texture. Spoon into wide mouth pint mason jars and steam process for a half hour or freeze.

This recipe makes nine pints. Share it, too! BANANA CATSUP / BANANA CHUTNEY

## The Burds' Nest of Information This and That for November

### PERSIMMONS:

Take time to fertilize your persimmons with a balanced fertilizer, eg. preferably an organic 6-6-6 or 10-10-10. Do so even with fruit not yet harvested. Remember, Persimmons lose their leaves this time of the year. Keep applying the fertilizer LIGHTLY each month until the first new leaves start to push. STOP fertilizing (for this reason) once the leaves are pushing because further fertilizer will send a signal for no fruit to set or the set fruit to abort. TRIUMPH is our favorite Persimmon. It has good flavor and regular fruiting. There are many other good Persimmons, so you should test and try before you buy!



### MORINGA:

We are learning more and more about the health benefits of Moringa. It grows well here with the correct care. Propagation is by seed, cuttings, air layers. It can be grown successfully in a large pot or in the ground. Shape it as it grows: harvesting the top of the tree then it will bush out. In addition, the leaves, flowers, and pods will be easy to reach. The benefit of Moringa is for another month's newsletter. There are many good books about Moringa, too! Moringa prospers in well drained, sandy soil. (Moringa will stress and die in WET soil, also. Here in SWF, a young tree will probably die at 32F. A mature tree struggles at 28F. Moringa grows at a fast rate and needs to be pruned regularly. Fertilizer it when young a little Peters 20-20-20 (follow instructions) and a light sprinkle of cotton seed meal which is the only nutrition needed when mature because Moringa thrives in acid conditions.



# Fresh Citrus Fruit Training

The University of Florida is again making our usual Fresh Citrus Fruit Training program available via internet.

Companies can pick and choose what they specifically need from the following narrated modules:

- Food Safety
- Personal Hygiene
- CDC-Issued Guidance for COVID-19 in Agricultural Workplaces
- Worker Protection Standard (WPS) – Field Crews and Harvesters
- Chemical Hazards – Packinghouse Personnel
- Citrus Fruit Disease Identification (esp. Citrus Canker & Citrus Black Spot)
- Ladder Safety
- Tractor Safety

Upon successful completion, each participant will receive a Certificate of Attendance.

The cost is only \$3 per person total for as many modules as they wish to take, or a maximum of \$100 per company. Certificates and training kits (hand sanitizer, mask, educational materials, and more) will be sent via FedEx.

You can access the trainings at:

<https://crec.ifas.ufl.edu/trainings/fresh-fruit/>

**UF** | IFAS Extension  
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## 2021-22 Fresh Fruit Trainings

**TRAINING TEAM CONTACT INFORMATION**

Amir Dezasadeh (Questions & In-Person Scheduling) amir2558@ufl.edu 772-462-3660	Mark Ditenour mditenour@ufl.edu 772-577-7359
Jamie Burrow (Certificates/Technical Support) jburrow@ufl.edu 863-956-8648	Christine Kelly-Begato (Training Payment) ckellybe@ufl.edu 772-226-4330 x3



- Please note that the Safari browser may not work properly with the program on a desktop or mobile device. It is recommended to use desktop Google Chrome or Firefox browsers.
- You will need to be able to print, scan, and upload the sign in sheet to complete the training modules.
- The cost is \$3.00 per a person total for as many modules as they wish to complete, or a maximum of \$100 per company.
- Certificates and training kits (hand sanitizer, mask, educational materials, and more) will be sent via FedEx.

TRAININGS OFFERED IN ENGLISH AND SPANISH		
Agricultural Tractor Safety		
Ladder Safety		
Worker Health, Hygiene, and Training		
Overview of Food Safety for Fresh Citrus		
Identification of Citrus Diseases in the Packinghouse		
Chemical Hazards: Packinghouse Personnel		
Worker Protection Standard: Field Crews and Harvesters		
CDC-Issued Guidance for COVID-19 in Agricultural Workplaces		



Virtual trainings can be accessed at  
<https://crec.ifas.ufl.edu/trainings/fresh-fruit/>

# USDA - Pandemic Response and Safety Grant Program

Applications are now open until Nov. 22, 2021.

Pandemic Response and Safety Grant Program - usda ([grantsolutions.gov](https://grantsolutions.gov))

If you operate a small farm producing specialty crops whose annual revenue is less than \$1 million, run a farmers market, food hub, community supported agriculture (CSA) farm, a small food processing business or food manufacturing operation, you may be eligible for grant funding.

According to the USDA, the pandemic-related costs that are recoverable through this grant program relate to the following areas, and include estimating staff time to implement:

- **Workplace Safety:** Implementing workplace safety measures to protect against COVID-19 such as providing personal protective equipment, thermometers, cleaning supplies, sanitizers, hand washing stations, installation and purchase of air filters or new signage.
- **Market Pivots:** Implementing market pivots to protect against COVID-19. Though not exactly well-defined market pivot are related to cost of changing how you had to operate your enterprise to make it more COVID-19 safe including the staff time to implement these changes. For example, a farmers' market may have had to restructure their layout to ensure one-way traffic and improve social distancing.
- **Retrofitting Facilities:** Retrofitting facilities for worker and consumer safety to protect against COVID-19 such as installation and purchase of protective barriers, walk up windows, heat lamps/heaters, fans, tents, propane, weights, tables chairs and lighting.
- **Transportation:** Providing additional transportation options to maintain social distancing and worker and consumer safety to protect against COVID-19 such as securing additional transportation services for workers or establishing new delivery routed or distribution services. For instance, a food hub might have had to shift to delivering food directly to consumers rather than just having to have common distribution point.
- **Worker Housing:** Providing additional worker housing resources or services to maintain social distancing or to allow for quarantining of new or exposed employees.
- **Medical:** Providing health services to protect workers against COVID-19 including offering or enabling vaccinations, testing, or healthcare treatment of infected employees, including paid leave.

This is not a competitive grant program; grants will be awarded based on eligibility. Funding is not awarded on a first-come-first-serve basis, and the 45-day application period opened October 6.

Before applying, all applicants must obtain a Data Universal Number System (DUNS) number. This DUNS number will be required to receive this grant. More information on how to obtain a DUNS number, plus full eligibility criteria can be found at the USDA's website: <https://usda-prs.grantsolutions.gov/usda>

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# USDA Introduces New Insurance Policy for Farmers Who Sell Locally

WASHINGTON, Oct 6, 2021 – The U.S. Department of Agriculture (USDA) is rolling out a new insurance option specifically for agricultural producers with small farms who sell locally. The new Micro Farm policy simplifies record keeping and covers post-production costs like washing and value-added products.

USDA's Risk Management Agency (RMA) created this new policy based on research directed by the 2018 Farm Bill, and it includes feedback from producers who grow for their local communities. The policy will be available beginning with the 2022 crop year.

"We are excited to offer this new coverage for producers who work to provide their communities with fresh and healthy food," said RMA Acting Administrator Richard Flournoy. "USDA is focused on supporting local and regional food systems, and this new crop insurance policy is designed with this important sector of agriculture in mind."

The new policy is offered through Whole-Farm Revenue Protection (WFRP) and it has distinct provisions that can provide more access to the program, including:

- No expense or individual commodity reporting needed, simplifying the recordkeeping requirements for producers
- Revenue from post-production costs, such as washing and packaging commodities and value-added products, are considered allowable revenue.

The Micro Farm policy is available to producers who have a farm operation that earns an average allowable revenue of \$100,000 or less, or for carryover insureds, an average allowable revenue of \$125,000 or less. RMA's research showed that 85% of producers who sell locally reported they made less than \$75,000 in gross sales.

See the full report. [HERE](#)

The Micro Farm policy builds on other RMA efforts to better serve specialty and organic crop growers. This includes WFRP, which provides coverage for producers with larger operations that may not be eligible for Micro Farm. RMA recently made improvements to WFRP as part of a broader set of new policies and expanded policies to assist specialty crop and organic producers.

The Federal Crop Insurance Corporation approved the Micro Farm policy in late September, and additional details will be provided later this fall.

More Information Crop insurance is sold and delivered solely through private crop insurance agents. A list of crop insurance agents is available at all USDA Service Centers and online at the RMA Agent Locator. Learn more about crop insurance and the modern farm safety net at [rma.usda.gov](http://rma.usda.gov).

USDA touches the lives of all Americans each day in so many positive ways.

Read about it [HERE](#)

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# USDA - Organic Certification Cost Share Program

Organic producers and handlers can now apply for U.S. Department of Agriculture (USDA) funds to assist with the cost of receiving or maintaining organic certification.

Applications for the Organic Certification Cost Share Program (OCCSP) are due Nov. 1, 2021.

OCCSP provides cost-share assistance to producers and handlers of agricultural products for the costs of obtaining or maintaining organic certification under the USDA's National Organic Program. Eligible producers include any certified producers or handlers who have paid organic certification fees to a USDA-accredited certifying agent during the 2021 and any subsequent program year.

Producers can be reimbursed for expenses made between Oct. 1, 2020, and Sept. 30, 2021, including application fees, inspection costs, fees related to equivalency agreement and arrangement requirements, travel expenses for inspectors, user fees, sales assessments and postage.

For 2021, OCCSP will reimburse 50% of a certified operation's allowable certification costs, up to a maximum of \$500 for each of the following categories (or "scopes"):

- crops
- wild crops
- livestock
- processing/handling
- State organic program fees
- Organic farmers and ranchers may apply through an FSA county office or a participating state agency.

This funding will be complemented by an additional \$20 million for organic and transitioning producers through the Pandemic Assistance for Producers initiative. More information on that funding will be available in the coming weeks.

To learn more about organic certification cost share, please visit the OCCSP webpage, visit [usda.gov/organic](https://usda.gov/organic), or contact your local USDA Service scale farmers, food processors or distributors, or farmers markets financially impacted by Covid-19 can now apply for up to \$20,000 to recover costs related to the pandemic. Center: USDA Service Center Locator  
USDA is an equal opportunity provider, employer and lender.

USDA Accepting Applications to Help Cover Costs for Organic Certification

## Special Thanks

A big thank you to Dr. Stephen Brady, Dr. Noris Ledesma, and Mario Lozano for their help in making the Mango Grafting Class a big success. Feedback from many of the class participants was very positive and the information meaningful.

## Fruit that Ripens in November

Atemoya, avocado, banana, black sapote, canistel, carambola, carissa, coconut, dragon fruit, fig, jackfruit, miracle fruit, monstera, orange, Otaheite Gooseberry, papaya, passion fruit, peanut butter fruit, pomegranate, soursop, strawberry tree, sugar apple.

Annual Fruits: Eggplant, winter squash (Cushaw/Seminole pumpkin), pigeon pea, bell pepper, tomatoes.





## Economic Feasibility of Small-Scale Specialty Mango Production in South Florida

NORIS LEDESMA\*

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Additional index words. niche market, estate agriculture, cultivar, *Mangifera indica*

The local food movement and sustainable food production are gaining considerable interest in south Florida. Both of these innovative approaches to local farming warrant taking another look at mango production in South Florida. This research provides information that may aid farmers in the decision to invest in specialty mango production in South Florida. The primary objective of this study was to determine the potential profitability of a 1- to 2-acre small-scale specialty mango grove in south Florida. Data on production, costs, and returns were collected from Mumbai Farm, a private mango farm in south Florida. The grove consists of 1.5 acres, and it has not been used for agricultural activities during the past 20 years, providing the opportunity to quickly certify it as an organic grove. The project includes budgets, market observations, horticultural practices, and new mango cultivars for niche markets. It was assumed that the farmer would market their production via local markets and specialty wholesale.

The mango industry started in Florida more than 100 years ago. Today, mango is grown primarily in south Florida. In 2013, Florida's mango acreage was located in Miami-Dade County with 600 acres, concentrated between May to September. The remainder of mango acreage is located in Lee, Palm Beach, and other counties with an appropriate climate. (J.H. Crane, TREC, 2013).

Farms in Dade County are a mix of urban and rural locations, with size ranging from 1/4 of an acre to almost 30 acres. Farming experience of growers varies greatly. Some are very experienced in growing other crops and are diversifying into avocado, longan, mamey sapote, guava, others. They are others have no prior experience with farming. The smallest farms are usually growers' backyards that have been turned over to their farming efforts.

The mango continues to grow in importance in the local market due to interest in the local food movement and the poor quality of imported mangos. These have led to an interest in new mango plantings in Dade County. For small-scale specialty mango production in south Florida, growers have to be actively seeking alternative markets to increase their profitability.

The current status of the commercial local market, with regard to cultivars, is a predominance of 'Tommy Atkins', 'Keitt' and 'Haden'. There is no consensus within the industry in regard to new mango cultivars for the local market. The adoption of new cultivars will depend on the ability of the consumer to differentiate them in the marketplace; that is, a new cultivar must be readily distinguishable from imported mangos such as 'Tommy Atkins', 'Átaulfo', 'Kent', and 'Keitt' (Campbell and Ledesma, 2006).

The tropical fruit program at Fairchild Tropical Botanic Garden has been active in the selection of mango cultivars that can serve multiple roles for estate agriculture and niche commercial markets. These cultivars generally have a small tree size, favorable horticultural traits, disease tolerance, and excellent fruit quality.

They also have specific appeal with different ethnic groups in local markets (Campbell and Ledesma, 2004).

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**LAND PREPARATION.** First step was to remove existing shrubs and trees. Available organic material was allowed to decompose and was ground prior to being incorporated into the soil. The soils of Mumbai Farm are calcareous, which is typical for Miami-Dade County. A scarifying front-mounted plow on a large bulldozer crushed the oolitic limestone bedrock to a depth of 2 inches, mixing it with the organic material described above. Even after this operation, the scarified soil was not deep enough to grow mangos. To plant the trees, parallel holes were dug using a backhoe. Each hole had to be 3–4 times the diameter and 3 times deeper than the original mango tree container.

**IRRIGATION.** Winter temperatures, even in south Florida, are frequently low enough to cause cold injury, especially in young mango trees. Young trees may be killed at temperatures from 29 °F to 30 °F, while small fruit and flowers can be severely damaged by even a few hours at 40 °F (Crane et al., 2003). A micro aspersion irrigation system for cold protection was installed.

**PLANTING.** Mango trees were planted ~13 feet apart within rows with 19.75 feet between rows. Consequently, a mature stand would have about 170 trees per acre.

The cultivars 'Mallika', 'Nam Doc Mai #4', 'Angie', 'Yumbo Kesar', and 'Mumbai' were selected for the current study. Their characteristics are described below:

'Mallika' is a hybrid between Neelum and Dasher, and is considered among the best of the new generation of Indian dessert mangos. The tree is semi-dwarf, making it attractive to mango growers outside of India, who are always looking for new niche markets around the world. The bright yellow fruit have a flattened

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oblong shape, with a rounded base and an irregular, non-waxy skin. The fruit weigh from 10–18 oz. When properly ripened, the pasty, but completely fiber-free flesh is a deep orange, with an intensely sweet, rich and highly aromatic flavor. Mallika fruit are harvested mature-green, before they break color on the tree and should be stored at a temperature of not less than 70 °F for 2–3 weeks for proper ripening. In this manner their ultimate eating quality will be achieved. The fruit can be refrigerated after it is completely ripe, but not before.

‘Nam Doc Mai #4’ is among the best dessert mangos from Thailand, with an exceptional appearance and eating quality. The fruit are long, slender and sigmoid, weighing from 12–16 oz. The ripe fruit range from a greenish- to canary-yellow and only rarely have a reddish blush on the sun-exposed shoulder. The flesh is soft and juicy, with a sweet and aromatic flavor. ‘Nam Doc Mai #4’ has better performance in south Florida and the tropics than in colder areas. In Thailand and throughout much of Asia, it encompasses what is most desired in terms of versatility and quality. While mature green, it is eaten raw and dipped in sauces. Mature green fruit are also used for making sweet preserves and pickles. When ripe, the fruit have a smooth, silky texture, a nice bouquet and are extremely sweet.

‘Angie’ was selected for home garden and estate agriculture in south Florida due to its compact growth habit, disease tolerance and overall fruit quality. The fruit are 400 g, oblong and saffron yellow with a classic Indian mango’s orange blush on the sun-exposed shoulders. The skin is smooth and has no visible lenticels. The flesh is tangerine orange and fiber free. The flavor is classified in the ‘Alphonso’ class of mangos with a rich sweetness and sophisticated profile like an apricot. It has excellent disease tolerance and, since it is an early season cultivar, it often can be harvested before the rainy season in south Florida. The tree is semi-dwarf and highly manageable with annual pruning. Size can be maintained at or below ~9 feet with consistent production.

‘Yumbo Kesar’ is from the Talala and Gir area of Gujarat, India. The fruit are large, averaging 10.5 to 14 ounces. They are oblique-oblong, have a green skin with rich saffron color flesh with no fiber. ‘Yumbo Kesar’ makes a good table fruit with its sweet taste and aroma. As with most other fine dessert mangos from India, ‘Yumbo Kesar’ is best harvested while hard-green and ripened at room temperature. In this manner one can expect an exceptional, multi-leveled flavor, from deep and resinous to the intensely sweet. The fruit are uncommon outside of India due to the green skin color.

‘Mumbai’ most likely originated from seeds from India. The fruit range from 10–12 oz and are a deep green color when fully ripe. When exposed to the sun they often develop a red shoulder. The skin is smooth, and the flesh is a deep orange, melting and juicy with little fiber. The flavor is rich and spicy, reminiscent of the finest of the Indian dessert types of mango. The fruit can be deeply scored around the middle and twisted to separate. The sweet, delectable flesh in the two halves can then be spooned out, leaving only the stone and the skin. ‘Mumbai’ has the potential to be a hit for specialty markets in the European Union (EU).

### Production Costs

Table 1. illustrates a sample budget, including: land preparation, orchard layout, planting, hole preparation, irrigation, fertilization, weed control, tree care and pruning, pest control, and miscellaneous. Fixed costs include: taxes, insurance and overhead expenses. The most farmers own their own land.

Table 1. Operating Annual Cost (Year 1 to 5).

6 x 3.5 m, density = 75 kilo/tree; 170 trees/acre	(\$/acre)
<b>Operating Cost Year 1</b>	
Tree Removal & Site Preparation	3500
Trees (2 gall)	2025
Holes	1200
Irrigation	5000
Fertilizers	100
Mow Middles, weeding by hand around trees	2500
*Grove Work & Hand Labor Pruning and shaping	00
Total Operating Cost year 1	12,188
<b>Fixed Costs (Year 1 to 5)</b>	
Overhead Taxes, insurance	750
Utilities	600
Total Fixed Costs/year	1350
<b>Operating Cost Year/year (Year 2 to 5)</b>	
Fertilizers	300
Mow Middles, weeding by hand around trees	2500
Grove Work & Hand Labor Pruning and shaping	00
Preharvest Cost	2800
<b>Harvest and Marketing Cost</b>	
Sales Charge @ 10% F.O.B Price	700
Pick & Pack	4000
Total Harvest and Marketing Cost	7700
Total Cost Year 1	13,538
Total Cost Year 2	4150
Total Cost Year 3	4150
Total Cost Year 4	4150
Total Cost Year 5	10,500
<b>Total Cost for 5 Years of Production</b>	<b>36,420</b>

Materials for the first year include trees at \$15.00 per tree, electricity for irrigation system, miscellaneous parts and supplies. The largest item in the first year, of course, is the purchase of 100 trees.

Harvesting and marketing costs are added to production costs. The main contributor to the harvesting and marketing costs is the cost associated with picking, and packing, including the cost of packing material. Together they account for 85% of the harvest and marketing costs and as much as 60% of the overall cost to produce and market mangos. The high harvest and marketing costs are due to mango harvesting methods and federal regulations (National Mango Board). Because the fruit is easily bruised and scratched, mangos are hand-picked, which makes harvesting a highly labor-intensive operation. The Mango Promotion, Research, and Information Order; Referendum Order is aimed at increasing grower returns by promoting orderly marketing conditions while at the same time ensuring consumer satisfaction.

Total preharvest and operating costs totaled \$2800 and fixed costs were estimated at \$1350 per acre, while total harvest and marketing costs were \$7700. The cost of production for year one requires an investment for \$13,538. The cost of production decreases following and subsequent years to \$4500.

### Profitability Analysis

The primary objective of this analysis is to determine the expected profitability of small scale table mango production in

Table 2. Assumptions about Markets &amp; Revenues.

Market share of yield revenue/pound		
Farmers Market (full price)	18.75%	\$2.00
Farmers Market (reduced price)	5.00%	\$1.50
Wholesale Market (full price)	37.50%	\$1.25
Wholesale Market (reduced price)	10.00%	\$0.75
Waste or lost yield	5.00%	\$0.00

south Florida. The analysis assumed a one acre family run grove producing specialty mangos, a 20-year horizon with no yield until the fifth year, and trees reaching full production in the seventh year. It is assumed that the family investor seeks to maximize wealth and that the specialty mangos will be sold through farmers markets, restaurants, chefs, and wholesale markets.

Currently, average yield is estimated at about 10,500 pounds per acre with average of production 165 pounds/tree. Single trees can produce between 220 and 330 pounds in years with heavy crop years. The projection shows that the production will increase after year 7 (Table 3). Assuming the production will increase from 165 pounds/tree by year five to 220 pounds/tree by year seven.

The analysis considers the assumption of actual prices per pound in farmer's markets vs wholesale (Table 2).

With a pack-out rate of about 90%, the quantity of saleable mangos is estimated at 9450 pounds per acre. Assuming an F.O.B. premium price of \$2.00 per pound the gross revenue is calculated at \$15,723 per acre. Subtracting the total cost of production and marketing by year five, it (\$36,420) gives a net return to the growers of about \$20,687 per acre in year 5. By year 7, the returns will be positive and the grower's investment will be recovered. (Table 3).

The return appears more favorable in the following years. Even so it is a short-term strategy that is insufficient for maintaining a full-time operation. It easily can be assumed that growers remain in the industry for land speculation and more than likely than not have other sources of income.

### Data and Methods

Production relationships, costs, and returns data came from both primary and secondary sources. Primary data was obtained from a grove demonstration in Homestead, Florida. Secondary data was from published enterprise budgets and other literature, as well as market observations.

Annual pro-forma budgets were estimated for a 20-year planning horizon. It was assumed that the mango grove does not yield until the third year and that full production begins in the sixth year and continues through the 20th year. It was assumed that the final product will be marketed via local farmers markets, chefs and wholesale markets. The investor is assumed to have a goal of wealth maximization. The net present value (NPV) method was used to help determine the profitability of this type of operation.

Development of the enterprise budgets based upon the assumptions of the study, experience from the demonstration mango grove, and input from horticulturists, other professionals and market observations. Revenues can be influenced by yield,

Table 3. Gross Returns

REVENUE (year 5)			
Yield (pounds/acre)		(10,500 pounds/acre)	
Restaurants (full price)	38.00%	\$2.00	\$7980.00
Farmers Market (full price)	10.00%	\$2.00	\$2100.00
Farmers Market (reduced price)	5.00%	\$1.50	\$787.50
Wholesale Market (full price)	37.00%	\$1.25	\$4856.30
Losses	10.00%	\$0.05	\$0.00
Total Revenue Year 5			\$15,723.80 \$15,723.80
Total Revenue Year 6			\$15,723.80 \$31,447.60
REVENUE (year 7)			
Yield (pounds/acre)		220 pounds/tree	
		(17,000 pounds/acre)	\$25,457.58
Total Revenue Year 7			\$25,457.58 \$56,905.18
Total Revenue Year 8 to 20			\$25,457.58 per year

markets, and product prices. The research assumed that the mango operation would have no yield in years 1 to 5.

### Other Remarks

The Florida mango season runs from late June through September. Most of the state's commercial mango groves are found in Miami-Dade County, in the agricultural communities of Homestead and the Redland. To keep the industry viable, Florida growers can become even more creative by experimenting with new products and exploring new markets. Early cultivars can start the season in May. These cultivars include 'Mallika', 'Nam Doc Mai #4', and 'Angie', are generally small in tree size, have considerable disease tolerance and have fruit with excellent quality. They also have specific appeal with distinct ethnic groups.

The future of the mango industry depends at least in part on the selection, testing and adoption of new cultivars that can differentiate themselves in terms of eating quality and horticultural traits. Finding new cultivars and targeting new niches with an opportunity to increase profits is the one of the challenges facing small-scale producers.

The interest in farmers' markets has been increasing in south Florida during the last decade, bringing a greater demand for locally grown produce. Restaurants have much greater flexibility adapting their menus to accommodate seasonal availability of local produce than grocery stores and fast-food chains. Seasonal cooking has really come into style with the local food movement. The direct-from-farm sales model: Local growers favor setting up their own distribution channels

### Literature Cited

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- Crane, J.H. 2013. Estimated commercial subtropical and tropical fruit crop acreage in Florida, Data compiled by the University of Florida/IFAS, Tropical Research and Education Center, Homestead, FL, 2012-13.
- Crane, Jonathan H., Carlos F. Balerdi and Ian Maguire. 2003. Mango growing in the Florida home landscape. Univ. Fla. EDIS HS2/MG216. <https://edis.ifas.ufl.edu/mg216>





# Bonita Springs Tropical Fruit Club



## Who We Are & What We Do

The Bonita Springs Tropical Fruit Club, Inc., is an educational not-for-profit organization whose purpose is to inform, educate and advise members and the public in the selection of plants and trees, to encourage their cultivation, and to provide a social forum where members can freely exchange plant material and information. The club cooperates with many organizations, and provides a basis for producing new cultivars. We function in any legal manner to further the above stated aims.

### General Meeting:

The General Meetings will be held on the second Saturday of each month starting at 4:30 pm. The Meetings will be pot luck dinners at the Bonita Springs Fire Control & Rescue District Station at 27701 Bonita Grande Drive, Bonita Springs, FL Please bring a dish to share.

### Workshops:

Workshops will be held on the fourth Saturday of each month starting at 4:30 pm. at the Bonita Springs Fire Control & Rescue District Station at 27701 Bonita Grande Drive, Bonita Springs, FL and will be pot luck dinners.. Please bring a dish to share. This open format encourages discussion and sharing of fruits, plants, seeds, leaves, insects, photos, recipes, etc. This is a great chance to receive answers to specific questions.

### Tree Sales:

Semi-annual tree sales in JUNE and June, in the Bonita Springs area, raise revenue for educational programs for club members and other related purposes of the club.

### Trips:

The club occasionally organizes trips and tours of other organizations that share our interests. The IFAS Experimental Station and the Fairchild Nursery Farm are examples of our recent excursions.

### Membership:

Dues are \$15 per person for new members, and \$25 per household. Name tags are \$6 each. Send checks to: PO Box 367791, Bonita Springs, FL 34136, or bring to any regularly scheduled meeting.



# Bonita Springs Tropical Fruit Club



Feel free to join BSTFC on our **Facebook group**, where you can post pictures of your plants, ask advice, and find out about upcoming events!

<https://www.facebook.com/groups/BSTFC/>

Link to the **next meeting**: <https://www.facebook.com/groups/BSTFC/events/Meetup> Link (events/meetings sync with the calendar on your phone!):

<https://www.meetup.com/Bonita-Springs-Tropical-Fruit-Club/>

Our **Website** (and newsletters with tons of info):

<https://www.BonitaSpringsTropicalFruitClub.com/>

#### Officers and Board of Directors:

Jorge Sanchez, President  
Luis Garrido, Vice President  
Dwain Kiddo, Treasurer  
Talitha DeLuco, Secretary  
Crafton Clift, Director  
Lisa Mesmer, Director  
George Kaladiny, Director



**Like Us on Facebook!** <https://www.facebook.com/groups/BSTFC/>

## 2021 CFG BOARD OF DIRECTORS

The Collier Fruit Growers Inc. (CFG) is an active organization dedicated to inform, educate and advise its members as well as the public, as to the propagation of the many varieties of fruits that can be grown in Collier County. The CFG is also actively engaged in the distribution of the many commonly grown fruits, as well as the rare tropical and subtropical fruits grown throughout the world. CFG encourages its members to extend their cultivation by providing a basis for researching and producing new cultivars and hybrids, whenever possible. CFG functions without regard to race, color or national origin.

### REMEMBER TO RENEW YOUR MEMBERSHIP!

#### OFFICERS:

President, Rodger Taylor - 239-384-9630  
Bonnie Hawkins, Vice President  
Melissa Parsons, Treasurer  
Lisa Hare, Secretary

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