



The Fruit Growers of Southwest Florida

APRIL 2021



After having to postpone last month, Josh Jamison will speak Tuesday, April 20 at the Collier Fruit Growers Meeting. Josh is an edible plant enthusiast and collector. Since 2013, he has been the Agriculture Manager at the h.e.a.r.t. (Hunger, Education and Resources Training) Village, a nonprofit organization in Florida that educates students planning to do international development work. Josh is also a graduate of Warner University. He manages the demonstration gardens which host a large diversity of fruits, vegetables and other useful plants that improve the lives of people around the world. Josh has studied and grown many underutilized nutritious leaf crops, root crops, tropical/subtropical fruit, vegetables, and all kinds of other plants. His passion in life is to promote agro ecological farming as a path to local and global community restoration.

Mango grafting season is rapidly approaching. The Collier Fruit

Growers is attempting to reschedule the much-anticipated grafting class. It will be held on a Saturday either in early June or on September 25. It will be at one of two possible locations (the Naples Botanical Garden or in the garden on the north side of the Extension Service – Collier facility). The twenty persons who signed up for the cancelled grafting class on June 6, 2020 will be automatically registered for the rescheduled class. Once the exact time and place has been established each person will be notified. The Participants will be given the opportunity to withdraw and have their \$10 fee refunded. A short-list of possible substitutes will be compiled in the order of when their requests are received by e-mail at rtaylorrm@comcast.net The \$10 fee will be due the day of the class.



**Collier Fruit Growers' NEXT Meeting:
Tuesday, April 20, 2021.
The meeting starts at 7:15 pm.
Life Center, Tree of Life Church
2132 Shadowlawn Dr., Naples, FL 34112**

Please always observe the wearing of masks and social distancing.

Please remember to pay your 2021 renewal dues: \$15/ individual, \$25/ family.

Please remember that it is time to pay your \$15.00 renewal dues for 2021 or risk not receiving the monthly newsletters. Please mail dues to: CFG, Inc. 1944 Piccadilly Circus, Naples, FL 34112.

**Bonita Springs Tropical Fruit Club Meeting will be April 13, 2021.
Workshop: Tuesday, April 27, 2021.**

The location of the future BSTFC Meetings will be announced by email.

Please always observe the wearing of masks and social distancing.

Please remember to pay your 2021 renewal dues: \$15/ individual, \$25/ family



Please always observe the wearing of masks and social distancing.



Tropical Fruit Recipe for April

Give you body a boost with a tropical fruit smoothie!

Everyone knows smoothies are a great way to nourish and protect your body from the inside out. So why not start your day with this delicious immune-boosting smoothie made with coconut water for some good old fashioned preventive medicine. Hopefully this recipe will delight your taste buds and set the tone for one great day!

Science has proven you can boost your immune system by eating vibrant, vitamin-fortified, antioxidant-filled foods straight from nature. We will be taking advantage of their DNA to help you!

We're using avocados because they are easily digested and help your body better absorb fat-soluble nutrients and help maintain balanced blood sugar.

Then aloe vera since it is one of the oldest healing remedies and natural antibiotics in the world. It is known to purify the blood, ease arthritis pain, lower high cholesterol, and protect the body from oxidative stress.

Also, coconut water which is highly nutritious and one of highest sources of electrolytes, and antioxidants.

Fresh figs which are rich in nutrients and simultaneously low in calories while providing so much good fiber.

Of course, we will also be using the king of all fruits, Mangos! They are rich in vitamins, minerals, antioxidants and help control blood pressure, lower risk of cancer, slows signs of aging and boost immunity overall.

In addition, the superfood mulberries to add vitamin C and iron. They also decrease oxidative stress and treat dry and sensitive skin while making your hair lush! Who doesn't want that?

Since I love my papaya tree we will be putting some in as well. Papaya has a digestive enzyme which is called papain, it is also good for eye health and is packed with Vitamin A and antioxidants, which are amazing for anti-aging, weight loss and better cardiovascular health.

Some ripe jackfruit to add sweetness and a myriad of vitamins as well as providing you with energy all day long.

Finally, banana. The original source of essential vitamins and minerals such as potassium, calcium, and magnesium. Banana is the favorite food for your liver, heart, digestive health. If I wake up in the middle of the night I eat a banana and it helps me fall asleep swiftly.

If you are brave enough to grow your own fruits and veggies, they taste even more amazing. I can't eat a mango from a store anymore since my tree sprouted fruit! I check on my mulberries every day to see if any are ripe, and the papayas are so good, they are incredible,

sweet, delicious, and creamy! Smoothies are one of the easiest ways to get your daily fill of fruits and veggies. So, this one will be full!

To make this smoothie extra easy on the day to day, a little meal prep goes a long way.

I chop up all of my fruit in one sitting then portion it out to small freezer bags. Before filling up the bags, I use marker to write the ingredients on it so there's no questions of what or how much to add, that way my whole family can have the vitamins they need for a healthy lifestyle.

Tropical Fruit Smoothie

(Servings: 3 Smoothies)

Ingredients:

1 to 1-1/2 cups coconut water
1/2 cup frozen mango,
1/2 cup frozen pineapple,
1/2 cup frozen or fresh papaya,
1/2 cup frozen or fresh mulberries,
1/2 cup frozen or fresh jackfruit
2 inch length of peeled aloe vera pulp of a large leaf.
4 fresh figs
1 large, sliced banana frozen or fresh
1/2 avocado

Instructions:

Add one cup of the coconut water, the frozen fruit, fresh avocado, aloe vera pulp in a blender, and blend until completely smooth. If the smoothie is too thick, add a little more coconut water at a time to obtain desired thickness. Pour the smoothie into 2-3 glasses and add optional garnishes if desired.

Serve immediately.

Notes:

Chef Daniela has graciously agreed to provide the recipe each month.

The opinions expressed within this article are the personal opinions of Chef Daniela.

Krome Memorial Institute

Proc. Fla. State Hort. Soc. 94:307-309. 1981.

EVALUATION OF THE LONGAN AS A POTENTIAL CROP FOR FLORIDA¹

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Abstract. The longan grows well in the soils of southern Florida and makes a handsome tree for home garden plantings. The small amount of fruit produced in orchards can be sold easily and there is interest in expanded commercial production.

Important limiting factors to fruit production include low temperature injury to trees, irregular fruit production and lack of suitable methods for propagation of superior selections.

Recent selections have much better fruit quality than older selections, and show promise of more regular bearing as well. Limited expansion of commercial plantings appears to be economically justified.

Good prices and increasing demand for fruit have created much interest in the planting of orchards of longan in southern Florida during recent years. Unfortunately, some erroneous statements have been made about the regularity of bearing of the longan and about its cold tolerance. There is danger that such misinformation could induce growers to invest in plantings with the expectation of greater profits than they are likely to obtain. This paper presents an assessment of factors that limit longan production in Florida.

History in Florida

The longan is native to Southeast Asia and is cultivated from southern China to India. The first introduction to the United States was by the U. S. Department of Agriculture in 1903 from southern China (6). Trees produced from the original introductions and distributed in Florida came from a limited genetic base and produced fruit of generally inferior quality (6). This caused the longan to be held in very low esteem in Florida (4, 6, 9) and accounted for the small amount of research done on the fruit in this state in the past. People familiar with the longan in the Orient knew it to be a good fruit and encouraged further research to evaluate its potential in Florida (4, 6, 9).

Since the early 1950's the introduction of superior selections by the U. S. Department of Agriculture and private individuals has greatly broadened the genetic base of longan introductions in Florida (5, 6). One of these, the 'Kohala' from Hawaii (11, 12), has given rise to seedlings

superior to anything seen previously at the University of Florida Agricultural Research and Education Center, Homestead (1). Similar results are reported with seedlings from other selections at the U. S. Department of Agriculture Subtropical Horticulture Research Unit, Miami (R. J. Knight, Jr. Personal communication).

Under Florida conditions, seedling trees will flower and fruit in 4 to 6 years after planting in the field, and thus are more precocious than some species, such as the lychee. This greatly facilitates the improvement of longan through seedling selection. There appear to be good possibilities for continued improvement in Florida in the future.

Adaptation to Florida Conditions

The longan grows well in southern Florida (2, 6, 8, 9). Its northward distribution in the state is limited by susceptibility to injury from frosts or freezes which occur in some years during the months of December, January or February. Reports of the effects of freezes on tropical and subtropical species make it clear that the longan is not a cold-tolerant tree (3, 7, 10). Small trees have leaf and twig injury at temperatures 1-2°F below freezing, and are killed by exposure to air temperatures in the high 20's. Larger trees can withstand some frost. They have leaf injury at temperatures of 27-28°F and injury to branches at temperatures of 25-26°F. Trees exposed to temperatures of 24°F or below will have injury to the trunk and major limbs, and may be killed.

Susceptibility to cold injury limits cultivation of the longan to the warm areas of the southern part of the Florida peninsula, roughly from Tampa Bay and Merritt Island southward. In comparative terms the longan tree has about the same cold-hardiness as the lychee and the 'Tahiti' lime, and slightly more than the mango and the West Indian avocado. Opinions that the longan is more cold hardy than these other crops are not substantiated by observations following several severe freezes (3, 7, 10).

The longan grows well in a variety of soil types. The best growth in Florida is obtained in sandy soils of medium acidity and a fair amount of organic matter. Trees grow well also in the calcareous soils of high pH in the southern coastal area. Small trees occasionally have micronutrient deficiencies in these soils, as indicated by leaf chlorosis. Most trees outgrow these symptoms as they develop a good root system, however, and mature trees seldom are chlorotic. Vegetative growth in organic muck soils is good, but the trees do not bloom and fruit well.

Longan trees respond well to fertilizer application in the sandy and calcareous soils of Florida. Formulations similar to those used for citrus fruits are recommended (8).

Water requirements of the longan tree have not been determined. Irrigation during times of dry weather is advisable because trees exposed to very dry conditions do not grow and fruit well. Trees will tolerate occasional flooding without evident injury, but it is not advisable to plant them where the soil is flooded much of the time.

¹Florida Agricultural Experiment Stations Journal Series No. 3325.

Flowering and Fruiting

Bloom in Florida occurs in March or April, and fruit matures from early August to early September. The best flowering occurs after relatively cool winters when frost does not occur. Research has not been done to quantify the duration of "chilling" needed, the temperature range which is most effective, or the best timing of the low temperature exposure. Repeated experience indicates, however, that when temperatures in the 30's or 40's occur for relatively long periods during December, January or February and there is not frost injury, there is likely to be a good bloom on longan trees. Bloom usually is poor after warm winters. If a good bloom occurs, there is nearly always a good crop of fruit.

A major problem with longan in Florida and other areas is the irregularity of fruit production (1, 6, 9). Typically trees will bear a heavy crop one year and then a small crop or no fruit at all the next year. Sometimes two years of poor crops occur between years of good crops. The fact that nearly all of the trees in a given area have the same "on-years" and "off-years" in fruiting indicates that climate probably is the most important factor controlling flowering.

There are also great differences between selections in their genetic capability to flower and produce fruit. Under the best of climatic conditions, some selections bloom profusely and produce heavy crops, while others have little bloom or fruit. The cultivar 'Kohala' has been planted in many locations and has borne fruit more consistently than most longan trees do in similar circumstances. Other selections have been propagated vegetatively and appear to have superior bearing characteristics, but need to be tested more.

Little research has been done on ways to induce flowering in longan, or to reduce alternate bearing. Sometimes limb girdling will induce bloom on otherwise unfruitful trees (6). Fruit cluster thinning has been practiced for a long time by growers in the Orient as a means of reducing heavy crops and increasing the chances of fruit production in the following year (6, 9). Limited trials in Florida indicate that fruit thinning may be effective here as well, but since it is done by hand it would be an expensive procedure.

Fruit Quality

Much progress has been made in selection of superior fruit types in Florida. The improvement in local seedling populations owes much to the recent importation of superior germplasm, as discussed above (6). In the past, most trees in Florida bore small fruit with a thick pericarp and a relatively small amount of edible pulp. Table 1 presents data on the size, amount of edible pulp, and sugar content

Table 1. Fruit characteristics of longan seedlings and cultivar 'Kohala', University of Florida AREC, Homestead.

Selection number	Fruit weight	Edible pulp	Sugar content
	g	%	%
Superior types			
1	10.1	78.2	18.0
11	9.6	74.4	17.7
12	10.4	76.2	20.8
15	9.5	76.4	19.5
Common types			
18	5.3	63.2	19.5
22	4.5	59.0	—
27	6.7	66.6	21.5
Kohala	11.6	77.6	19.1

of the "common run" of longan seedlings in the past and those of the cultivar 'Kohala' and of superior seedling selections of the present in Florida.

Fruit size is very important in the marketing of longans in Florida. Buyers prefer only large fruit, and even if they are willing to buy small fruit they do not pay a good price for it. Fruit size is to some extent genetically controlled and some selections have large fruit size even with a heavy crop on the tree. The amount of fruit on a tree can also influence fruit size significantly. When trees have a heavy crop, fruit thinning will cause a considerable increase in fruit size if it is done at an early stage of fruit development. Thinning is generally done by clipping off entire fruit clusters or parts of clusters by hand.

Heavy bearing is of course a very important and desirable characteristic. No extensive yield records have been taken on longan in Florida. In seedling evaluations at the University of Florida AREC, Homestead, some records have been taken, from which generalizations can be made. On trees with a height and spread of about 20 feet, a light crop is in the range of 50 to 100 lb., a medium crop 150 to 250 lb., and a good crop 300 to 500 lb. Occasionally trees of this size will produce 600 to 700 lb of fruit. Larger trees are capable of producing more fruit, but they are so difficult to harvest that it is not practical to let trees get large. Occasional pruning of the trees down to a manageable height is very desirable if they are being grown for commercial fruit production.

Other desirable characteristics now evident in superior selections are a thin peel or pericarp and a light tan, attractive external color of the fruit. Poorer selections have a thick peel and a dull dark brown color.

Propagation

Longan propagation by seed is easy. Fresh seed will germinate and sprout within a few days in a well-drained, moist medium. The seed loses its viability rapidly after removal from the fruit, however, so storage of seed is not feasible. The great disadvantage of growing orchards of seedling trees is their variability in growth and fruiting characteristics. Some of the trees are likely to be unfruitful and others will have inferior fruit. Differences in growth habit and other characteristics make orchard management and fruit marketing difficult.

The obvious alternative is vegetative propagation of superior selections, and therein lies another important problem with the longan in Florida. Vegetative propagation is difficult. The methods commonly used in Florida for similar tree fruits—air layering of small branches or veneer grafting of seedling rootstocks—have not given good results. Some successful method must be found before superior selections can be propagated on a large scale. One hope is the use of tissue culture propagation.

Potential for the Longan in Florida

The longan is an excellent tree for home gardens in Florida. The demand for fruit and the good prices received indicate that it is a good prospect for limited commercial plantings as well. However, there are several important limiting factors to production of the crop in this state. These include:

1. Frosts and freezes, which limit plantings to the coastal regions and warm areas in the interior of the southern half of the Florida peninsula, and will occasionally damage plantings even there.
2. Irregular bearing, which at present limits good fruit production to about one year out of two.
3. Variable and poor fruit quality of seedling trees.

4. Lack of a successful method of vegetative propagation to enable nurserymen to produce large numbers of trees of superior selections.

Growers should consider all of these factors carefully before undertaking the planting of orchards of longan. Small plantings should be profitable under present conditions of demand and price. At this point, however, the longan must be considered a crop of limited potential with important limiting factors to its production. Large plantings probably are not advisable.

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Proc. Fla. State Hort. Soc. 94:309-311. 1981.

Collier Fruit Growers News

After having to cancel the November 2020 Fruit Tree Sale, the February sale was a major success. The Organization netted \$5,830. Already, plans are being made to holding an even larger Fall Tree Sale, on Saturday, November 20. Thank you to all the many volunteers that helped with the February Sale in making it a meaningful success to CFG.

The much-anticipated Mango Grafting Class will be rescheduled to either one of the first three Saturdays in June, or September 25, 2021. Once the final arrangements have been made all currently registered persons will be contacted. **Openings will be filled in the order that their request are received.** More information will be forthcoming in the May FGWSF Newsletter.

Comprehensive lists of known Tropical Fruit Trees, both by their common and scientific names, have been linked to the CollierFruit.org homepage. **Please advise the Organization of any additions that may be required.** A further listing of fruit trees by their nature 'Plant Families' may be helpful in organizing the individual newsletter articles.

GRAFTING ANNONAS IN SOUTHERN FLORIDA¹

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Additional index words. Annonaceae, bud union, apical dominance, propagation, budwood preparation.

Abstract. Spring is considered the best time of year for

grafting Annonas (Annonaceae) in Southern Florida. Pre-graft preparation of budwood on the tree and scion preparation off the tree, permitted grafting most of the year except when the trees were dormant during the winter months. Graft combinations tested showed higher rates of grafting success when using pregraft preparation for the budwood.

Tropical fruits have less critical time periods during the year when they may be successfully grafted when contrasted with temperate fruits. However, many tropical fruit species do have an optimum time of year when higher percentage of graft take occurs (11). Weather conditions such as high temperatures, rainy or dry season, and fluctuations in humidity can have an influence on the condition of rootstocks and scions and subsequently the success of graft union (1, 6, 8). Also, the annual cycle of dormancy influences the success of the graft union in some species (11).

¹Florida Agricultural Experiment Stations Journal Series No. 3378. This work was sponsored in part by the Rare Fruit Council International, Inc. and the Dade County Agrilocouncil. Drawings by Jose Ramos.

Budwood preparation in some species is important (11): (a) carbohydrate accumulation to nourish the scion until a graft union is formed (7, 8, 12), or (b) removal of apical dominance that permits budbreak of the axillary buds (11). Although budwood may be girdled for carbohydrate accumulation in some of the *Annona* species, this is not a common practice because the wood is so brittle that a slight wind will cause the weakened branch to snap off. However, a long budstick, relatively large in diameter, will contain more food reserves that will nourish the scion for 2-3 weeks until the graft union is formed.

Local environmental conditions are important in determining grafting technique for a particular species. Under Florida conditions, the veneer graft is used for most tropical fruits (3, 4, 5, 7, 10). Diameter of the stock relative to the scion affects the formation of the graft union, and also the rate of growth and time period from the nursery to the field (2, 4, 9, 13).

Budwood is collected for many of the *Annona* species in South Florida after the leaf drop in winter and just before budbreak in spring. This is considered the optimum time for grafting many species of *Annona*. Even though they may be grafted at other times of the year, the rate of success has been lower when using budwood from trees in full leaf. Maturity of the buds and whether they are blind, is often difficult to establish when the buds are dormant. However, they should be collected just as the buds are beginning to swell. Once the trees are in full foliage, the buds cannot be properly examined since they are interpetiolar (buds are completely surrounded by the petiole as in the sycamore) in most *Annona* species (Fig. 1).

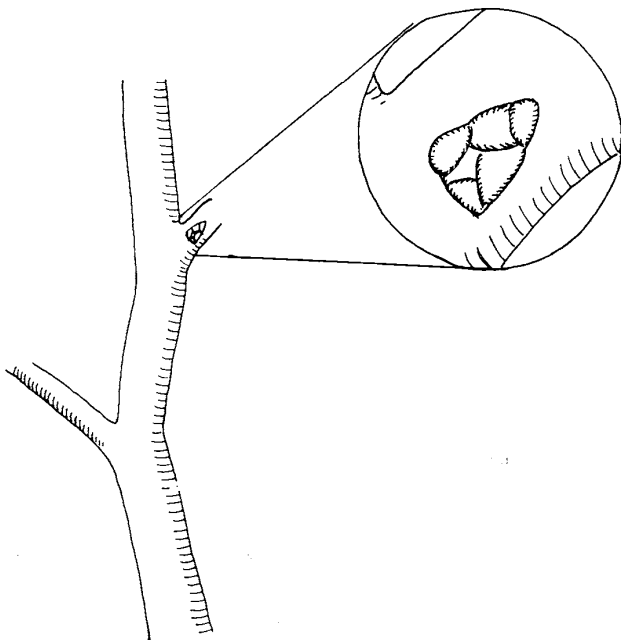


Fig. 1. Inter-petiolar bud.

The purpose of this study was to determine if on-tree and off-tree scion preparation enhances grafting success at times of the year other than spring.

Materials and Methods

Budwood was collected in South Florida in March when the trees were beginning to break dormancy, and May, June, July and August. Pre-graft preparation of budwood

on trees in full leaf consisted of removing the terminal bud and leaf blades, leaving the petioles attached (Fig. 2). Budwood was collected as soon as the petioles abscised and the buds were beginning to swell. The budsticks were immediately prepared for grafting (Fig. 2).

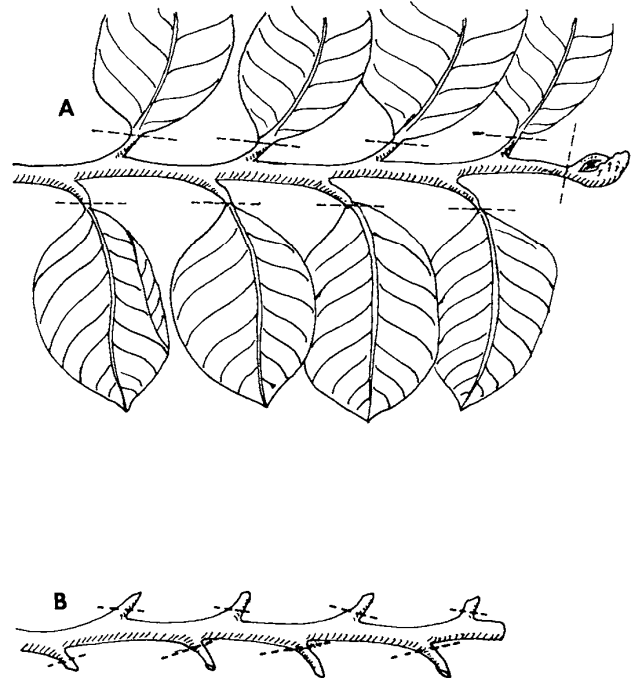


Fig. 2. On tree budwood preparation: A. Removal of leaf blades and terminal buds. B. Petiole abscised.

Scions used for veneer grafts were prepared in the standard manner, but instead of cutting the budsticks in half longitudinally, only a superficial cut down to the cambium was made, removing the bark and some cortex, leaving 3/4 to 7/8 diameter of the budsticks intact (Fig. 3). An oblique cut was made on the front surface of the scion to match a corresponding notch on the prepared stock.

Rollinia (*Rollinia mucosa* L.), cherimoya (*Annona cherimola* Mill), soursop (*A. muricata* L.), surgar apple (*A. squamosa* L.) and atemoya (*A. squamosa* x *A. cherimola*) were veneer grafted to seedling rootstocks of pond apple (*A. glabra* L.) and wrapped with clear polyethylene tape.

There were preliminary tests of scions on pond apple to determine grafting technique with unprepared budwood during June and July, 1979 (using a chip bud). Chip buds were the same size as veneer grafts, but the internodes of the budwood were so long at this time of year, scions of the same size had only one bud. Tests were conducted during March, 1980 with unprepared budwood from dormant trees (Table 1).

Prepared scions from trees in full foliage were collected in August, 1979 and May, 1980. Cultivars of atemoya ('Bradley', 'Geffner', 'Page') were used in some experiments to make sure that cultivar difference did not influence the percentage of graft take (Table 2). Scions of the other species were collected from mature seedling trees (Table 2). Rollinia and cherimoya were not used in later experiments because budwood was scarce.

Results

Preliminary tests with unprepared budwood in June and July, 1978, had 60-100% initially and 30-50% survival

Proc. Fla. State Hort. Soc. 94: 1981.

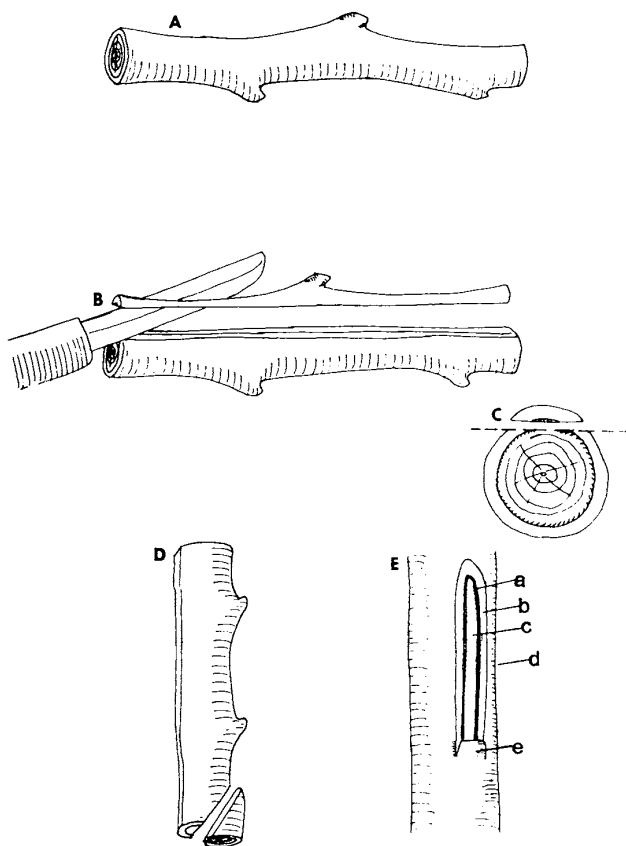


Fig. 3. A. Budwood, B. longitudinal cut, removing 1/8-1/4 diameter, C. cambium layer exposed, D. oblique cut, E. prepared stock showing: a. cambium, b. phloem, c. xylem, d. dark. e. flap.

after 2 months. Dormant budwood grafted in March, 1980 showed 50-100% take, but all died later. Small stock size prohibited using the large scions during this experiment and the combination of small stocks and small scions *did not produce* vigorous plants (Table 1). Budwood that had been prepared on the tree during May and August, 1980 had 90-100% take depending on the species tested (Table 2).

Discussion

The method of pregraft preparation of budwood on the trees and scion preparation off the tree permits grafting of the tested *Annona* species during most of the year, except when the trees are dormant in winter. The technique of scion preparation with shallow cuts is easier to manipulate since so little wood is removed from the scion, leaving a smoother surface for better contact with the stock plant.

The combination of on-tree budwood preparation and off-tree scion preparation can benefit both the commercial nurseryman and other horticulturists by extending the time of year that *Annona* species can be more successfully grafted.

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Table 1. Grafting trials with unprepared budwood of *Rollinia* and *Annona* species in South Florida.

Exp.	Scion	Date	Reps	Graft	Comments		
					1 month	2 months	Later observations
1.	<i>Rollinia mucosa</i> L.	6/28/79	8	chip	8 alive	4 pushing	Rest dormant but alive
	<i>Annona squamosa</i> L.	7/1/79	10	"	6 "	3 "	"
	<i>A. cherimola</i> Mill.	7/5/79	10	"	10 "	5 "	"
	<i>A. muricata</i> L.	7/2/79	10	"	10 "	3 "	"
2.	<i>A. (squamosa x cherimola)</i>	3/27/80	10	veneer	10 pushing	all died	
	<i>A. muricata</i>	3/27/80	10	"	5 pushing	"	
	<i>A. squamosa</i>	3/27/80	10	"	10 pushing	"	

Table 2. Grafting trials with *Annona* species, "on" and "off" the tree budwood preparation.

Exp.	Scion	Date	Reps	Graft	Comments		
					1 month	2 months	Later observations
1.	<i>Annona (squamosa L. x cherimola Mill.)</i>	8/16/79	10	Veneer	10 alive	10 pushing	all alive
	<i>A. muricata</i> L.	8/16/79	10	"	10 "	6 "	slow initial start
	<i>A. squamosa</i>	8/16/79	10	"	10 "	6 "	much less vigorous
2.	<i>A. (squamosa x cherimola)</i>						
	cv. 'Bradley'	5/7/80	10	"	9 "	9 "	vigorous
	cv. 'Geffner'	5/7/80	10	"	10 "	10 "	vigorous
	cv. 'Page'	5/7/80	10	"	10 "	10 "	most vigorous
	<i>A. muricata</i>	5/7/80	10	"	10 "	10 "	pushed last but later grew fastest
	<i>A. squamosa</i>	5/7/80	10	"	10 "	10 "	least vigorous

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The Florida Sugar Cane Saga

The sugar cane industry has a long history in Florida and is still one of the leading business interests and political powers in the state. The book, "*Cultivation of Sugar Cane*", which can be found in Florida Historical Society Library, is a 1900 treatise by William Carter Stubbs, Ph.D. (1846-1924), tracing the history of sugar cane production in Florida, Georgia, and South Carolina from 1767.

Florida is the leader of the four sugar –producing states, accounting for half of the sugar cane and about 25% of all cane sugar produced in the U.S. 75% of the Florida crop comes from a relatively small area near Clewiston in western Palm Beach County.

Anyone familiar with Everglades restoration, environmental law and South Florida water policy knows 'Big Sugar' is a major business and political player in the state.

The first Florida commercial sized sugar cane plantations started in the late 1760's in New Smyrna. They tried to scale up what started as small operations of only a few acres, with the cane grown and cut by hand.

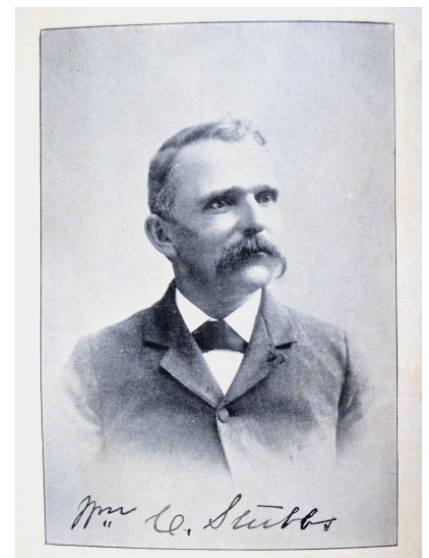


Sugar cane grinders, such as this one at the historic Rossetter House in Melbourne, Brevard County, can be found to this day around Florida.

These plantations and all that followed, failed, despite substantial investments in land and equipment by eager and optimistic settlers (mainly planters from Virginia and North Carolina looking for new and profitable crops). Enthusiasm is not enough; you also need good soil and predictable weather. Sugar cane, like bamboo, is a grass, and is native to Asia. The major problem was freezing. When sugar cane freezes it produces less crystallized sugar. When to harvest was a guessing game, and eventually the risks of guessing wrong became too great for most planters. It was not until 1886 that larger scale planting would resume, and then it was south of Lake Okeechobee. It was still limited, and in his book, Stubbs noted the inefficiency of the hand processing of sugar, and he outlined ways to improve it.

Even though growing sugar cane in Florida has been likened to growing bananas in Massachusetts, in the 1920's the U.S. government began building and dredging canals and 'reclaiming' Everglades land south of the lake for agriculture and paying subsidies to sugar growers. Even with government help, the sugar industry stayed small, until 1959 and the Cuban Revolution. With the embargo on Cuban sugar, subsidies grew, more land was cleared and the rest, as we often say, is history.

A chemist and agricultural scientist, educator and unabashed promoter of the sugar industry, Stubbs was Louisiana's state chemist and director of the Sugar Experiment Station Audubon Park, New Orleans, 1885-1895, the United States Experiment Station in Honolulu, Hawaii, 1900, and was a professor at Louisiana State University and Auburn University. A native of Gloucester County, Virginia, Stubbs fought for the Confederacy, including a stint with J.E.B. Stuart's Corps.





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.**

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 APRIL and April, 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/>

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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.

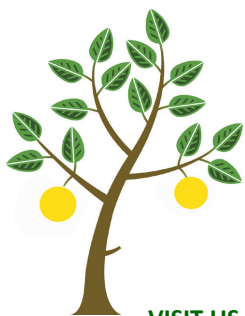
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