



December 2023

***Fruit Growers
of SWFL***

Published by Collier Fruit Growers



**The Collier Fruit Growers' Meeting will be held
Monday, December 18th,
Starting at 7:00 pm.
The Greater Naples Fire/ Rescue Station
14575 Collier Blvd., 34119**

Enter through the east side door of the Administration Building.
Bring tropical fruit or a fruit-based bake item for the tasting table.

Remember: It is time to renew your \$15 annual family membership.

Please bring trees, seedlings, plants or fruit for the raffle. Tickets are \$2 for one or \$5 for three.



Note: The election of Offices and Directors for 2024 will be held at the beginning of the December Meeting.



Our very own James "Crafton" Clift will be the speaker at the CFG Membership Meeting on Monday, December 18. Crafton will discuss plants, both native and introductions, that "Should Not Be Forgotten."

Crafton has an undergraduate degree in religion and was an accomplished athlete in field and track. He served in the United States Air Force as a dental assistant before joining the Peace Corp and taught children in Africa. Crafton obtained his master's degree in horticulture at the University of Florida, Gainesville. He has an expansive knowledge of plants and has traveled and worked extensively throughout the world.

Crafton has been a good and caring friend to many people and is a contributing member of the Collier Fruit Growers and the Bonita Springs Tropical Fruit Clubs.

In lieu of a CFG Christmas Party a picnic will be held on Saturday January 6 starting at 1:00 pm in the demonstration garden at UF/IFAS Collier Extension Service, 14700 Immokalee Road. Cold sandwiches, waffles, and beverages will be provided. Please bring food and side dishes that are appropriate for a picnic.

The Collier Fruit Growers continues to implement its ambitious agriculture educational program for potentially all Collier County Schools and home-schooled pupils. A meeting has been requested with Dr. Leslie Ricciardalli, the superintendent of Collier County Public Schools, present the proposed CFG agricultural, wellness, and nutritional agendas to her.

Please volunteer your time for numerous activities, such as posting educational materials on the website, preparing course outlines, or helping with grant applications, at:

collierfruitgrowersinc@gmail.com

Or consider donating to this initiative program through PayPal™ by clicking on the "donate" button:

Donate

the Bonita Springs
tropical fruit CLUB

**There will be no formal December meeting. Next Meeting
Saturday, January 13th at 4:30 pm.
Bonita Springs Fire Control & Rescue District Station
27701 Bonita Grande Drive, 34135**

The election of Officers and Directors will be conducted at this, the first, meeting in 2024" and "Note: The time and location of the BSTFC Christmas Party will be announced via. Email. The event will be a "potluck" event, bring a dish or dessert.

Recipe of the Month - Fried Chempedak (Artocarpus integer)

The chempedak (or cempedak) is in family [Moraceae](#), & same genus as [breadfruit](#) and [jackfruit](#). The fruit is smaller and more elongated than jackfruit with a slight narrowing 'waist' near the center of the fruit. The rind is thinner than that of jackfruit, but it has a pungent odor.

The chempedak was transported by the Arabs to the east coast of Africa, then to tropical Africa. There are several cultivated species which evolved from wild varieties, called 'bankong,' that flourish in the jungles.

Fried Chempedak:

Ingredients:

- 250 gm/2 cups flour
- Salt to taste
- 1 egg yolk and 12 gm / 1 Tbs. castor sugar (beaten together)
- ¼ tsp. turmeric powder
- 250 ml/ one cup warm milk
- 20 – 30 chempedak segments
- 1 egg white (stiffly beaten)
- Cooking oil for deep frying [or oven pan]



Instructions:

Sift the flour and salt into a mixing bowl. Make a well in the center and pour in the egg yolk and sugar mix. Add warm milk slowly. Beat until the batter is smooth. Just before cooking, add the stiffly beaten egg white and turmeric powder. Heat oil for deep frying. Roll the chempedak segments in dry flour seasoned with a little salt before dipping in the batter. Deep fry 5 – 6 segments at a time until golden brown (heat oil before putting in each batch to fry.) [Alternately, air fry in oven using a shallow pan coated with a small amount of oil.]

Remove and drain on grease-absorbent paper. Serve hot.



• Remember: It is time to pay your \$15 CFG dues for 2024. Pay with cash, mail check, or use PayPal™ using the 'DONATE' button, then send confirmation to info@CollierFruit.org.

Dr. Noris Ledesma pointed out that,

The United States will continue to depend on mango supplies from Latin and Central American



The mango industry in the United States will continue to depend on supply from other countries. Mango demand is projected to double in the next 10 years.

By: Francisco Seva Rivadulla, international agri-food journalist

(Agraria.pe) In the 2023 edition of the Mango Grower's Summit held recently, the University of Florida professor and specialist in tropical fruit genetic resources, Dr. Noris Ledesma, who is part of the annual meeting of the Florida

Horticultural Society (FSHS), explained that "we are very satisfied and happy with this event, which has undoubtedly met all our expectations, as we have had a great quality of both speakers and topics presented in our forum. We appreciate the support and collaboration that the National Mango Board has given us."

Ledesma introduced about the state of the mango industry in the United States, noting that "mango production in the United States is concentrated in Florida, California, Hawaii and Puerto Rico. The mango industry began in Florida more than 100 years ago and today mango is grown primarily in the south of this state. South Florida's production is approximately 1,300 Ha and Florida's mango acreage is located primarily in Miami-Dade County, followed by Palm Beach, Lee, Osceola, Brevard, Manatee, Broward, and the remainder in Sarasota. Fortunately, in Florida we have a great genetic diversity in terms of mango varieties that has historically been a source of innovation and entrepreneurship in mango culture. We have state and government gene banks, University of Florida gene banks, botanical gardens and private entities."

"Our growers are small and there is a mix of urban and rural locations, ranging in size from 1/4 acre to nearly 30 acres. The agricultural experience of producers varies greatly. Some have agricultural experience and are diversifying into avocado, longan, zapote, guava, and others. There are some producers who have no previous experience with agriculture. Smaller farms are usually the large yards where growers optimize their farming efforts."

"Mango continues to grow in importance in the local market due to interest in the movement of local foods. Surveys of local producers show that they want new cultivars, due to the market approach (Mangoes gourmet) destined for restaurants. Producers have to actively seek alternative markets to increase their profitability," says Dr. Ledesma.

Mango growth in the United States

As for the future of the mango industry in North America, the specialist comments that "the mango industry in the United States will continue to depend on the supply of other countries. Latitude and conditions for growing mangoes in the United States are limited and demand for mango is projected to double in the next 10 years. The greatest availability of imports to the United States arriving from Mexico is from February to September. Brazil's imports from August, followed by supplies through March from countries such as Ecuador, Peru, Central America, Haiti, Australia, and more recently Jamaica and Colombia. This makes mangoes available year-round in the United States. We have noticed that the windows have been changing and that there is a good overlap between the stations."

In recent years there has been a growing interest in introducing new mango varieties to Latin American countries. However, these processes require time and investment. Countries like Peru already have a long way to go and there are interesting data on new varieties as an option to expand their portfolio. While it is true that the Kent mango is a desired variety, both in the European market and the United States, it is expected that new varieties will give a greater market opportunity, he emphasizes.

What can be improved in the industry?

Regarding the improvements that can be made in the industry of this crop, he pointed out that "mangoes are one of the most popular fruits in the world. That should provide a huge opportunity for retailers in the United States. One of the most important factors for U.S. mango buyers is having enough supply to promote mangoes 12 months out of the year, but consumers also want quality mangoes, fresh fruits that taste good, physiologically ripe."

At the same time, he indicates that "I have noticed an evolution in the quality of mangoes arriving in the United States in the last 10 years, but there is still much to improve in terms of quality and flavor. I think that for this it is necessary a joint task that starts from the field, appropriate genetic resources in the right place, with precise management protocols that guarantee the consistency of the product. You have to work on all fronts of the supply chain with an integrated team."

With regard to the organization of the producer sector, he points out that it is important for small producers to join forces and organize in order to be able to add their efforts and resources, otherwise he believes that they will not have competitive options. Diversifying is healthy for industry. A good way to differentiate a product in the market is through new mango varieties, new market strategies, ethnic fruits, and new market niches.

Regarding the work carried out by the National Mango Board (NMB) in the mango industry in the United States, Noris Ledesma commented that "the NMB continues to lead the promotion and consumption with very positive results in recent years. We are living in an era where people are concerned about their health and want to consume fresh, tasty and good for health products. The NMB promotes the consumption of mangoes at all times of the year, using creativity and effective advertising campaigns to reach each of the potential consumers. It is important to promote new market niches, importing different varieties that broaden consumer perception and connect them with their culture and roots."

Fall Collier Fruit Tree Sale

The Fruit Tree Sale at the University of Florida Collier Extension's 'Yard and Garden Sale,' held on October 28 & 29, was a great success, thanks to those CFG members who donated their time to help. This was the third time that CFG participated in the event. This location for the tree sale is more accessible for the avid gardeners living in Golden Gate Estates, It also draws attention to CFGs' weekly gathering, every Thursday morning, 10 am to 1 pm, at the nursery. The spring fruit tree sale will remain at Freedom Park as always, on the last Saturday in February.



The Fruit of The Abiu (*Pouteria caimito*)



One taste of a sweet abiu fruit and you'll want to plant your own abiu tree, stat! But sweet and tasty varieties can be difficult to find. Since abiu is native to the Brazil and other tropical areas of South America, it is easy to grow your own abiu in warm climates. Here's how. **You may want to plant two or more trees because the trees may require cross-pollination to produce fruits.**

Abiu fruits grow to be about the size of a large lemon, although they are considered a type of berry. Abiu is ready to eat when the outer peel turns from green to bright yellow, but don't eat the peel, it has a natural latex in it that isn't edible.

A ripe abiu has white, almost translucent flesh and one or two large seeds inside (you do not consume the seeds). The flesh is what you eat, and it is creamy and has almost a sweet buttery flavor to it, without being too sweet. It is especially delicious made into ice cream or sorbet.

Growing From Seeds:

Abiu trees are typically grown from seeds, although there are grafted varieties available. If you want to start with your own, the seed must be fresh. The easiest way? Get a few fresh, ripe abiu fruits, and save the seeds. It is also recommended to soak the seeds in water overnight. Most varieties are 'tasteless' so consider planting the seeds and use them as rootstock for scions of known good variety.

Germination:

Each seed naturally contains a waterproof coating, so to speed up germination scratch it in order for the seed to germinate. You can do this gently with a bit of sandpaper or nicking with a pair of pointed tweezers or blunt scissors.

The intent is to ensure water gets into the seed, but that the seed is not actually cut or damaged, don't be aggressive with scratching your seed. A few nicks or roughening up the outside should do it. Then, place the seeds in a bowl of shallow water (bonus points for untreated rainwater!) for a full day. Plant seeds in well-drained soil in pots or in rows that get plenty of sunlight. If you plant in rows, give a space of 10 feet or more between each one.

Growing from Seedlings:

You may be able to get grafted seedlings from a local nursery. In Hawaii, there is a variety of Abiu that goes by the name Z1. It produces a large, sweet tasting abiu whereas the seedling abiu tends to be smaller, but delicious.

When choosing a seedling, look for seedlings that are younger than a year old to plant on your homestead. Smaller trees take better when transplanted than larger trees. Plus, you can save a whole lot of money doing it that way.

Plant in well-draining soil, ideally a bit sandy, in an area that gets plenty of sunlight. Space seedlings 10-12 feet apart.

Nursery trees still need extra attention until they reach five years of age, but you will have a bit of a head start than if you had grown them from seed. Grafting, budding, and air layering can be used to propagate superior strains and advance the production schedule. Recommend planting at least two abiu trees for adequate cross pollination.

Water:

Abiu trees can tolerate a good amount of water, if the soil is very well drained. If your property has areas of pooling, you may want to avoid planting abius there. Instead choose well-draining high ground or create a mounded area to plant your seedling. The opposite is true in dry areas, Abiu needs water regularly.

If you are in a dry climate, you can plant your abiu in water harvesting basins that catch and hold rainfall so that the tree can get its required amount.

Care:

Fertilize your abiu trees when they are three months old and replace fertilizer every 3 or 4 months until the tree is two years old, then reduce to every 6 months. Blood Meal is a great fertilizer for Abiu, if applied in the early years.

As a tree gets older, feed them with a lot of compost rich in animal manure and top dress with mulch. Doing this a couple of times per year will be a 'game changer' for Abiu trees.

Abiu trees grow best with an average of twelve hours of sunlight a day. You should regularly weed around your seedlings to ensure other plants don't compete for sunlight and stunt their growth.

Remove nearby weeds until your tree is about three feet in height.

**How long does it take for an Abiu to bear fruit?**

Abiu is a moderately fast-growing tree, and you can expect fruit after three years.

In Hawai'i, abiu trees produce fruit year-round and have a constant cycle of flowers and fruits for delicious abiu fruit almost all the time.

If you want to encourage larger fruit, thin the flowers or young developing fruit so that they can have space as they develop.

How to know when Abiu is ready to harvest?

When the fruit turns from green to almost entirely yellow, it is ready to harvest. Abiu has a short shelf-life and should be consumed within 4 days.

The fruit is also very fragile and easily bruised. Don't shake the trees to drop their fruit – climb up and pick by hand to save your fruits. You may want to place some old blankets around the bottom of the trees so if a few ripe fruits do drop, they'll be saved.

Don't eat all of the abiu fruits the same day you harvest it. They taste even better a day or two after harvest if kept at room temperature. It is a taste to die for, guaranteed.

Do you need to prune an Abiu tree?

You don't need to heavily prune abiu trees, but it's a good idea to prune young trees to ensure the center-leader branch doesn't take over. Pruning encourages the tree to spread out and grow more branches, which means more fruit, later.

Prune an abiu tree to keep it at a moderate height of 12-15 feet. They can grow much taller, of course, but because the fruits are so delicate you want to be able to pick them before they drop to the ground.

You may find the biggest pests to your abiu fruit are birds, coming to enjoy the fruit before you get a chance! The easiest remedy is to place netting around your trees and give only humans access to the delicious fruits. Keeping trees under 20 feet in height makes this task easier.

Abiu fruits are delicious and easy to grow in your own fruit forest. These trees love warm weather and sunlight and don't require a great deal of management, making them a perfect addition to the lower tree layer of a food forest.

Abiu specimen tree in the Naples Botanical Garden



Refer to Pages 406 -408, 'Fruits of Warm Weather,' by Julia Morton for more information on Abiu fruit trees. (collierfruit.org, Tab: RESOURCES)

Propagation

This article, first published in the November 2018 issue of the Collier Fruit Growers newsletter, is worth publishing again for all the new and old members alike who may be new to grafting.

The propagation of fruit trees is not as easy as just planting seeds or cuttings in nutrient rich soil with an adequate amount of sunlight and water. Most tropical fruit tree seeds are only viable for a short period of time after the fruit is harvested, and not all fruit trees grow true from seed. The one exception is papaya where the seeds have been known to lie dormant for years until sunlight cause the seeds to germinate. Seeds with a hard outer 'seed coat' generally need to be scarified. Cuttings also only last a few days before they dry-up and die. Most cuttings do well in a moist environment [i.e., sealed clear plastic bag] until adequate new growth is observed. Peter Thompson has written an in-depth book on the subject entitled, 'Creative Propagation; A Grower's Guide,' for both the amateur and professional.

Some fruit trees do not grow true from seed or are able to be grown from cuttings. In these cases, the art of grafting bud wood (scion) onto a suitable rootstock must be employed. Typically, three methods of grafting are used: Cleft (Vee), Side Veneer and Bud grafts. Of these the Veneer graft is utilized by most experienced grafters in the field. All grafts involve the bonding of the cambium layer of living meristematic tissue (typically one cell thick) in the scion and rootstock together, enabling the scion to continue growing. The principles may be learned in hours, but practical ability and art may take a person a lifetime to accomplish with any amount of success. The basic principles are covered in the IFAS Publication Circular 456 A, "Propagation of Fruit Crops." A more in-depth source of information is 'The Grafter's Handbook,' revised 2013, by Robert John Garner.

Air-laying (marcotting) involves injuring or girdling a tree branch and surrounding the wound with moist material (sphagnum moss) until roots are set forth, whereby the branch is severed and planted as a new tree. This method is typically not used in Florida as only shallow surface roots develop and the new tree are prone to being uprooted by hurricane force winds.

A simplified 'Grafting / Propagation' table is presented here, recommending methods and times-of-year to propagate the various common warm weather fruit trees grown in South Florida.

Grafting / Propagation		
Fruit Tree	Time-of-Year to Graft	Propagation
Abiu	Oct – Nov Not True from Seed	Grafted, Budded, or Air layered
Ambarella	Not Grafted	Rooted from Cuttings
Atemoya/ Annona genus	Oct - Mar, also in Aug with Prepared Budwood.	Not True from Seed
Avocado	Nov - Feb	Not True from Seed
Bael Fruit (Citrus)	Veneer graft on Robust Seedling in its Second Year.	Large Varieties are Not True from Seed.
Banana	Not Grafted	Corms
Barbados Cherry	Oct, Nov - Not Grafted	Root from Cuttings
Blackberry	Not Grafted	From Root Cuttings

Grafting / Propagation		
Fruit Tree	Time-of-Year to Graft	Propagation
Black Sapote(Chocolate Pudding Fruit)	Nov - Feb	Not True from Seed
Bucida	Aug, Sep - Not Grafted	From Seed or Cutting
Canistel	Feb, Mar	Not True from Seed
Carambola/ Bilimbi	Graft Dec - Feb	From Seed during Jun thru Jan
Carissa	Not Grafted	Rooted from Cuttings
Cashew Apple	Not Grafted	From Seed
Ceriman (Monstera)	n.a.	Seed or Cuttings
Cherry of the Rio Grande	Not Grafted	From Seed
Coconut Palm	Not Grafted	From Seed
Cocoplum	Not Grafted	Rooted from Cuttings
Custard Apple	Mar, Apr	Not True from Seed
Darling Plum (native)	Not Grafted	From Seed (very rare)
Fig (LUS Purple)	Need to be Grafted due to Nematodes; Graft Using Ficus Sycamorus as Rootstock.	Not Recommended from Seed
Grumichama	Rarely Grafted	From Seed
Guava	Need to be Grafted, but Difficult	Difficult from Seed
Imbe	Not Grafted	Plant Three Large Seeds per Pot to get Male and Female Trees.
Jacoticaba	Not Grafted	From Seed
Jackfruit	Sep, Oct; Need to be Grafted on Very Robust Seedlings.	Not True from Seed
Jujube	Very Difficult to Graft	Air-Layered
Kei Fruit	Not Grafted	From Seed
Kumquat (Citrus)	Always Grafted as Seedling; Rootstock is Very Slow Growing.	
Longan	Chip Bud on Small Seedling	From Seed
Lychee	Chip Bud on Small Seedling	Air-Layered
Mabolo (Velvet Apple)	Very, Very Difficult to Graft	Not True from Seed
Macadamia Nut	Not Grafted	Air-Layered
Mamey Sapote	Oct or Mar; Use Suitable Budwood & Pencil Thin Rootstock. Don't Let Seedling Get Root Bound.	Not True from Seed

Grafting / Propagation		
Fruit Tree	Time-of-Year to Graft	Propagation
Mango	May, Jun & Sep, Oct	Mono-embryonic Cultivars Not True from Seed
Mulberry	Typically, Not Grafted	From Cuttings
Muscadine Grape	Not Grafted	From Leafy Cuttings Under Mist
Papaya	n.a.	From Seed
Passion Fruit	n.a.	From Seed and Cuttings
Persimmon	Jan - Mar	Not True from Seed
Pineapple	n.a.	Plant the Top or from 'Pups'
Pitaya (Dragon Fruit)	n.a.	From Cuttings, After Harvest
Pitomba	n.a.	From Seed
Star Apple	Oct - Mar	Not True from Seed
Stopper	n.a.	From Seed
Sugar Apple (sweetsop)	Oct - Mar	Not True from Seed
Sapodilla	Grafted	Not True from Seed
Tamarind	Very Difficult to Graft	Not True from Seed
White Sapote (Citrus Relative)	Feb, Mar on Strong One Year Old Seedling.	Not True from Seed

Cottonseed Meal

Another good article that is worth repeating.

A by-product of cotton manufacturing, cottonseed meal, as a fertilizer for the garden, is slow release and acidic. Cottonseed meal varies in formulation slightly, but is generally made up of 7% nitrogen, 3% phosphate as P₂O₅, potassium as K₂O, and other minor nutrients. It is typically NOT considered 'Certified Organic.' Cottonseed Meal fertilizer is highly beneficial with a high organic content, which aerates tight, dense soil and aids in moisture retention in light, sandy soils. Due to its slow release properties, cottonseed meal is safe to use liberally without fear of possible foliage burn, while promoting healthy foliage and increasing crop production.

Add cottonseed meal, in a ratio of one pound to 18 cubic feet of mulch and spread 2 to 3-inches thick, to lower the pH of the soil, increase the availability of elements like Iron (Fe) and magnesium (Mg) and prevent 'nitrogen deficiency' during break-down of the mulch. [Note: Yellowing of leaves may be an indication that the pH of the soil needs to be reduced with an application of cottonseed meal.] Work one cup of cottonseed meal into the soil around smaller fruit trees and 2 to 4 cups around larger specimens. If planting a new tree, dig the hole twice as wide as needed and backfill with a combination of soil and cottonseed meal. Water thoroughly and continue to apply cottonseed meal fertilizer in the ratios above, twice per year, even after fruit trees are established.

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://bstfc.org/>

Officers and Board of Directors:

Jorge Sanchez, President
Mario Lozano, Vice President
Tom Kommatas, Secretary
Janice Miller, Treasurer
Crafton Clift, Director
Eric Fowler, Director
Luis Garrido, Director



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

Collier Fruit Growers

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.



COLLIER FRUIT GROWERS

VISIT US AT:
www.collierfruit.org

REMEMBER TO RENEW YOUR MEMBERSHIP!

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Vice President, Michael Cartamil
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Jorge Sanchez
Crafton Clift
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