

NEWSLETTER

JUNE 2005

TAMPA BAY CHAPTER of the RARE FRUIT COUNCIL INTERNATIONAL, Inc.

EDITORS: BOB HEATH, PAULA HARDWICK, CHARLES NOVAK, LINDA NOVAK, JIM LEE, SALLY LEE

PRESIDEN: CHARLES NOVAK WEBSI

WEBSITE: www.rarefruit.org (CHARLES NOVAK)

MEETINGS ARE HELD THE 2nd SUNDAY OF THE MONTH @ 2:00 PM.

NEXT MEETING: JUNE 12

PROGRAM: DAVE PALMER OF THE HILLSBOROUGH COUNTY EXTENSION SERVICE WILL SPEAK AT OUR NEXT MEETING ON A VERY IMPORTANT TOPIC, NAMELY PESTICIDES. We would all be happier if pesticides were never necessary for reasons which we all know. But Dave Palmar will fill us in on the proper use of pesticides and when they can be used to advantage. If you have questions about pesticides, he will probably have the answers. We will also have our usual plant raffle and tasting table, so please contribute. Also, where they're available, bring fruit and vegetables for the Farmers Market.

WHAT'S HAPPENING

May-June 2005

by PAUL ZMODA

This year's 'dry season' is turning out to be not so dry. We are above average in the rainfall department and our fruiting plants are thankful for that.

We picked tea leaves and processed them to yield a quarter pound of green tea. A cup made from this tea is mild and rewarding. Tea leaves may be plucked every 7 to 10 days and the shrubs respond by getting more bushy, so even more leaves will be available later on.

Our largest grumichama tree is now 9 feet tall. The fruit yield this season has been outstanding. The dark red/black berries are very juicy & of a unique flavor.

Feijoas are blooming to beat the band. The flower petals are succulent and sweet and taste like candied rose petals. To ensure fruit, I make a daily habit of gently squeezing the older blooms, dusting my fingertips with pollen. I then do the same on the newly opened, darker ones to transfer the pollen.

We are still enjoying our tamarind pods which took 11½ months from flowers to ripeness.

I gave all of our peppers, eggplants, okra, squash and watermelons a generous treat of bat guano, collected from a warehouse in Polk County.

The Shaklee product "Basic H" was sucessful in eliminating white flies and scale insects on our guavas and citrus. Try this if you cannot get the colloidal cleaning product. Usage rate was approximately 2 tablespoons per gallon of water.

We got an enormous crop of blueberries. This was very much appreciated as the price for them in the markets hit an astounding \$16 per pound!

New plantings: green, red & purple yardlong beans, gac (Momordica cochinchinensis), okra & one cherimoya tree.

PLANT	DONOR		WINNER
Çabeluda	Bob Heath		?
Banana	11		R. Shigamura
Papaya	11		?
Eugenia Confusa	11		Tony Ferreira
5 Leaf Akebia	11		?
Sea Grape	11		Ed Musgrave
Beauty Berry	11		?
Surinam Cherry	11		Judy Der
Gac	11		Zmoda
Red Passion Fruit	11		F. Foster
Passion Fruit	Lees		Harris
Longan	11		?
Pawpaw	11		?
Orange Berry	11		?
White Ginger	Pat McGauley		?
Fig	Tony Ferreira		?
Surinam Cherry	Thom Scott		?
Surinam Cherry	11		?
Loquat	11		?
Loquat	11		?
Pineapple	ŋ		?
Smooth Cayenne	Lillian Smolen	V	?
Pineapples	II	· y	Betty Bruder
Pineapples	11		?
Tomato Plants	Sanda Worsham		?
Rolinia	Luba		?
Eggplant	Harris		?
Yellow Canna	III		?
Yellow Canna	11		?
Jade	Connie White		?
Mexican Oregano	Jon & Debbie B	butts	?
Aloe Vera	11	,	?
Pot Summer Squash	W. Yoblonski		Bob Heath
Pot Zucchini Squash	11		T. Worsham
Tropical Spinach	N. McCormack		?
Mamey Sapote	C. Novak		?
Jack Fruit	11		Musgrave
Surinam Cherry	11		Harris
Lychee	11		Donna Grose
Ylang Ylang	J. Cimafranca		Michael Duffie
Ylang Ylang	11		?
	111		
Dwarf Banana Brown Fig	Carl Chapman		Ron Shigamura Ron Watkins
Impatien	?		Gini Watkins

Members' Corner:

Lychee fruit for sale (late June-early July). Contact Sally Lee (813) 982-9359.

FOR SALE: Permanent metal plant tags. 1" \times 3-3/8". Weatherproof. As used at my farm to mark all my specimens with Latin and common names, country of origin, planting date, etc. Fifty for \$11.00. Paul Zmoda 932-2469. I will bring to next meeting.



From the President Charles Novak

I'm sure everyone enjoyed Gene Joyner's presentation on Mangos last month. We had over 100 members attend our Mother's Day meeting. Thanks to all the members who donated the delicious food to the tasting table and the plants for the plant exchange.

Our June program will be on the Proper Use of Pesticides-which should be of interest to everyone. Please try to attend this meeting.

There will be no meeting in July. Members are invited to attend the Rare Fruit Conference July 7 - July 10 at the Fruit & Spice Park in Homestead, FL. There will be tours, speakers, a banquet, and rare fruit tastings. Website: http://www.fruitandspicepark.org/FruitConference.php

We need suggestions for speakers. If you know of someone who could give a presentation of interest to our members, please contact Sally or Jim Lee at (813) 982-9359.

There will be a Board of Directors meeting after the regular meeting on June 12. Members are welcome and encouraged to attend.

Scheduled Programs/Events:

June 12:

Dave Palmer, Hillsborough County Extension Agent.

Topic: The Proper Use of Pesticides

July 7 - 10:

Rare Fruit Conference 2005 - Homestead, FL

**No Regular Meeting Sunday, July 9, at Westside Conference

Center

August 14:

Trip to the Amazon presentation

TASTING TABLE MAY 2005

Lohn	Banana Walnut Bread Rambutan stuffed with pineapple	Ferreira Engelbrecht	Fruit salad Fried Plantains
Sinclair Smoleny	Pistachios, Romeo & Juliet	Topping	Cake
Shigemura	Choc. chip, coconut & nut bars Fruit couscous, Sekihan	Kirby Sawada	Pumkin fritters Cake
McGauley	Mama's stew, tamarinds	Newcombe	Salad
Musgraves Yoblonski	Caramel pecan cinnamon roll Summer squash, zucchini	Bruder Scott	Sodas
Branesky	Philippine fried rice	McCormack McCormack	Sulphur Springs fruit salad Pecan cookies
Cimafranca Lee	Pork adobo (Philippine)		
Novak	Swirl cake, lemon cake, Danish, papay Chicken pasta salad with mango, bluet platter, juices	a, brownies, salsa dip perry cobbler, banana	o -guava nut bread, fresh fruit

and many other delicious contributions to the tasting table. Please list your contribution on the sign up sheet and get your free plant exchange ticket from Sally Lee.

Graffing Knives and Grafting Kits: The club has grafting knives, grafting kits and Parafilm available for purchase by members who would like to graft their own plants. Contact Charles Novak (813) 754-1399.

Tampa Bay RFCI Polo Shirts: The club has polo shirts (dark green or blue) available for purchase by members. The cost is \$15 each. Contact Charles or Linda Novak.

Club Library: Please return club Library Books at the next meeting.

pH Soil Testing at the JUNE meeting. If you would like to have your soil's pH tested, obtain soil samples from 6 to 8 sites within the area you want tested. Mix the soil together and put it in a plastic bag. You will need at least 1 cup of soil for the test.

MANGOS

by GENE JOYNER of the Palm Beach Extension Service

Gene's Unbelievable Acres is about $2\frac{1}{2}$ acres of botanical gardens, started in 1970 on an empty cow pasture with over 1200 varieties of plants including about 160 different types of fruit trees. Almost any kind of tropical fruiting tree you can think of is probably somewhere on that property. Gene only received very minor damage from the hurricanes, so his big fruiting trees, 15 to 20 feet tall, are still in good shape. His gardens are open on the second Saturday of each month by appointment because of limited parking, from about 1:00 to 5:00 pm.

Mangos, as with most of us, is number one of Gene's favorite fruits. If he could only keep one fruiting tree, it would be the mango. He says he looks forward every year to the mango season. He said that down in the Palm Beach area, because of the hurricanes they had a very late bloom. The trees are holding fruit on this late bloom, which is unusual, and most trees in the area have a much smaller crop due to the stress of the two storms. The growers down Miami way, however, will still be having a pretty good crop this year.

The mango is the number one fruit in popularity in the world. There are more people worldwide eating mangos than eat apples, peaches, pears, plums and other commercial fruit combined. Mangos originated in Southeast Asia and they are very important to the people in these countries because during mango season, many people virtually live off the mangos.

Because the mango is a very nutritious fruit, you could have a diet of 100% mango and not suffer from dietary problems. However, it's Florida that has the reputation for the finest mango varieties in the world, and many of the mango producing countries have major groves based on varieties developed in Florida that were distributed tho those countries many years ago. In parts of Africa, Israel, Australia, Brazil, Peru, Chile, Central America and the Caribbean Islands, many of their export mangos which they ship to the United States for sale in our supermarkets were originally developed in Florida.

Mangos have a relatively long season; some of them ripen as early as March and others ripen as late as the end of November. Brooks Late produces fruit as late as Thanksgiving in the fall. Many mango trees around the world are produced from seeds, but if you want a known variety, you have to get a grafted tree. Boynton Beach, FL is the biggest producer of mango trees in the United States. Zill's, an 18 acre nursery that last year produced over 80,000 grafted mango trees, shipped throughout Florida and into the Caribbean Islands and other places in the world. They are also big in avocados, producing about 15,000 to 20,000 trees last year. Some years ago, they had a shipment going to a grove in California of 5000 mango trees, all Keitt variety. All of their root stocks are turpentine mangos, most of which they obtain from Jamaica, the seeds of which are shipped to Florida, minus their shell; just the embryo is shipped. They get close to 99% germination of the seeds because they are inspected after they are removed from the shell, and only the viable ones are shipped.

Mangos are used some place in the world at almost every stage of their development, from the size of a chicken egg up to full maturity. Many cultures use mangos when they're green. They can be used for relishes and pickles before the seed develops. Also mangos, at their full mature size but still green, can be used just like you would use apple. They can be cooked, for instance, and made into pies that are indistinguishable from apple pies, and you can make a mango sauce that's almost indistinguishable from apple sauce. But who would want to waste a mango to make an apple pie or apple sauce?! And of course when they're ripe, there are innumerable ways to use mangos in various recipes. They can also be dried and made into excellent fruit leather. Mango juice which is available in markets today is excellent for milk shakes and to flavor ice cream.

Gene had a great number of slides of different varieties of mangos and also slides of the problems, insects, diseases, etc. His first slide was a small tree to indicate the general shape of the mango tree. It makes a well shaped beautiful tree in the landscape unless it has suffered from freeze damage. Mango trees in more tropical climates may reach a height of 80 ft with trunks of a diameter of 3 to 4 ft. To harvest the fruit, of course, you would need a helicopter or a bucket truck with a long boom.

The next slide showed the florescence which are terminal on the ends of the limbs, made up of thousands of tiny flowers, only a very small percentage of which will actually set fruit, and many of those will fall off before they reach maturity. Mango varieties at maturity will range anywhere from about 3 ounces to about 6 pounds for the largest variety. Size, of course, doesn't indicate the quality of the flesh or pulp. Some of the small varieties, maybe a pound, pound & a half, taste a lot better than some of the biggest ones.

His next slide showed a table with a large number of different species. In south Florida at the Fairchild Gardens and Palm Beach where Gene lives, they have a number of mango festivals where people can taste the various mangos being grown. There are several displays in south Florida of the various species of mango. The Rare Fruit Council and the Extension Service in Palm Beach have a festival the last Saturday of June every year, June 25 this year, from 10:00 a.m. till 3 p.m. Fruit on display, fruit to taste and a selling area where you can buy the trees. they will also be selling the fruit of lychees, mamey sapote, jackfruit and al sorts of fruit to taste and fruit to buy to take home. Some mangos, when ripe, are very pretty. Tommy Atkins, a noted example, is a beautiful red fruit but Gene said it is not the most flavorful. He said if you have a tree of Tommy Atkins and another tree you like better, when your friends come to visit, give them the beautiful Tommy Atkins and save the others for yourself. They will be happy with it, of course, because it's very pretty, and you keep the more delicious one for yourself, ha ha. Tommy Atkins, because of its beauty, is a top shipping mango and is grown throughout the world where mangos are produced.

Gene had slides and mentioned the names of several varieties; the Haden, an old variety; the Zill, not real big but one of his favorites and a heavy producer; Valencia Pride, another old timer, a very large fruit, pink and yellow on the outside - unfortunately, it only has a shelf life of about 3 days, so when it ripens, you need to eat it immediately; Kent, one of Gene's favorites, another old timer, a large fruit up to 5 lbs. or so, very late, reaching maturity late in July and early August and even into September, but not very pretty, with not much eye appeal. Van Dyke is another one he likes, a smaller mango but real pretty, red and a little yellow sometimes, with a small seed and lots of pulp, very high quality. Early Gold is another one with pretty orangish skin, medium size, ripening in June, but with a fat squatty seed. Keitt is a major commercial late mango which ripens toward the end of July and into August, 5 to 6 lbs. maximum, a big fruit & a heavy bearer. East Indian is another one with a lot of fiber but excellent quality, so it can be sliced up, pureed, and used in milk shakes and ice cream and other products. The Southern Blush Mango is getting to be a commercial variety. It has a medium size seed compared to other mangos, but high quality flavor, no fiber and is a very dependable producer.

We next looked at some of the problems that mangos have. The number one problem is a fungus called anthracnose. It not only attacks mangos, but a wide range of other fruit. Once it develops in your landscape, it's probably going to be there year round because when it's not on the mango, it's on some other fruit tree. Among the mangos, it can live on the flower, the foliage and the fruit; and in some years can cause a total loss of the crop. If it infects the flowers during the bloom period, all the flowers will turn brown, shrivel up and die, so that you don't get a single fruit set. And sometimes after the fruit has set, maybe as large as golf balls, they can get infected and fall off. The lesions from anthracnose are very distinct;

they're black, sunken spots on the foliage and on the fruit. Commercial growers usually spray their trees weekly for anthracnose when they first start blooming. However grove owners use products that are probably not available to the general public for homeowners' use.

Another problem we have with mangos during the wet summer months is parasitic red algae, which can also affect some citrus trees. It will get on the leaves and if it spreads enough and is not sprayed, it can damage the leaf and the leaf will abort. It is relatively easy to control with one spraying of copper, which is very toxic to this algae, and one spraying will usually end it for the season.

Another fungus disease is called mango scab, a disease that some years is very prevalent, depending on the temperature and humidity conditions. It doesn't damage the fruit other than to make the skin look bumpy and scabby. It will go through the skin and into the pulp if the fruit is left to ripen too long, but normally by the time it's ripe, it has only damaged the skin, and most people don't bother to spray for it. In the event you want to spray, copper fungicide is the spray for this problem.

Fruit that is hanging on the tree and exposed for an extended period of time to the sun can suffer from sunburn. As the fruit approaches maturity, it tends to lighten in color where the sun shines on it and looks as though it is getting ripe. This is just a discoloration of the peel but the pulp inside will begin to decay, the rot will go into the flesh and the fruit will abort. The only way to prevent this for fruit that is hanging in the sunshine for several hours, is to provide some sort of shade. Mangos are also subject to fruit split when there is a lot of rainfall, just as with citrus and other fruit. The late fruit that is still on the tree in July and August are the ones more likely to split because of the excess rain at that time of year.

The mango tree is normally able to get all the nourishment it needs from the ground without a lot of fertilizing. Many people do no fertilizing at all and get bumper crops on their trees every year. Also as the trees mature, their roots normally go deep enough that irrigation is not required even in the dry season.

* * * *

FIGS

(Ficus carica)

The fig is in the family Moracaea, the Mulberry family. There are some Ficus species that are deciduous, as is the common fig, and there are also evergreen species. Some are even vines. Hybridization between Ficus species, including crossing tree forms with vines, has been performed, but with no useful results to date.

Any form of pruning or training (e.g., espaliering) may be used in growing figs. In the southeast, the most common form is the bush. This is because they sucker prolifically from below ground here, making a multiple trunk form of growth. If a tree shape is desired, the suckers must be removed constantly.

The fig prefers full sun, but will perform fairly well in half shade or exposed to the morning or afternoon sun. In full shade it will have problems.

The fig leaf is palmate in form with three to five lobes. Different varieties have recognizably different leaf forms, some more deeply lobed than others. Also, not all leaves on the same tree are identical, which can complicate the identification process.

Some time ago, a nurseryman in Houston bought what he thought was a load of magnolia trees and they turned out to be fig trees. So he called them "Magnolia" figs. The "Magnolia" fig used to be grown commercially in Texas, between Galveston and Houston. In Europe it is known as the "Brunswick".

Although the common fig grown in the south will set fruit parthenocarpically, it is capable of being sexually fertilized. When grown in Europe, where the fig wasp is present, these same figs will be pollinated and produce fruit of different color and shape than that produced here. As a result, different names get attached to the same tree in different locations. In Florida the nomenclature is very confused. The common "Brown Turkey" of the southeast is also known as "Everbearing", "Texas Everbearing", "Harrison", "Ramsey", "Lee's Perpetual", etc. The "Celeste" is also "Blue Celeste", "Celestial", "Little Brown", "Purple" and "Sugar". The "Green Ischia" can be "Ischia Green", "White Ischia" and "Ischia Verte".

The major leaf disease of figs is "fig rust". The only control is to spray the undersides of the leaves with copper, either in neutral copper form or in a Bordeaux mix. Other fungicides are of no use. Spray every two weeks religiously. Be aware that this is a preventive treatment only. A monthly application of a nitrogen fertilizer will force leaf production and overcome the rust problem to some extent. Most leaves will then hold until fall, though they may drop a bit early, which is no problem.

In the spring, before new leaves come out, some fig varieties will form figs on the old wood. This "breba" crop will ripen later, after the tree has a full set of leaves. A second crop will then form in the axils of the leaves. Some varieties, like Celeste, will usually drop all of the breba crop and bear only the leafy crop, which appears continuously until fall.

Pruning tends to stimulate longer internodes (the distance between leaves), and, hence, a longer crop season. You should get more fruit without pruning, but a condensed crop season. Pruning will extend the season, but give you a reduced crop.

The fig is a unique type of "fruit", called a syconium. It is actually a hollow stem with flowers on the inside. It contains hundreds of male and female flowers, the females forming the true fruits, or seeds. In the Smyrna fig, the tiny Blastophaga wasp enters the syconium through the opening (eye or ostiole), searching for a place to oviposit her eggs in the female flowers, As she enters, she brushes pollen from the male flowers and thereby serves to pollinate the female flowers. The wasp will leave and enter other figs, thereby performing cross-pollination.

A tightly closed eye is preferred to southeastern figs. An open eye permits water to enter and results in fruit splitting and souring. A closed eye also discourages insects from entering. A long stem, resulting in a drooping habit of the fruit, is also desirable here, since it helps prevent water from entering the eye. Although the Kadota fig has an open eye, there is a drop of honey-like fluid in the opening which prevents water and insects from entering.

The milky latex which exudes from figs contains an enzyme, ficin, which is similar to papain, found in papayas. Like papain, it breaks down proteins and can be irritating to the skin. Those who are especially sensitive to it should wear gloves while handling the fruit. Ficin has been employed to clarify beer, but is much more difficult than papain to extract from its source.

Celeste, with its tightly closed eye and excellent eating quality, is the preferred variety for Florida. The Eastern Brown Turkey (different from the western Brown Turkey) is another favorite, having a larger fruit and the advantage of setting a breba crop. Green Ischia is also a good fresh fruit. Although not useful for preserves, it has the advantage of not attracting birds due to its green color when ripe. Another good fig is the Kadota, a yellow-green fruit. It is a good fresh fruit and makes an excellent preserve. It also has a breba crop. "Lemon", a yellow fig, is quite common, but has a rather insipid fruit.

Birds may be discouraged from attacking the fruit by the use of toy snakes placed in the trees. The snake must be moved daily, however, or the birds will ignore it.

Nematodes in the soil are a severe problem for figs on their own roots. A very heavy mulch will lessen the damage. If the fig is planted near a building, sidewalk or paved driveway, that will allow its roots to grow where the nematode population is lower. In warmer regions, nematode resistant rootstocks are employed, such as Ficus cocculifolia, F. glomerata (F. racemosa), F. gnaphalacarpa and F. palmata. F. cocculifolia is the preferred rootstock. Like the others, it is cold sensitive and has a tendency to send up suckers, which must be removed.

Fig propagation is usually by dormant wood cuttings, 6" to 12" lengths and up to 3/4" diameter. Cut directly beneath nodes or joints and plant in a well-drained media, leaving 1" of stock above soil level. Keep moist, but definitely not wet. Leafy shoots will root under intermittent mist. Marcotting, or air-layering, is also employed.

Use chip bud, patch bud, side graft or inlay graft on rootstocks. Chip bud and side graft are preferred when wood is 1/2" or less, patch buds for 1/2" to 1-1/2" wood. and inlay graft for larger stocks. Latex flow from cuts does not hinder graft union

* * *

Events of Interest:

July 7-10, 2005: July 16 - 23, 2005:

August 2005:

Rare Fruit Conference, Fruit Spice & Park in Homestead, FL

Costa Rica Tropical Fruits, Flowers and Spa Tour with Tom Economou

and Gene Joyner (561) 686-6687-leave message and phone number Chris Rollins' 27 Day Fruit and Garden Tour of Southeast Asia,

(305) 247-5727

www.fruitandspicepark.org



