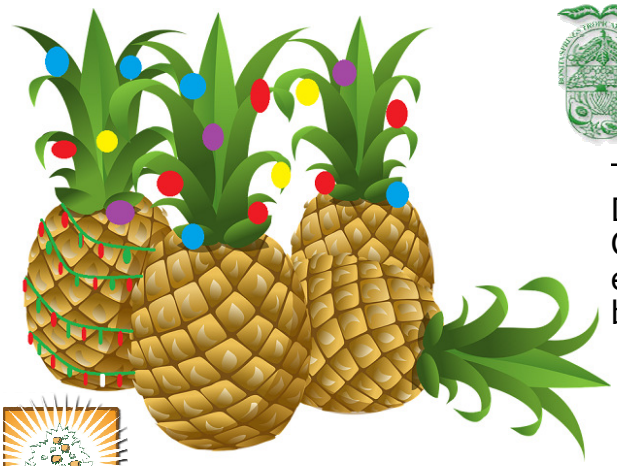
The Fruit Growers of Southwest Florida

DECEMBER 2019



Bonita Springs Tropical Fruit Club Christmas Party

The Christmas Party will be held on Tuesday, December 10th at the Revive/Paradise Wellness Center, 28410 Bonita Crossings Blvd. #11 (take elevator to 2nd floor) starting at 6:45 PM. Please bring a side dish to share.

Collier Fruit Growers – The Year in Review

Please mark your calendar, the Christmas Holiday Party will be held on the Tuesday, December 17th at the Tree of Life Church. The entire family is welcome, as there is a playroom for young children. Access to the Life Center for set-up will commence at 5:30 pm. The actual festivities will start at 6:00 pm will a 'Meet and Greet,' followed by the Annual Meeting at 6:30, which will include the election of officers. Food will be served at 7:00 pm. CFG will provide the ham, beverages, utensils, plates and condiments. Member are encouraged to bring a side dish or dessert to share. There will also be photographs and a short summary of our trip to Costa Rica this past July.

There were the highlights of 2019. Starting in April the enhanced monthly newsletter was further expanded to include the Bonita Springs Tropical Fruit Club. Hopefully, with the participation of both organizations the expanded newsletters can be maintained through 2020.

In June, club members toured of 'The Kampong' in Coconut Grove and despite the afternoon's heavy rains, members attended the 'Bill Whitman Day & Logan Celebration' at the Fruit and Spice Park in Miami-Dade County.

In July, the club was a contributing sponsor of the 'Taste of the Summer' event at the Naples Botanical Garden further enhancing the public's awareness of the large variety of warm weather fruits that can be grown successfully in Southwest Florida.

Later, at the end of July, eighteen persons, mostly from Southwest Florida traveled to Costa Rica for a one-week fruit awareness and cultural tour. With the participants' contributions, CFG was able to sponsor Crafton Clift for his great expertise. Great enjoyment and camaraderie was had by all.

Grafting of various varieties of mango budwood onto rootstocks planted last year was conducted by several members of the club. With the approach of cooler weather, grafting of various annona scions was started, which will continue through January 2020. Starting in late November, trial Persimmon grafts were attempted. The grafting of persimmons will commence later in December through March. This will include the saplings planted in five different locations of Collier County last year.

RECIPE OF THE MONTH:

This is a perfect recipe for the cooler weather. Its spicy goodness will warm you down to your toes. To make it a little less spicy, remove the seeds from the jalapenos. Found on www.allrecipes.com , the recipe makes 4 servings.

recipe:

AVOCADO SOUP WITH CHICKEN AND LIME

4 6” corn tortillas, cut into strips
1 qt. chicken broth
1 ½ Tbsp olive oil
¼ cup fresh lime juice
1 white onion, thinly sliced
1 tomato, seeded and diced
8 cloves, garlic, thinly sliced
salt and pepper to taste
4 fresh jalapenos, sliced
8 oz skinless, boneless chicken breasts, cut into thin strips
1 avocado, peeled, pitted and diced
¼ cup chopped fresh cilantro

Preheat oven to 400 degrees. Arrange the tortilla strips on a baking sheet and bake 3-5 minutes until lightly browned. In a large saucepan over medium heat cook the onion, garlic, and jalapenos in olive oil 4-5 minutes. Stir in chicken, broth, lime juice, tomato and salt and pepper. Gently simmer until chicken is cooked about 5 minutes. Stir in avocado and cilantro and heat through. Adjust seasonings, if desired.
Ladle into bowls and top with tortilla strips to serve.

Pollination Requirements of Some Tropical Crops

By Roger Goebel, Australia Rare Fruit Council; edited by Crafton Clift

ABIU – Flowers are bisexual (prefect or hermaphrodite having both anthers and stigmas). It's rare to get fruit from a single tree. Some self-incompatibility may occur. Insect pollination appears useful.
ACEROLA – Flowers are bisexual Flowers appear to have a low degree of self-pollination. Insects (bees and flies) are useful. Flowers produce nectar. If fruiting stops, cut down tree & expect new growth to flower & fruit.
ALLSPICE – Flowers are bisexual, but trees function as either male or female. Honeybees are recommended. Use leaves if no fruit. Just leaves and hot water will make a good bedtime tea.
AVOCADO – Flowers bisexual but function as male and female at different times over a two-day period. Some varieties are self-compatible within the variety, others needed other varieties that produce compatible pollen. Flowers produce nectar. Honeybees and native bees recommended.
BLACK SAPOTE – Some trees are male. Some female trees have male branches. Some trees bear fruit one year and then male flowers the next year. Single trees not requiring cross pollination are 'Bernecker,' 'Reineke,' 'Masonoti,' and 'Black Night.' 'Masonoti' produces seedless fruit if no male tree is present.
BANANA – Female flowers are produced first followed by male ones. Cultivated types do not require pollination. Wild types are pollinated by birds, bats and insects. Flowers produce nectar.
BETEL NUT – Separate male and female flowers on the same flower cluster. Insects and wind likely to cause pollination.
BREADFRUIT – Male and female flowers on each tree. Seedless type (breadfruit) do not require pollination. Seeded type (breadnut) is likely to be wind pollinated.
BRAZIL NUT – Requires orchid to support butterfly in 'off-season' pollinate Brazil nut flowers. Attempts to cultivate have never succeeded, and when jungle is cut around them, they quit bearing.
COCOA – Flowers are bisexual but appears to be self-incompatible. Some varieties are self-compatible. Pollination by very small insects – midges and ants. Rarely self-compatible. Plant many or graft.
CARAMBOLA – Flowers bisexual and incompatible. Some varieties are self-compatible within the variety while others rely on pollen from other varieties. Flowers are highly attractive to insects. Bees recommended. In Florida, all grafted cultivars, except 'Hart,' bear abundantly.
CASHEW NUT – Bisexual and male flowers are produced on the same panicle. Insect pollination is necessary. Flowers produce nectar.
CARDAMON – Flowers consist of numerous bisexual florets that are self-sterile. Pollination by honeybees recommended. [Purchase from Logee's in Connecticut.]
CAROB – Most trees have either male or female flowers. Some trees have male flowers and bisexual flowers. Cross pollination, possibly by wind.
CASSAVA – Male and Female flowers on the same panicle. Insects most likely cause pollination.
CASIMIROA – Flowers are bisexual, but often incompatible within the variety. Pollinator varieties recommended. Bees recommended. Flowers produce nectar. [Dr. Stephen Brady has two compatible cultivars.]
CHERIMOYA – Flowers are bisexual and self-fertile, but female parts are receptive before the pollen is released. Very small insects are thought to act as pollinators.
CINNAMON – Flowers are bisexual, likely to be pollinated by very small insects.
CITRUS – Flowers are most bisexual. Lemon and lime may have some male flowers. 'Washington' navel flowers do not produce pollen and do not require pollination.
CLOVES – Flowers are bisexual. Cross pollination by bees appear necessary. Flowers produce nectar.
COCONUT – Male and female flowers on each panicle. Most varieties are not self-pollinating as male flowers open before the female ones. Dwarf varieties appear to be self-fruit-setting as flowers overlap. Insects and wind appear to cause cross-pollination. Flowers produce nectar.

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COFFEE – Flowers bisexual and usually self-fertile. Bees may increase yields. Flowers produce nectar.
DATE PALM – Hand pollinated by humans. [Camel] manure used to attract flies to crown of palms. Male and female flowers on separate trees. Cross-pollination to a limited extent by wind. As no nectar is produced, bees collect pollen from the male flowers, but are not attracted to the female flowers.
DURIAN – Flowers are bisexual and open at night & early morning. Pollinated by bats, moths and possibly bees. Flowers produce nectar.
DUKU – Flowers bisexual with sterile pollen. Fruit sets parthenocarpically(1).
FEIJOA – Flowers bisexual, some being self-fertile, other require cross pollination with other trees.
FIG – Varieties produce only female flowers that do not require pollination to set fruit. 'Smyrna' figs require a special pollination variety and cross-pollination by a small 'Aphytis' wasp.
GRANADILLA – Flowers are bisexual and self-fertile but require insect or mechanical transfer of pollen from male part to female part. Hand pollination from 7 to 9:00 am advised.
GUAVA – Flowers bisexual but require insect transfers of pollen. Honeybees are recommended. Flowers produce nectar.
INGA BEAN – Flowers bisexual but possibly of low self-compatibility. Heavy flower drop with little or no fruit set early years of flowering.
JAKFRUIT – Male and female flowers on same tree. Cross-pollination by wind, rain or insect or other required for good fruit formation.
JOJOBA – Male and female flowers on separate plants. Pollination by wind. No nectar produced.
JUJUBE – Flowers bisexual with pollen released before female part is receptive. Pollination by bees is recommended. Flowers produce nectar.
KOLA NUT – Tres product bisexual and/or male flowers. Pollination by bees recommended as only pollen from the male flowers is viable.
LONGAN – Male and female flowers on same panicles. Pollination by bees recommended. Flowers produce nectar.
LOQUAT – Flowers bisexual. Pollination by honeybees recommended. Flowers produce nectar.
LYCHEE – Flowers male, female and bisexual. Male flowers open first followed by female and bisexual flowers and some of male flowers. Initial heavy flower drop (males) often causes concern. Pollination by honeybees recommended. Flowers produce nectar.
MACADAMIA – Bisexual florets in racemes(2). Pollen released before female part is receptive. Pollination by honeybees recommended. Flowers produce nectar.
MANGO – Bisexual and male flowers appear on same panicles. 'Carrion' flies recommended for pollination. Ratio of male to bisexual flowers varies greatly within varieties. Flowers produce nectar.
MAMMEA – Flowers bisexual. Needs cross-pollination with second clone. No hand pollination recommended.
MAMMEY SAPOTE – Flowers bisexual and possibly pollinated by small insects. Needs cross-pollination. Flowers produce nectar.
MOMBIN – There are male and female trees. Males are rarely propagated. The are no male trees in Florida. Females trees bear seedless fruits parthenocarpically(1).
MULBERRY – Separate male and female flowers in varying amounts on most trees with some varieties producing only male or female flowers on the tree. Honeybees visit male flowers, but pollination by wind is suspected.

Notes: (1) The development of a fruit without fertilization or seeds.
(2) An unbranched flower cluster, consisting of a single central stem or rachis, along which individual flowers grow on small stalks at intervals, blooming from the base toward the apex, as in the lily of the valley.

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NUTMEG – Mostly male and female flowers on different trees while some trees have bisexual flowers. Pollination by small insects is most likely.
NATAL PLUM -Flowers bisexual. Different varieties have male or female functional flowers, giving a result of poor fruit set in many plants.
OIL PALM- Male and female flower clusters on the same plant but are functional at different times. Pollination by insect or wind. In Malaysia very young, very old and trees near saltwater produce only male flowers.
PAWPAWS – Trees have bisexual flowers. Stigmas become sticky 2-3 days before pollen sheds.
PASSIONFRUIT - Flowers are bisexual (perfect), but usually need pollen from a second clone. 'Possum Purple' sets fruit its own pollen. Insects (honeybees and native bees) are recommended to achieve good crops. Carpenter bees (large diameter) are necessary for large flowers.
PECAN NUT – Male and female flowers on each plant. Wind pollinated. Some varieties are self-fertile, others are not.
PEPPER – Flowers of male, female and bisexual may be on the same plant or on separate plants. Cross-pollination is necessary. Rain is considered the main agent. 'Kudra valle' bears well in Florida by itself.
PERSIMMON – Flowers may be bisexual, male or female. Fruit of some varieties set without pollination while flowers of others require a pollination variety planted at regular intervals. Flowers produce nectar.
PILI NUT – Male and female flowers on separate trees. Cross-pollination by insects necessary.
PINEAPPLE – Flowers bisexual. No pollination is required for the fruit to form. Flowers produce nectar. Hummingbirds (not found in Australia) are regarded as the main pollinators where pollination is desired.
PITAYA (PITAHAYA) – Flowers are bisexual but appear self-compatible. Plants of different varieties are suggested to be planted nearby and insects are possibly the main pollinating agent. (Yellow Pitaya – *Hylocareus* – is a universal pollinator.)
PURPLE MANGOSTEEN – Male and female flowers are on separate trees. Male trees are rare. Female flowers do not require pollination to set fruit. The 'seeds' are not true seeds. [Dr. Frank Martin (USDA, P.R.) cut parthenocarpic seeds (all female tissue) into twelve pieces and got twelve plants.]
RAMBUTAN – Male, female and bisexual flowers on the same or separate trees. Some trees on seedling types may have male flowers only. Honeybees are recommended. Flowers produce nectar.
ROLLINIA – Flowers are bisexual. Small insects appear necessary to transfer pollen as pollen is released after female part is receptive.
RUBBER TREE - Male and female flowers on the same panicle. Honeybees appear to aid pollination. Flowers produce nectar.
SAGO PALM (*Metorxylon sagu,* 'the true sago palm') - Male and female flowers on the same plant. Pollination not required as plants are propagated by suckers.
SAPODILLA – Flowers are bisexual and may require insect visitation to set fruit. Flowers produce nectar.
SOURSOP – Flowers are bisexual but require insects to transfer pollen.
STAR APPLE – Flowers appear to be bisexual and pollinated by small insects.
STRAWBERRY – Flowers are bisexual. Female parts receptive before pollen is released. Honeybees are recommended for adequate fruit size.
SUGAR CANE – Flowers are bisexual, and wind pollinated, but pollination is not required in normal cultivation.
TAMARIND – Flowers are bisexual and most likely insect pollinated. Flowers produce nectar.
TEA – Flowers are bisexual but often self-sterile. Cross-pollination is recommended for seed setting.
TUNG OIL NUT – Each tree has mainly male or female flowers, though some trees may have small numbers of the other. Cross-pollination by insects is necessary.
TURMERIC – Flowers are bisexual but appear to be sterile. Fruit set is not necessary.
UVILLA Pourouma cecropiifolia (Amazon tree grape) – Male and female flowers on separate trees. Cross-pollination by insects is required.
VANILLA- Flowers are bisexual and self-fertile but require small insects to transfer pollen.

Krome Memorial Section

Proc. Fla. State Hort. Soc. 128:18–19. 2015.

South Florida Cottage Industry with Canistel

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Additional index words. fruit dehydration, dried fruit, processing of fruit, estate agriculture

Canistel (*Pouteria campechiana*) (Sapotaceae) is a fruit tree species native to Central America. It is grown in many Central and South American, African, and Asian countries. It is also grown in some U.S. states (Morton, 1992), but nowhere on a large scale. The canistel is commercially a minor fruit crop in South Florida. The attractive color, high carotene content, sweet flavor, and moist flesh of superior types can increase canistel's potential to be grown on a larger commercial scale. The objective of this study is to deliver a reliable overview of the suitability of a canistel industry based on cottage industry products and services. Cottage industry products have been tested using different canistel varieties at the Fairchild Farm in Homestead, Florida, where we have a collection of 12 superior cultivars. 'Bruce', 'Fairchild 2', 'Keisau', 'Oro', and 'Trompo' were tested. Trees have been in production for 9–10 years, with a high, stable yield capacity. The results include recommendations of harvest, postharvest, and processing of the fruit.

Canistel (*Pouteria campechiana*) has been distributed throughout Central America, the Caribbean, some regions of Southeast Asia, and areas of Africa. It was introduced into Florida early in the 20th century and is mostly grown in fruit collections and to a limited extent commercially. Canistel trees have been grown in home plantings along the Southeast and Southwest coasts of Florida and the Florida Keys since the 1940s. Canistel is often seen in backyards and occasionally in fruit collections in South Florida. Canistel varieties are available in South Florida, and some of them are promising because of their high, stable yield capacity for commercial orchards. The canistel is currently produced on a small commercial scale in Miami-Dade County, but exact statistics are not available.

Pouteria campechiana can be used by small- and large-scale ice cream and preserve makers, the dairy product industry, and for baking and pastries. Canistel produces a bright orange-yellow fruit with like-colored skin and flesh. The fruit are typically rounded with a pointed apex and they soften at maturity. The fruit flesh is smooth and has a sweet flavor. The ripened canistel is consumed as a dessert fruit. The flesh of canistel fruit is sometimes incorporated into desserts, such as ice creams and puddings. The fruit generally matures from September to February but some varieties and individual trees produce fruit more or less continuously throughout the year. Canistel is a nutritious fruit and a rich source of polyphenolic antioxidants. It is high in energy, niacin, and carotene, has a fair level of ascorbic acid, and a relatively high content of carotenoid, an organic pigment of yellow, orange, or red color suitable for food application (Ma et al., 2004).

The glossy skin of the canistel fruit is adherent to the flesh and at maturity can be difficult to separate from the flesh. The flesh goes from a rubbery texture with ample latex to a soft and pasty consistency. Inside of the fruit are from one to up to five large black or dark brown, glossy seeds.

The local foods movement and alternatives to traditional agriculture are gaining considerable interest in South Florida. Canistel is an alternative crop for South Florida, with attractive productivity of 136–250 kg of fruit/tree/year (Wasielewski and Campbell, 1997). Harvesting and handling of fruit for processing has the potential to be mechanized with proper pruning, which makes the canistel attractive as a potential crop in South Florida.

This paper provides information on the alternative agricultural uses of canistel beyond a fresh fruit. Cottage industry products have been tested using different canistel varieties at the Fairchild Farm in Homestead, FL, where we have a collection of 12 superior cultivars.

Materials and Methods

For this study, canistel fruit were harvested from five different cultivars and ripened at room temperature for 5–10 days to evaluate the optimum state of maturity. The immature mesocarp contains a high level of sticky latex that renders the fruit unpleasant and difficult to use. The dark yellow to orange color of the flesh upon ripening is pleasing to the eye. It is stable with both heating and freezing. Canistel fruit were all harvested from trees located at the Fairchild Farm, Homestead, FL, which houses the genetic collections of the Fairchild Tropical Botanic Garden. Harvesting was done during the peak season for canistel in South Florida (March–April). Cultivars evaluated were 'Bruce', 'Fairchild 2', 'Keisau', 'Oro', and 'Trompo'.

The main parameter used for harvesting time was color. Fruit ripen at different times on the same tree and sizes and shapes can vary. For the color measurement, the Royal Horticultural Society Color Chart was used, with the corresponding Universal Color Language numbers and names.

Additional information was collected on the fruit at full maturity according to the methods of Crane et al. (2001). Table 1 shows the color at harvesting, days to ripening at room temperature, whole fruit weight and moisture content, processing time, and evaluation of the product.

Each whole fruit per cultivar was weighed at ripening. Fruit were peeled by hand, the seeds removed and sliced for dehydrating. This process can be laborious and difficult due to the sticky nature of the pasty flesh and the difficulty in separating the skin from the flesh and seeds.

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Table1. Canistel cultivars parameters at the time of harvest and processing.

Cultivar	Avg. fruit wt (oz)	Color at harvest	Days to ripening	Moisture content	Dehydrating time (h)	Evaluation of product (flour)
'Bruce'	18–24	14–A	7	79	8.5	Excellent flavor, color
'Fairchild 2'	7–13	16–A	5	89	10.2	Good flavor, poor color
'Keisau'	8–10	14–A	6	75	9	Excellent flavor, color
'Oro'	12–16	14–A	6	76	9	Excellent flavor, color
'Trompo'	9–15	16–A	8	76	10	Good flavor, color

DEHYDRATOR. An Excalibur electric home dehydrator (Excalibur, Sacramento, CA) was used for the experiment with nine removable trays. The electric heating contains temperature controls and fans that assure uniform temperature distribution in the drying chamber. Teflon mesh trays were used because the dried fruit slices do not stick to them (Campbell and Campbell, 1983).

DEHYDRATING FRUIT. Firm, ripe fruit were selected and carefully washed and peeled. The pulp was cut into lengthwise slices up to an inch in thickness. The slices were arranged flat on the dehydrating trays, making sure as to not clump the fruit slices together. The temperature control was set to 125 °F to 135 °F and allowed to run until the slices reached the desired consistency without losing yellow color.

Drying time was evaluated for the different cultivars. All cultivars were sliced to the same thickness. Slices were weighed after drying to estimate the moisture content.

$$\text{Moisture Content} = \frac{\text{weight of wet sample} - \text{weight of dry sample}}{\text{weight of wet sample}} \times 100$$

EQUIPMENT USED. For this study individual canistel fruit were washed, peeled, and cut into chips. The tools, utensils, and other equipment used were measuring cups, measuring spoons, sifter, peeler, grater, utility tray, plates, fork, weighing scale, knife, mixing bowl, working table, and a dehydrator.

Grinding was done using an electric grinding machine until a fine flour-like texture was obtained. The canistel fruit flour was placed in a clean covered jar cover to avoid contamination.

The canistel flour was tested in different recipes sweet and savory as milkshakes, yogurt, bread, ice cream, soup, and pastries. The canistel flour contributes both color and flavor to the recipes.

Results and Discussion

The average time for dehydration in an electric home dehydrator was between 8.5–10.2 h using one-inch thick ripe fruit. All cultivars evaluated ('Bruce', 'Fairchild 2', 'Keisau', 'Oro' and 'Trompo') dried well, with good color and flavor. 'Bruce' had the driest flesh and required the least time in the dehydrator, with an average of 8 h in the dehydrator. 'Fairchild 2' had a much moister flesh and required more time in the dehydrator, with an average of 10.2 h. Also 'Fairchild 2', showed poor color after the dehydration process.

An unusual advantage is that the fruit, when ripe, can be dried and milled into mealy flour. The flour can be shipped long distances, stored for years in airtight containers and can be used for other products. Dry canistel is an extremely versatile and tasty ingredient which blends well with ice creams, baby food, yogurts, pies, cakes, cookie fillings and desserts. The pulp and flour of the canistel retains its nutty aroma, flavor and texture throughout the different processes. It has been shown to be heat and cold stable and is excellent for natural sorbets and other organic products where chemical stabilizers cannot be used.

The canistel and its products have been tested by Fairchild Tropical Botanic Garden of over two decades (Wasielewski and Campbell, 1997), including tasting panels and for value-added products. Many people in the United States say that it tastes and smells like maple syrup. It is a frequent component of milkshakes, typically made with the fruit but without ice cream. This fruit contributes both color and flavor to most dairy products. In South Florida, the canistel fruit and its products are popular in farmer's markets and there is a greater potential for this fruit as a processed product, such as the powder used as an additive to milk or as a natural food coloring agent.

The canistel is still a minor commercial fruit crop in South Florida. However, assured availability of quality raw material on a local level has encouraged businesses to incorporate it into their products. Challenges remain for the canistel due to the lack of mainstream recognition and acceptance of the fruit. Hispanics are increasing familiar with this fruit, but outside of South Florida there is a nearly complete lack of knowledge. The large local Hispanic market in South Florida may be able to absorb large portions of increased production, but without a marketing program, efforts may ultimately be unsuccessful.

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INDEX of ARTICLES
Two Years of the Enhanced Newsletters

The following is an index of all the articles published during the past year:

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Collier Fruit Growers Garden Notes:

Now that the cooling temperatures have arrived, more attention has been given to grafting soursop and related Annona species onto soursop rootstocks. Annonas are typically grafted in October through March in southern Florida. Crafton suggests using either a simplified bud or top cleft graft, both wrapped tightly in parafilm to bind and lock out moisture. Timing is important between the cutting of budwood and grafting that should be held to only a few minutes, not hours.

Albert Folres, a new member of the Collier Fruit Growers, has recently grafted 'Triumph' Asian persimmon scions onto American persimmon rootstock successfully. As persimmons do not grow true from seed and January through March is the best time of the year to graft them, Albert's grafting talents will be much appreciated in the coming months.

Albert is assembling a solar powered irrigation pumping system for his new grove of fruit trees in northern Golden Gate. The pumped system will deliver more than 550 gallons per hour against a forty-meter (130 foot) resistance to an elevated 'day tank.' The system's configuration and components will be discussed in the January Newsletter.

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:

General meeting, 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 Revive Magazine, ***28410 Bonita Crossing Blvd., #11***, Bonita Springs.

Workshops:

Workshops (monthly discussions) are held on the *fourth Tuesday* of each month at **7 PM** at the Revive Magazine, 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.

DECEMBER CALENDAR OF EVENTS

Tuesday 3 Monthly Meeting: **Caloosa Rare Fruit Exchange**, 7:00 PM, Fort Myers-Lee County Garden Council Bldg., 2166 Virginia Ave., Fort Myers.

Tuesday 10 Holiday Christmas Party: **Bonita Springs Tropical Fruit Club**, 6:45 PM: Revive/Paradise Wellness, 28410 Bonita Crossings Blvd. #11, take elevator to 2nd floor. Please bring a dish to share.

Wednesday 11 Monthly Meeting: **Rare Fruit Council International**, **Miami**, 7:00pm in the Science Village Classroom next to the Butterfly Exhibit at Fairchild Tropical Botanic Garden, 10901 Old Cutler Road, Coral Gables.

Thursday 12 Shangri-La Springs Hotel and Spa, Tour of the organic fruit and vegetable garden, 10:00 AM, 27750 Old 41 Road. Bonita Springs, Admission: $3.00 per person.

Tuesday 17 Annual Holiday Christmas Party: **Collier Fruit Growers**, 6:00 PM early starting time: Tree of Life Church, Life Center, 2132 Shadowlawn Drive. Please bring a side dish or dessert to share.

BURDS' NEST OF INFORMATION THIS and THAT FOR DECEMBER

PRUNING
Resist all pruning in December.

MANGO FLOWERING
If you see flowers/panicles on your mango trees, it time to apply only 0-0-22 out around the dripline.

LYCHEES LONGANS
To encourage flowering, it really important to cut off all water NOW until the flowers begin to show.

COLD PROTECTION
Watch THE FORECASTS for front predictions. Depending where you live, especially east of I75, turn on your watering system at the WARMEST TIME OF THE DAY. Twenty minutes will be enough. ALSO remember that some fruit trees, such as Soursops, drop their leaves and fruit at 40F or lower. Therefore, they should have a warm wrap, and it should NOT BE PLASTIC!

MIRACLE FRUIT

Try applying cotton seed meal round your miracle fruit bushes to encourage fruiting. It is sold at feed stores.
Use the same amount that you would when applying regular fertilizer. Please note that the recommended fertilizer for miracle fruit is the same as for citrus: 10-2-10 or 6-4-6. Don't forget to check the chlorine % on the citrus fertilizer bag. It should not be more that 4% chlorine as the chlorine turns to salt. That would make for very unhappy plants.

Fruits which Ripen in December:

Atemoya, avocado, banana, black sapote, canastel, caimoyo (begins in January), carambola, carissa, coconut, fig, jackfruit, mamey sapote, miracle fruit, 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.

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!):

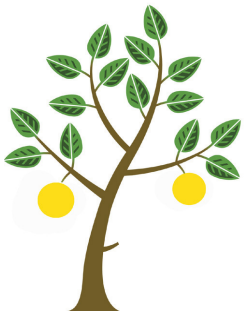
https://www.meetup.com/Bonita-Springs-Tropical-Fruit-Club/

Our **Website** (and newsletters with tons of info):
https://www.BonitaSpringsTropicalFruitClub.com/

Officers and Board of Directors:
Jorge Sanchez - Interim President
Jorge Sanchez - Vice President
Micah Bishop - Treasurer
Lisa Mesmer - Secretary
Crafton Clift - Director
Luis Garrido - Director
Berto Silva - Director

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

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!

2019 CFG BOARD OF DIRECTORS

OFFICERS:
President, Rodger Taylor - 239-384-9630
Bonnie Hawkins, Vice President
Melissa Parsons, Treasurer
Jennifer Adriaanse, Secretary

DIRECTORS AT LARGE
Crafton Clift, Director
Micah Bishop, Director
Jorge Sanchez, Director

Like Us on Facebook! https://www.facebook.com/CollierFruitGrowers/

The Collier Fruit Growers monthly meetings are now broadcast live on Facebook at 7:30 pm on the third Tuesday of each month. The meetings are posted on the 'Collier Fruit Growers Group's Facebook page. Access the page by requesting to be a Member.