



The Fruit Growers of Southwest Florida

MAY 2019



The next Bonita Springs Tropical Fruit Club speaker will be Denise S. Houghtaling at the May 14 meeting. Denise has been a resident of Lee County since 1973. She and to her husband, Mark, have raised 7 daughters and 8 grandchildren. Denise attended Barry University and started her career early in construction and real estate. She and her family started MW Horticulture Recycling (HWHR) over 6 years ago. MW horticulture Organic Compost (MWHOR) is US Compost Certified through the STA program. MWHOR Organic Compost is OMRI Listed. OMRI (Organic Materials Review Institute) that determine if product quality as organic under the USDA's National Organic Program (NOP). MWHOR is also the only organic compost from plant-based feedstock in the state of Florida. They saw an

opportunity to turn a defunct mulch yard into a successful organic compost and mulch recycling facility. MWHR is the largest horticulture recycling facility in Lee County, handling approximately 80% of Lee County's horticulture debris. They are developing additional recycling facilities in the surrounding counties in Southwest Florida. Denise is an active member of many state and national organizations, including US Composting Council and FRT (Florida Recycle Today), where she currently serves on the Organics Committee.

Denise is an instructor for the Green Industries Best Management Practices (GI-BMP) through University of Florida / IFAS Extension and Florida Department of Environmental Protection.

Bonita Springs Tropical Fruit Club Meeting: TUESDAY, May 14th. The tasting table is at 6:15 pm. The meeting begins at 7:00 pm. First United Methodist Church, 27690 Shriver Ave, Bonita Springs, FL

Meetings are held every 2nd & 4th Tuesday of the month.



Our May 21st, speaker will be Dr. Stephen Brady who is well known as a local authority on fruit growing and nationally known as a world fruit hunter. He is closely affiliated with the Naples Botanical Garden. Since planting his first mango tree as a child, Dr. Brady has had a passion for growing tropical fruits. A retired physician with an undergraduate degree in Botany, Stephen has a collection of approximately 600 fruit trees and 300 coffee trees surrounding his Naples home. He is one of several local fruit enthusiasts featured in the 2012 documentary 'The Fruit Hunters,"

which follows the search for exotic cultivars by preservationists around the world. Stephen will speak on popular fruit varieties of the Annona species, which are suited to our Southwest Florida climate.

Collier Fruit Growers Meeting: TUESDAY, May 21st.
The tasting table starts at 7:00 pm. The meeting starts at 7:30 pm at the Tree of Life Church, Life Center,
2132 Shadowlawn Dr., Naples, FL

RECIPE OF THE MONTH:

Jackfruit is an excellent vegan meat substitute. This recipe, from Whole Foods Market, uses the jackfruit as the main ingredient in a rice bowl. It is spicy but you can tone down the heat to your liking.



recipe:

SPICY JACKFRUIT RICE BOWL



2 teaspoons cooking oil

1 medium white onion, diced, divided

4 cups seeded and diced fresh jackfruit (use pods and core, discarding skin and seeds)

1 serrano chile or jalapeño pepper, diced (leave seeds in)

1 1/2 teaspoon chili powder

1 teaspoon fine sea salt

Juice of 1 orange

2 cups cooked brown rice 1/2 cup chopped fresh cilantro

Lime wedges for serving



Heat oil in a large skillet over medium heat. Set aside 1/3 cup chopped onion for garnish; add remaining onion to skillet and cook, stirring, until golden brown, about 6 minutes. Add jackfruit, serrano, chili powder and salt. Cook, stirring, for 1 minute. Add orange juice, cover and simmer, stirring frequently, until jackfruit is tender and some pieces begin to fall apart, 20 to 30 minutes; add water 1/4 cup at a time if mixture gets too dry.

Divide rice among 4 bowls. Top with jackfruit, reserved onion and cilantro and serve with lime wedges.

Growing *Theobroma* [Cacao] in Florida By: Micah Bishop, DVM, PhD, DACVIM BSTFC Treasurer, CFG Director

Theobroma is a genus in the family Malvacea of flowering plants which includes other commonly grown commercial plants including cotton, hibiscus/okra, and durian. Theobroma is primarily grown for the production of chocolate but also contains the alkaloid theobromine which is used in medicine as a bronchodilator in respiratory disease such as COPD and asthma (although it is now made synthetically). Theobromine is also the common break down product of caffeine, such as in coffee, tea (Camellia sinensis), and soda, and acts as a stimulant.

The primary species, *Theobroma cacao* was initially thought to have been grown commercially by the Mayans. The recipe for xocoati was introduced to Spain by Cortes in 1528 and after discovering that sugar improved the drink, cacao became a driving force for colonization in the new world by the Spanish. Initial growing took place in Trinidad and Hispanola but more success was found in Ecuador. The French, Dutch and English eventually brought cacao production to the rest of the West Indies. However, today the large production of cacao and subsequently cocoa comes from Côte d'Ivoire, Ghana and Indonesia. The global market for cacao production is a multibillion dollar industry and in 2017-2019, 4.6 million tons of cacao was produced. Cacao is a true tropical and mostly produced between 10°N & 10°S of the Equator. This makes cacao growing in Florida marginal at best. Optimal temps are 65-90°F with damage, death and defoliation occurring below 50°F. Practically, my personal observation reveals defoliation at prolonged temps of 48°F and below, but I have seen plants come back after suffering near freezing weather. The small seedlings are particularly sensitive and should be protected or brought indoors if the temps are below 55°F.

Cacao are small trees (up to about 20 – 30 feet; often shorter in Florida) and prefer to grow under light shade and under the canopy of taller trees. Here in Florida, a live oak makes a good place to plant but it should be away from the trunk, so the cacao receives about 25% shade when fully grown. Young seedlings may need protection until larger (70% shade) and will perish in full sun.

Cacao is originally from the South American tropical rainforest. Thus, plants enjoy being evenly damp throughout the year and never really want to dry out. In fact, they are well known for losing fruit if drought occurs during the early fruit development. They can take some flooding as well but prolonged time in standing water can lead to fungal disease and defoliation.



Figure 1 is a picture of a typical Florida cacao tree, post winter. This picture was taken at the Naples Botanical Garden in March 2019.

Cacao don't enjoy our sandy Florida soil so improving the soil prior to planting or planting on raised mounds may aid in success. Trees are also not reported to be wind tolerant, but I can't say I have seen a full-grown cacao tree take a hurricane to know how it will fair.

Young plants benefit from small frequent amounts of a 10-10-10 fertilizer, and every other month, foliar application of minor nutrient spray (citrus spray). Similar to other rainforest plants, these trees are fairly heavy feeders and appreciate compost application.

Cacao is a long-lived tree and are considered productive for up to 60 years. Once a tree is old enough, cacao can produce all year long with the unusual characteristic of having both numerous flowers and fruit on the tree at the same time. Cacao is cauliflorous, similar to jackfruit and papaya. Pollination of flowers occurs naturally by small midges but even in the natural conditions, pollination rarely occurs (3/1000 become fruit). Flowers are both male and female however most varieties are not self-compatible so more than one tree is needed. Flowers only last about 24 hours in Florida thus frequently hand pollination will likely be needed to set a reasonable number of fruits. Pods can take 4-5 months to get to size and then another month to ripen (**Figure 2**).



Figure 2: Unripe cacao pods at the Fruit & Spice Park. March 2019

Determining ripeness of cacao is usually by assessing full development of ridges - when scraped, they are no longer green. However, like other fruit, individual varieties may vary. Trial and error are usually needed as the tree will not drop ripe fruit. Choosing cacao to grow in Florida is extremely challenging due to lack of labeling of varieties. Plants are commonly propagated from rooted cuttings, but these should ideally be avoided as they, unlike seedlings or grafted plants, will not produce good tap roots. A good tap root would be essential in Florida for more access to our low water table for this hydrophilic tree.

There are three main varieties of cacao with many individual clones within each group, however these are very difficult to distinguish, and I have only seen them labeled by one vendor in Florida. The three groups are Criollo, Forastero, and a hybrid of the two – Trinitario (obviously developed in Trinidad, West Indies). Forastero is considered more hardy and easier to grow than Criollo, and chocolate from this variety makes up the majority of commercial production. Criollo is reported to produce a finer chocolate but is more challenging to grow and set enough fruit. Trinitario combines the best of both and would be a good recommendation for a Florida grower. There is a variety of Forastero called Amelonado which would be another good tree to grow here as it is reported to be self-fertile. There are two



other species of *Theobroma* grown – *Theobroma bicolor* (white cacao) and *Theobroma grandiflorum* (copaoasu). I currently grow white cacao and find it to behave similarly to the regular cacao, although the leaves are different and more rounded. The white cacao nibs are considered a "super food", traditionally eaten out of hand, made into ice cream, or mixed with achiote and sugar to make a dessert.

If you are lucky enough to get a few pods, then you can attempt to make your own chocolate. It is a multi-step process that requires several pieces of equipment to make it worth your time. Initially, the pods must be opened, and the beans allowed to ferment for several days in a warm location (over 105°F). Beans are dried in the sun then either roasted whole or deshelled (by manual means or via a larger grinder) and then roasted. The roasted beans are ground again, and the chocolate liquor extract is mixed with sugar and then further ground to make it smooth. The following link provides a good YouTube video made by a homesteader using small scale equipment and will give you a good idea on the process: https://youtu.be/5cFhx myB0Q Needless to say, any chocolate you produce will be well earned. The video nicely also shows you a way to make cacao juice from the ferment, which is actually quite tasty.

Note: You may be confused about the difference between cacao and cocoa. Cacao is the species name and the unprocessed beans. Cacao becomes cocoa although both terms are often used interchangeably.

References & Recommended Reading

Crane JH, Balerdi CF, Joyner JE: Cocoa Growing in the Florida Home Landscape 2016. https://edis.ifas.ufl.edu/pdffiles/HS/HS30700.pdf

Cocoa Research Centre – Trinidad, The University of the West Indies https://sta.uwi.edu/cru/

Cocao Statistics https://www.statista.com/statistics/262620/global-cocoa-production/ International Cocoa Organization https://www.icco.org/about-cocoa/growing-cocoa.html

The Cocao Tree http://xocoatl.org/tree.htm

Top Tropicals Website https://toptropicals.com/catalog/uid/Theobroma-bicolor.htm



Bananas at the Centennial Exposition

Bananas originated most likely in Malaysia, spread to the Indian valley and were cultivated by the Chinese. War spread them to northern Africa, where the crop crossed with several native species and split off into many varieties. Portuguese explorers brought bananas from Africa to Europe somewhere around the 16th century, where they were cultivated and domesticated for human consumption. In America, however, the banana would remain virtually unknown until its introduction at the 'Centennial Exposition' (World's Fair) in Philadelphia. On June 5, 1876 the exotic yellow fruit was introduced to visitors of 'Horticultural Hall' at the Fair.





"The orange and lemon trees, with their rich golden fruit, the camphor tree, with its luxuriant growth of sharply cut leaves, the eucalyptus, which is said to have the property of neutralizing the malarial poisons of the air; the guava; the mahogany, and the India rubber tree, with thick heavy leaves, all made up a rich and beautiful display of foliage, which was charming from whatever part of the hall it was viewed. A banana, with its fat, sturdy branches of fruit, formed a conspicuous object of the collection, . . ." (1)

At first bananas were considered a delicacy, selling for 10 cents apiece, often wrapped in tinfoil and eaten with a knife and fork. By the 20th century the fates of Central and South America would become intertwined with that of the banana. The United Fruit Company, the largest banana producer in the United States, took over broad swaths of land and through various financial and political finagling all but colonized the region. 'History of the Centennial Exhibition,' by James D. McCabe, 1876

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Swamp Cabbage (Sabal Palmetto) By Brooke Hollander

Sabal palmetto, also known as the cabbage palm, common palm, blue palm, or swamp cabbage was adopted as the Florida State tree in 1957 (South Carolina also adopted the tree) and is found within approximately 47 of the counties. [In fact, it is not a tree, but an overgrown bundle of grass, that is native to the Southeastern US and West Bahamas.] The sabal palm has been used by both native Americans and early settlers for several purposes included as a food source, fuel, and the fronds or shelter. Because the sabal palm is listed as a state tree, a common misconception appears to be that cutting down/killing a sabal palm is illegal; however, use of the sabal palm is only restricted in the Florida Statute (F.S.) by the following (County or other agency restrictions may exist):

F.S. 15.031 State tree.-

- (1) The sabal palmetto palm, which is also known as the cabbage palm, and sometimes as the cabbage palmetto, a tree native to Florida, is hereby designated as the Florida state tree.
- (2) Said state tree being now extensively used for commercial purposes, the provisions of this section shall not be construed to limit in any manner said use thereof in business, industry, commerce, for food, or for any other commercial purposes.

The terminal bud of the cabbage palm is edible, as other palm species. The heart of the palm is used to make swamp cabbage, although these words are used interchangeably. To obtain access to the central bud, one must cut tree off at three-feet below the palm head, remove all woody/fibrous external material until the central terminal bud is encountered. Often, the central bud is thinly sliced, and cooked with pork or other meat and seasonings until grey in color. The taste of the swamp cabbage has been described as mild with a wild/smokey flavor taking on the characteristic of what it is season with. Most of the flesh heart of palm for the US Market comes from Costa Rica. Hawaii also supplies limited quantities, mainly directed towards local markets and restaurants.

Check out these online references:

https://edis.ifas.ufl.edu/mv038

http://en.wikipedia.org/wiki/sabal_palmetto

http://www.eattheweeds.com/?s=cabbage+palm

'Heart of Palm' Recipe Videos:

https://www.youtube.com/watch?v=xg_gKxTyFaI

https://www.youtube.com/watch?v=jfYNvfyBPX0

Editor's Note: Palm trees, of which more than 2,000 species exist, are grouped botanically with **grasses**, sedges, bamboo, grains, lilies, onions, and orchids. In fact, as it turns out, a **palm** tree has more in common genetically with turf **grass** or corn than it has with an oak tree! A **palm** tree is truly a **grass** giant!



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 Meetings:

General meetings, that include an educational program, are held the *second Tuesday* of each month. General meetings begin at **6:15 pm for social time**, and the **speakers begin promptly at 7 pm**., at the First United Methodist Church, **27690 Shriver Avenue**, Bonita Springs. The meetings are held in the "Freedom Hall" meeting room.

Workshops:

Workshops (monthly discussions) are held on the *fourth Tuesday* of each month at **7 PM** at the Methodist Church, when practical. This open format encourages discussion and sharing of fruits and information. Bring in your fruits, plants, seeds, leaves, insects, photos, recipes, ect.. This is a great chance to get answers to specific questions, and there always seems to be a local expert on hand!

Tree Sales:

Semi-annual tree sales in March and November, 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.

Directions to Meeting Location:

From the intersection of Old 41 Road and Bonita Beach Road SE, proceed north to Dean Street. Turn right on Dean St. and go two blocks to Shriver, then turn left on Shriver and go two blocks to the Methodist Church. Free parking on both sides of the street.

Collier Fruit Growers Garden News

Dr. Richard Campbell delivered a lively and very informative presentation concerning Mangoes on Tuesday, April 16. Richard's slides from his presentation will be posted on the CollierFruit.org Website.

Eric Bina successfully grafted Mediterranean eggplants onto his perennial eggplant (Solanum torvum) tree. These big purple eggplants will probably stop fruiting during the Florida summer. Time will tell. We are hoping to acquire vital information from Eric's work.







Thanks to Marley Hagerstrom, owner of Naples Fruit Farm, LLC, who has offered to furnish scions to CFG for our spring Mango grafting program.

Attempted grafting of the common varieties of figs onto Sycamore Fig (Ficus sycomorus) rootstock will be performed in August.

Eric Bina's Next Attempt will be to Graft Tomatillos:

Eric requires appropriate rootstock. He is looking for Perennial Physalis (Physalis capenten, recently renamed Calliphysalis carpenteri), which happens to be designated as 'Endangered' so it is not readily available. Another plant which possibly can be utilized as rootstock is Cape Gooseberry (Physalis peruviana). Eric wants to know if anyone has been successful in growing Cape Gooseberry in south Florida? Apparently, it was introduced commercially to south Florida and the Bahamas in 1954. In the Bahamas it was successfully grown, but only fruits during the winter months. No explanation has been determined as to why it failed in Florida, it may have been the nemetodes. Eric is seeking help in obtaining either of these perennial plants. Please let us know if you provide the required plants or seeds.

BURDS' NEST OF INFORMATION THIS and THAT FOR MAY

PRUNING: Now is the best time for trimming AVOCADOS and CITRUS. Remember that if you trim branches larger than one and half inches, the wound should be sealed with pruning paint. If not treated, cracking will

eventually occur where bugs will occupy the wound causing it to rot and the tree die. There is an art to trimming. Avocados on heavy productive years after trimming, the remaining crop will be much larger. The new growth, helps feed that remaining fruit. Too much fruit weakens the tree, so the next year the tree may not fruit all all.

ANNONAS: As the fruit starts to set, mealy bugs will appear. Soap products are very effective: usually one ounce per gallon, less is better than more. If using the Bio Wash, half an ounce per gallon is OK. Dawn dishwashing soap is not good for trees. Always check that the dish soap has NO antibacterial or perfume added.

The Custard Apple (Bullocks Heart or cherimoya) are attacked by the **CHALCID FLY**. If small EXIT HOLES are seen, pick the fruit, bag it and trash it. Ideally the remaining fruit should be bagged to prevent further infestation. Keeping your branches at a reachable height makes keeping an eye on infestation easier.

MAY CALENDAR OF EVENTS

Weekly Nursery Workshops: Every Thursday year around, 9:00 AM until at least 1:00 PM, Cornerstone Nursery, 8200 Immokalee Road, North Naples – Learn about fruit trees, volunteer in the nursery, or just come and listen to Crafton's stories.

Tuesday 7 Monthly Meeting: **Caloosa Rare Fruit Exchange**, 7:00 PM, Fort Myers-Lee County Garden Council Bldg., 2166 Virginia Ave., Fort Myers.

Wednesday 8 Monthly Meeting: **Rare Fruit Council International**, 7:00 PM 'Fruitluck'
Tasting table, 8:00 PM Evening Program, Fairchild Tropical Botanic Garden, Coral Gables,
Miami-Dade County, Speakers: Cynthia Mejides, and Yvonne Mejides "Long Term
Organic Management" (Tropical Delights Farm, Florida)

Tuesday 14 Monthly Meeting: **Bonita Springs Tropical Fruit Club**, 6:45 PM Tasting Table, 7:15 PM Program: First United Methodist Church, Fellowship Hall, 27690 Shriver Ave., Bonita Springs.

Denise S. Houghtaling of MW Horticulture Recycling will be the speaker.

Tuesday 21 Monthly Meeting: **Collier Fruit Growers**, 7:00 PM Social, 7:30 PM Program: Tree of Life Church, Life Center, 2132 Shadowlawn Drive, Naples. Dr. Stephen Brady with be the speaker.

Tuesday 28 Monthly Workshop: **Bonita Springs Tropical Fruit Club,** 6:45 PM: First United Methodist Church, Fellowship Hall, 27690 Shriver Ave., Bonita Springs.

Saturday, June 8 **Field trip to The Kampong, Fairchild's Tropical Paradise,** Coconut Grove, Limited attendance, call 239-384-9630 for reservations, Tour of gardens by Crafton Clift, Cost \$15.

Saturday, Late June [D.T.B.A.] **'Taste of the Tropics' event**, 9:00 AM – 4:00 PM: **Naples Botanical Garden**, 4820 Bayshore Drive, Naples. Admission: \$20, Free to Garden Members.



Fruits which Ripen in May:



Avocado, banana, canistel, carambola, coconut, custard apple (end of season), guava, jackfruit, jaboticaba, mulberry (ever-bearing & spring harvest), lychee (early), mango (early), miracle fruit, strawberry tree, papaya, pineapple, sapodilla (early), soursop (limited area of cultivation), Surinam cherry, blackberry, Everglades tomatoes.

Getting to Know Crafton Clift in His Own Words Crafton is on the Board of Directors for both BSTFC and CFG

I was born on a cotton farm is Tennessee, and every day I tried to make a new 'Olympic' record for chopping the most cotton. It was much more fun to pick strawberries or peanuts, or wild pecans and blackberries. In college I majored in Religion, with a minor in New Testament Greek. I was like Joseph Campbell in realizing all religions admonish showing kindness to strangers and the oppressed. That was the time of the discovery of the Dead Sea Scrolls and I was surprised that the Sermon on the Mount was a sacred document used by the Essenes long before Jesus was born. There was no press corps following Jesus to put in red letters every word he spoke, and before the printing press, few people could read and write.

At the National 4-H Club Congress, I said one word to the operator of the hotel elevator, and everyone looked to see if I was barefooted. In an Air Force dental clinic in Iceland, the dentist I assisted from Boston always had 'Webster' on his side in matters of provincial pronunciation. It's the sibling returning home, leaving his last instar skin behind, that is the brunt of laughter and incomprehension of those who the only 'true' version of God is the one that you were born into. In the tropical fruit graduate class at the University of Florida, where classmates were Thailand, Venezuela, and Iran, I alone was from the USA. I mused: Who else has plowed with a mule in Tennessee, a water buffalo in the Philippines, a cow in Nepal and a tractor in Belize?

A Combined Newsletter of the Collier Fruit Growers and the 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/

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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.



VISIT US AT: www.collierfruit.org

REMEMBER TO RENEW YOUR MEMBERSHIP!

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