EDITORS: BOB HEATH, PAULA HARDWICK, CHARLES NOVAK, LINDA NOVAK

PRESIDENT: FRED ENGELBRECHT

WEBSITE: www.rarefruit.org (CHARLES NOVAK)

MEETINGS ARE HELD THE 2<sup>nd</sup> SUNDAY OF THE MONTH @ 2:00 PM. @ THE TAMPA GARDEN CLUB, 2629 BAYSHORE BLVD, TAMPA

**NEXT MEETING: JUNE 8** 

PROGRAM: THE MEETING AT THE TAMPA GARDEN CLUB WILL BE A WORKSHOP, A CLASS ON PROPAGATION, GRAFTING, AIR LAYERING, SEED GERMINATION, STARTING PLANT CUTTINGS & SETTING UP A MISTING BED, with a question and answer session. If you need root stock or bud wood for the workshop, please call Charles Novak @ 813-754-1399 or Bob Heath @ 813-289-1068 and we will try to help. We will also be enjoying our fabulous tasting table, plant raffle and farmers market. Come and enjoy the camaraderie and what should be a very educational and fun meeting.

### WHAT'S HAPPENING

May-Jun 2008 By PAUL ZMODA

Honeybees have once again taken over our owl nesting box - just after I spotted a female screech owl guarding the entrance hole. I may as well make another box just for the poor owls.

Our two 12' allspice trees are in full bloom now; they are both loaded with their weird smelling white flowers. I have never been able to get a fruit on single trees before so I'm hoping cross pollination will do the trick this year. Fresh allspice berries have such a strong flavor that only a few are needed at a time for culinary uses. They are so nice in pastries, pickles, meat dishes, sauces and herb blends. Just chewing on one while working in the yard is a delight.

Our Flordabelle peaches are ripening. Soft, yellow, juicy and with just the right acid/sugar balance...they are eagerly awaited each year.

One of the cherimoya trees has been flowering quite well again. I have been busy hand pollinating it from bloom to bloom with my little brush.

My fig trees, which were always pitiful and dying off one at a time, are looking pretty good this year and are holding some breba crop figs. The only difference is that I've been fertilizing with calcium nitrate.

New plantings: cucumbers, amaranth, gac vine.

### Insects

- Insects eat more plants than all the other creatures on earth.
- Insects are incredibly adaptable creatures and have evolved to live successfully in most environments on earth, including deserts and even the Antarctic.
- The only place where insects are not commonly found is in the oceans.
- An ant brain has about 250,000 brain cells. A human brain has 10,000 million. So a colony of 40,000 ants has collectively the same size brain as a human. Ant brains are largest amongst insects.
- The average life expectancy of an ant is 45-60 days.
- If a man could run as fast for his size as an ant can, he could run as fast as a racehorse.

### FOURTH FRUIT PHOTO CONTEST

1st Prize: A one year membership in the Tampa Bay Chapter RFCI

2<sup>nd</sup> Prize: A one year subscription to 'Florida Gardening'

Following are the rules for the Fruit Photo Shoot:

### **Judging Guidelines:**

- Submitted photos will be exhibited at the club meeting for members to vote for best photo.
- Images should emphasize composition, design and color esthetic value.
- > People, hands, rulers and other extraneous objects are undesirable.
- > Pictures of fruit, flowers or foliage attached to plants are preferred in lieu of cut and displayed artificially.
- > Fruits, buds, flowers, roots or any vegetative plant parts are suitable subjects, but all should be recognizable as a source of edible produce.
- > Pictures of plants grown strictly for aroma, animal feed or as ornamentals are inappropriate.

### General rules:

- 1. Any member of the Tampa Bay RFCI may enter.
- 2. All entries become Tampa Bay RFCI property and will not be returned.
- 3. Only color prints will be accepted no digital images.
- 4. By submitting entries, the entrants warrant that they are the originators, and grant to the RFCI the right of reproduction with credit to the originators.
- 5. Winning photos will be determined by a vote of the general membership at the next club meeting after the deadline of June 30, 2008.
- Entrants will be limited to a maximum of 5 prints.
- 7. Include your name and brief description with each photo; write this information on a sticky label and attach to the back of the photo.
- 8. Photos must be received by June 30, 2008.
- 9. Address all entries to: Linda Novak

Secretary - Tampa Bay RFCI

2812 N. Wilder Rd.

Plant City, FL 33565-2669

### Programs/Events:

June 8:

**Propagation Workshop** 

July 13:

Olives: The Olive Branch

Aug. 10: Sept. 14: Ray Jones: Fruits of Brazil

Chris Rollins; Fruit & Spice Park

Oct. 11-12: USF Botanical Garden Fall Plant Festival

July 9 – 13, 2008 Fruit & Spice Park, Homestead, FL RARE FRUIT CONFERENCE Registration forms will be available at the June meeting or obtain a form from fsp@miamidade.gov For more information: Phone: (305) 247-5727

Found: Pair of prescription eyeglasses left at the May meeting. To claim contact Charles Novak (813)754-1399 or charles.novak@gmail.com

New member:

Lawrence Jay

Tampa

# THE MYRTACEAE FAMILY by Gene Joyner

Gene began his presentation with a description of his Unbelievable Acres in Palm Beach where he regularly gives tours of his extensive gardens. This day he was talking abut the Myrtaceae family, which is a vast family of very important fruit plants, concentrating primarily on South America and southeast Asia. Gene said he was choosing those which are most available in this area, many of which are available in the nursery trade and from Rare Fruit Council members, and all of which are available in his garden.

One of the more unusual members of this group, not insofar as the fruit being that different (it resembles a grape), but the way it is born on the tree, is the jaboticaba, a fruit from Brazil where it is a forest tree and grows to a height of 60'. A 60' jaboticaba tree loaded with fruit would be quite a sight. Normally what we see in Florida are small to medium size trees at a maximum of 15 to 20'. Gene has one that is over 30' and about 80 years old, a big tree which fruits up to 8 times in a season. The jaboticaba has small leaves about the size of your thumb and a brown peeling bark which is very attractive. When it is in flower, however, this is the thing that stops people in their tracks. Instead of the blooms being among the leaves the tips of the branches as on most fruit trees, the blossoms come right out of the main trunk and the branches, starting almost at the ground, covering most parts of the tree and all the side limbs in small white flowers. They open quickly and the next day they're all open and it looks as though someone put cotton balls up and down the limbs. It's a light fuzz throughout. The bees love the flowers and are the principal pollinators. From several feet away you can hear the buzz of the bees working the flowers. The bloom only last one day but 24 days later, you may be picking the fruit, one of the fastest maturing fruit of the tropics. With many fruits you have to wait months for fruit to mature. Gene had slides of the fruit and flowers ready to harvest where it looks like somebody had stuck grapes on the branches with glue. The fruit resembles a muscadine grape with a thick skin, white pulp and 2 or 3 seeds. In a bowl people might think it's a bowl of grapes. Anything you use grapes for, you can use a jaboticaba for. The fruit also freezes very well. They're good in the freezer in a Ziplock bag for 6 or 7 months and are as good as the day you put them in there when you thaw them out. Individual fruit will vary from ¾" to 1-1/2". Under good conditions, you may see new fruit forming while the last crop is still on the tree. They are excellent for wine, fruit leather, ice cream, and eating out of hand.

There is also the yellow jaboticaba which is less popular and much harder to find in nurseries. The fruit are about ¾" and are yellow and fuzzy, much like a loquat which has that fine fuzz on the surface. This one does not fruit on the trunk & branches; rather at the end of twigs like most other fruit. The flavor is reminiscent of a longan, fairly sweet, and has a single seed, large for a small fruit, but it is interesting, and the yellow jaboticaba normally fruits earlier than the purple at about 6 years instead of 8. It will only bear about 3 times a year. It makes a good container plant; you can grow it in a 15 or 30 gallon pot and it will fruit, and can be brought in when a freeze is expected.

The guava is another important member of the family and almost everyone is familiar with it because of the many products you can buy in the supermarket, guava paste, jelly, turnovers, etc. The guava is found worldwide in tropical settings and in almost every fruit market throughout the world. In tropical countries you will see a wide range of different types of guavas. Guavas here in Florida, if they are protected from the winter cold, fruit in the warm months. They don't set much fruit in cold weather but the rest of the year they have flowers and all sizes of fruit on the tree at the same time. They do well in a wide range of soils. You could see wild guavas growing throughout the countryside in years past and you could go out years ago along the canals and creeks in the country and pick wild guavas, and years ago we had no fruit flies so the fruit was not infested with maggots. Most species of guavas have a yellow skin when ripe so you know when to harvest them, and if you don't harvest them in 2 or 3 days after the skin turns yellow, the fruit will fall off. Take it in as soon as it shows yellow and allow a couple more days for it to fully ripen. Inside the flesh

ranges from white to pink and almost red. The pink & red varieties are normally sweeter than the white. Guavas with a thick skin are used for guava shells and those with a thin skin are used for jellies and other preserves. Guavas are full of seeds but the seeds are rather tiny and when you're eating a guava, you can eat the seeds. And if you're not squeamish, you can get a little protein often with the fly larvae inside the fruit, remembering that the maggots are sterile and do not bother you if you eat them, nor do they affect the taste unless the fruit is beginning to turn brown and rot. Guavas will often bear at an early age on small trees 18 to 20" tall, so you don't have to wait years to get fruit.

There is also a red guava which is called strawberry guava or red Cattlea guava. It has a much waxier, shinier leaf. The fruit is smaller than a golf ball. It's used a lot as an ornamental and puts on fruit about twice a year, normally a large number of fruit. So if they're not harvested, they'll make a mess under the tree. Cattlea guava trees will get up to 30' tall or even bigger. The Cattlea is about 10 degrees more cold hardy than the common guava, down to 20 or 22 degrees without any damage. There is also a yellow Cattlea guava which is harder to find in nurseries. There's a small yellow guava about the size of the red and a larger one called the Puerto Rican Cattlea up to 2" in diameter and the tree up to 35 or 40' tall. The Cattlea guava can be grown from seed or air layered or from cuttings. Guavas are normally eaten fresh out of hand or made into jelly.

Another popular member of the group is the rose apple, very distinctly named because the fruit tastes like a rose smells. It blooms in the spring, beautiful powder puff like flowers 3" in diameter. The fruit looks like a little lemon hanging on the tree, 1-3/4 to 2". Very aromatic and made into jelly, they have a distinct rose flavor. The fruit are not solid flesh, but hollow with a big brown seed inside and when they're ripe, they rattle if you shake them. The flesh is about 3/8" thick, very crisp, crunchy and sweet. The trees can get up to 40', relatively fast growing. From seed it takes 3 to 4 years for fruit. The leaves are 8 to 10" long, 2" wide and pointed on both ends. New growth when it emerges is a beautiful wine red and forms

a very dense spreading shade tree. The tree is cold hardy down to the mid 20s.

Another fruit is this group is the Malay apple which is from Asia and makes a big tree. 40 to 60' is not unusual. It is cold sensitive and will sustain some damage at 32 degrees but it is one of the most handsome trees among the tropical trees when it is in bloom. The flowers look like a rose apple bloom but they're solid red. When it's in bloom and covered with these red pompoms, it is a sight to behold. In Central America it's used extensively to line the streets because it makes a beautiful street tree. The fruit, if you see them in a basket in a market, look like Bartlett pears, same size and shape with a crimson colored skin, and they may be eaten out of hand like a Bartlett pear. Inside they have white pulp and a single brown seed about ½ to ¾" which is multi embryo, which means when you plant the seed, you may get as many as four plants from one seed. When they get a little size, you can gently separate them and have four plants. The fruit may be used in a variety of ways. The tree will sometimes bear twice in one year, a heavy crop in spring and sometimes a lighter crop in the fall.

A close cousin to the Malay apple is the wax jambu. They are about the same size and shape as a Malay apple but the quality is not as good. The flower is very different from the flower of the Malay apple and it blooms in the spring and produces a yellow, light pink, dark pink or red fruit. The flavor is somewhat bland compared to the Malay apple. The plants can be propagated from seed or air layered. They bear fairly young and profusely. The tree is a couple of degrees more cold hardy than the Malay apple.

Another fruiting tree from Brazil is the grumichama. A real fruity fruit and quite tasty as well. It's a small to medium sized tree up to about 25', very upright, tall for its size and sometimes used for hedges. It blooms in the spring, the fruit ripens in the early months and sometimes it produces a second bloom. The fruit is dark purple, about 3/4", single fruit or three or four in a cluster. The flavor resembles a blueberry and is eaten out of hand. It makes an excellent jelly or jam and ice cream. They are grown easily from seed with only one seed per fruit about the size of an English pea.

It takes 3 or more years before it shows any fruit. The tree is cold hardy down to the mid 20s.

The pitomba is a close cousin to the grumichama and is also from Brazil, a little bit bigger plant, up to 25' or so. The fruit is bright yellow, 1 to 1½" in diameter with one medium sized seed and a sweet pulp reminiscent of an apricot. It makes good jelly, ice cream and milk shakes or eating out of hand. The tree flowers in early spring with ripe fruit in May. It's a dense bushy plant that lends itself to beautiful hedges. The tree is relatively cold hardy down to the mid 20s and will grow in a wide range of soils without too much of a nutrition problem. It produces single fruit or up to 3 or 4 in a cluster.

The Surinam cherry, also from Brazil, is one we see in abundance in this area as it grows so readily from seed and is spread by birds and animals. It's used extensively for hedges and produces a small tree up to 25'. The fruit is red, occasionally light purple, with a ribbed characteristic like a pumpkin and up to 1" or so in size. The fruit come in the spring and are produced in abundance. It is eaten out of hand, made into jelly and wine. The purple ones produce a red wine, the red ones produce a white wine. It bears 2 to 3 times every year. Unfortunately it is a favorite fruit of the fruit fly, but it grows well in Florida's sandy soils without much care.

The Cherry of the Rio Grande is also from Brazil, Eugenia aggregata. This is a fruit that many people make the mistake of picking before it's fully ripe because when it's nice and shiny red like a cherry, they think it's ready to pick. But when it's fully ripe, it's purple, almost black, and the flavor is at its peak. It makes a big tree, 35 to 40' with small leaves, opposite, dark green and glossy. The bark peels on the trunk leaving a smooth finish. Fruit comes in early spring through late summer with only one crop. The tree fruits very heavily and is good for eating out of hand or making jelly or pies. It grows readily from seed and grows rapidly to produce fruit. It's quite cold hardy down to the mid 20s. The tree is seldom propagated by nurseries and may be hard to find, although it is a fine small fruit. The fruit is somewhat elongated up to 1" or 11/4" in length and comes with that persistent stamen common to the Eugenia family.

The next plant Gene showed us was a Eugenia Stipatata, being grown in many countries in Central America now for its juice. It produces a baseball sized fruit 3" or larger in diameter, golden yellow when ripe and very aromatic, but quite tart for eating out of hand. It makes a very refreshing beverage, however, and in Costa Rica, for example, they are planting groves strictly for making a beverage for the mass market. The tree grows rather slowly but it may put on fruit after 3 or 4 years when it's only 3' tall. It normally grows up to 10 or 15'. The fruit has several seeds which germinate quite readily. In this area it is very difficult to find except among our own members. The tree will take the cold down to the low 20s.

For most tropical fruit Gene recommends a 3 time a year feeding program, March, June & October, with a general purpose citrus type fertilizer. By feeding the trees regularly you can keep them growing consistently throughout the year and increase your fruit production. Use lots of mulch. Gene says mulch is very good for fruit trees, not only for weed suppression but also to hold moisture, and as the mulch decomposes, you gain some nutrients. As trees get too big to be convenient, they will need to be pruned and pruning can be done any time throughout the year except in the winter. But don't prune when it's setting flowers in the spring. As soon as the fruit are gone, that's the time to prune. Mulch, except on citrus trees, may be placed right up to the trunk of the tree. At this point Gene took questions and closed his presentation.

### YAMS AREN'T SWEET POTATOES

Yams and sweet potatoes have little in common according to the North Carolina Sweetpotato Commission, which used to be the yam commission. (The U.S. Dept. of Agriculture designates sweetpotato as one word to avoid confusion with white potatoes.)

The sweet potato, a native of South America, is a dicot, meaning it has multiple growing points. But the yam, a native of Africa, the commission says, has only one growing point and is called a monocot tropical root. Agriculturists at the University of Florida say that in the U.S., yams grow only in Florida.

## MAY PLANT EXCHANGE

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Pineapple "Roberta Harris			•
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Fame flower ?			
	Fame flower		?

# Rooting hormones/Wounding

Certain chemicals will promote or regulate growth responses in plants when used in minute dosages, and they are used by gardeners not only for plant propagation but also to achieve a variety of other responses, such as encouraging fruit trusses to set.

These plant-growth-regulating substances very critical limits; a substance that sets fruits at one concentration and produces roots on stem cuttings at another may be used as a weedkiller at yet another. Thus it is exceedingly important to follow dosage instructions exactly in order to obtain the work at very low concentrations and within desired results.

stem to produce its roots both in greater quantities and quicker than might otherwise have been the case. If the stem cutting is is usually of no advantage whatsoever. They should be used with knowledge, and only as It is also important to realize that these chemicals do not constitute a panacea for produce roots is not present. Their action is merely to enhance the innate capacity of the currect season, then the use of such hormones and when they are likely to achieve an effect. success: they will not induce rooting responses if the inherent ability of the stem to propagated from a healthy plant and at the

The concentration for hardwood cutting propagation is normally 0.8 percent 184 in with the talcum powder is the rooting The majority of rooting hormones available on the market are constituted as powders, Talcum powder is used because it is extremely soft and it lacks an abrasive quality, so causing no damage to the cutting. Mixed in Normally this is a chemical,  $\beta$ -indolyl-butyric acid, known as 18A. Occaalc; softwood concentrations are usually much less-about a quarter of this figure. All-purpose hormone powders are usually the base simply being finely ground talc. sionally either IAA (eta-indolyl-acetic acid) or NAA (naphthoxy-acetic acid) is substituted. based on NAA. hormone.

also incorporated into the powders, so helping against any rots that may develop in the In many cases fungicidal chemicals are

Rooting hormones are also made up in iquid formulations, where the chemicals are

dissolved either in water or in an organic solvent such as alcohol.

or root cuttings. For these cuttings chemicals It is important to emphasize that these hormones should not be used on either leaf are not yet commercially available to aid regeneration.

# How to apply rooting hormones

In order to know how to apply rooting hormones, it is important to understand one centration of hormone applied to induce root formation is not the best concentration though the hormone may be absorbed or two basic premises. First, that the conto cause root development. Second, althrough the bark, most of the hormone will be taken up through the cut base of the stem cutting.

In actually applying the hormone therefore take care to touch only the basal cut surface onto the powder so that no powder adheres to the outside of the stem; do not dip the cutting even as deep as 1in.

certain conditions; it is prudent to adopt a duced to form, but if they emerge and come into contact with the hormone still on the bark this may cause the roots to die off. In many cases this does not happen totally, but it may cause losses in some plants or under By applying the hormone the roots are insystem that is suitable for all plants.

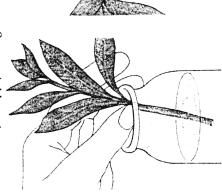
surface at the base of the cutting then the cutting should first be dipped in water. This is an especially valuable hint with softwood cuttings, which will benefit from the water If there is difficulty in getting sufficient hormone powder to adhere to the cut

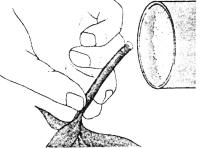
of water-based rooting hormones is much lower than powder-based ones, the bark is not adversely affected and so the cutting can be left standing in any depth of the Make up water-based formulations by Then stand the base of the cutting in the solution for 12–24 hours. As the concentration dissolving a pill in a specified amount of water.

to drain so that the alcohol can evaporate, leaving the hormone on the cuttings. If an alcohol-based solution is used, dip the base of the cutting in solution and allow

Correct way to apply rooting hormones

incorrect method





cutting on to the hormone 2 Push the base of the powder.

1 Dip the base of a stem cutting into water.

Ensure no hormone powder adheres to the outside of

# **WOUNDING STEM CUTTINGS**

Since certain chemicals are capable of enhancing root production on a stem cutting, it is possible that other techniques may also cause a surge in natural hormone production that could improve rooting.

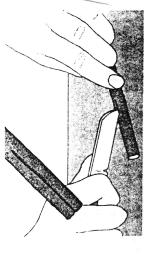
In some plants there exists in the stem when part of this sheath is damaged, then roots will be produced normally. This damage is achieved by a technique known between the bark tissues and the wood tissues a sheath of material that is capable of inhibiting root development. However, as wounding.

The commonest method of wounding is to remove a slice of bark from the bottom inch or so of the cutting, using a sharp

In long incisions in the bark at the base knife so that the wood tissues are just exposed. Alternatively make three or four of the cutting as deep as the wood tissues.

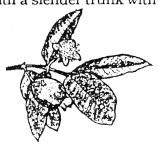
juniper, but it is unwise to use it as a require wounding. The need to wound a effective with rhododendron, daphne and possible site for infection and rotting. It may only be necessary on older, hardwood cutting will only be discovered in the light of experience—a continued failure to The technique of wounding can be very matter of course as it provides another root a cutting, which cannot be attributed cuttings;softwoodcuttingsdonotnormally to any other cause, may then suggest that the cutting may respond to wounding.





123. Psidium guajava - Guava

Small tree to 30 feet, native to tropical America, with a slender trunk with peeling bark.



Leaves to six inches in length and hairy beneath. White flowers are followed by a yellow, pear-shaped fruit to 4 inches in length. White or yellowish pulp is eaten fresh, as juice, jellies, preserves or stewed. Plants propagated by seed, cuttings, layering or grafting.

124. *Rhodomyrtus tomentosa* - Downy myrtle, Hill gooseberry

Evergreen shrub to 10 feet, native to Tropical Asia. leaves are light green about and hairy beneath, with a length to 3 inches. Flowers are rose pink to light purple and about 1/2 inch across. Its round purplish fruit is about 1/2 inch in diameter. Its white pulp is eaten fresh, used for jellies, preserves and pies. Plants are started by seed or division.

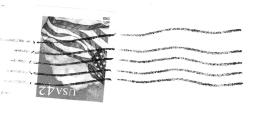
125. Syzygium aqueum - Water rose apple

Evergreen tree to 30 feet, native to Southeast Asia. Leathery leaves to 6 inches in length. White or pink flowers are about 1 inch across in clusters. Its berry-like fruit is white or pink and about 1 inch in diameter. Its white pulp is eaten fresh or pickled. Propagation is by seed or clump division.

SERICATIVE COSE

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