



# NEWSLETTER

SEPTEMBER 1989

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

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(INCLUDING RENEWALS)

MEETINGS ARE HELD THE 2ND SUNDAY OF THE MONTH AT 2:00 P.M.

NEXT MEETING . . . . . SEPTEMBER 10, 1989

MEETING PLACE . . . . . THE HOME OF JANET CONARD, 919 W. HENRY AVE.,  
TAMPA, PHONE 239-9246. YOU WILL FIND JANET'S  
HOME ON THE NORTH SIDE OF HENRY AVE., BETWEEN  
KENNETH AVE. & THE RIVER, NINE BLOCKS WEST OF  
FLORIDA AVE., AND FOUR BLOCKS NORTH OF HILLS-  
BOROUGH AVE. TAKE I-75/275 TO THE HILLSBOROUGH  
EXIT & GO WEST TO FLORIDA, HIGHLAND OR OLA,  
AND THEN NORTH TO HENRY AVE. THEN WEST ON  
HENRY TO JANET'S.

PROGRAM . . . . . POT-LUCK (COVERED DISH) LUNCHEON AT 1:00 P.M.  
PLEASE BRING COLD DISHES SUCH AS SALADS,  
LUNCHEON MEAT, BREADS, DESSERTS, ETC. THAT  
DO NOT HAVE TO BE WARMED UP, UNLESS YOU HAVE  
A FAVORITE YOU WOULD LIKE TO BRING THAT IS HOT.  
WE DO HAVE A MICROWAVE. IF YOU HAVE ANY FOLDING  
CHAIRS, BRING THEM TOO. THERE WILL BE A PLANT  
RAFFLE AND A VERY IMPORTANT PLANNING SESSION  
FOR THIS MONTH'S ANNUAL PLANT SALE. PLEASE BE THERE!!

\*\*\*PLEASE POST THE ENCLOSED FLIERS IN A PUBLIC PLACE IN YOUR AREA TO ADVERTISE OUR  
UPCOMING PLANT SALE\*\*\*

## NEW MEMBER:

John R. Bobby  
7341 Vienna Lane  
New Port Richey, Fla. 34668  
846-7492

\* \* \* \* \*  
YOUR RFCI NEEDS YOU!!! The Annual Tree Sale is the Life's Blood (Sap?) of our  
\* Organization. Without a successful Sale, we could have no speakers for our \*  
\* programs, and we could not publish this Newsletter - in short, there would \*  
\* be no RFCI! We cannot have a successful Sale without enough people-power, \*  
\* both Saturday for set-up, and Sunday, the day of the Sale. \*  
\* YOUR PARTICIPATION IS ESSENTIAL - PLEASE BE THERE!!!! \*  
\* \* \* \* \*

## TREE SALE . . .

If the RFCI is important to you, then you should join your fellow members in helping to make our sale its usual huge success. There are so many things we need help with, that we could not possibly mention it all here. Join us at the next meeting, where we will discuss many specifics, and have sign-up sheets available for the various plant sale committees. Participation in the Plant Sale will also reap higher benefits in the form of greater discounts on plant purchases than will be enjoyed by non-working members.

In addition to physical help on both Saturday and Sunday, I hope that some of our members are planning to bring some plants for sale. Our suppliers generally bring many beautiful plants, all of relatively large size. Many of our customers are also interested in experimenting with more varieties and will purchase more plants if we have smaller size plants that sell for less (we usually have tables set up for such specials, at \$1.00, \$2.00 and \$3.00) and our members generally supply these. Remember, we deal with these sales the same as we do with our commercial suppliers, i.e., the sale price is split evenly between the seller and the Club. Be sure to keep this in mind when setting your prices, which should be in half dollar increments. Plants should be clearly labelled as to type and price. All members who wish to sell plants must provide us with a specific manifest, listing quantity, type and selling price, and using the same forms provided our suppliers (no scrap paper is acceptable!). These forms will be available at the next meeting, and at the Armory the day before the sale (Saturday). No plants may be brought for sale on Sunday, the day of the sale; they must all be delivered to the Armory on Saturday. The same is required of our commercial suppliers, as things are far too hectic that morning to deal with plant unloading and inventory.

Any member who wishes to donate plants to the sale may do so, and such donation will be much appreciated. Again, we request that they be delivered to the Armory on Saturday. If you are selling plants, or donating plants to the sale, please be sure to sign the appropriate sheet at the next meeting.

Also, remember we are selling baked goods, pickles, jams, jellies, etc., with the producer getting 2/3 of the price instead of the usual 1/2, to help defray the high cost and energy of production. Please be sure all items are packaged so as not to encourage sampling on Armory premises, but rather upon the purchaser's arriving home, etc. So as to insure freshness of baked goods, these items may be brought to the Armory on Sunday morning.

## TREE SALE NOTES:

- 1) All RFCI members, whether they work at the sale or not, receive a 10% discount on purchases at the sale (upon proof of membership).
- 2) Those who work a half day or more, receive a 25% discount on plants selected prior to 4:00 p.m. on Sunday.
- 3) Workers receive a 50% discount on plants still on the sales floor after 4:00 p.m. on Sunday.
- 4) Workers may select plants prior to the sale until 12:00 noon on Sunday. These plants may be stored in the designated area during the sale after being checked out.
- 5) No plants may be moved from the sales floor between 12:00 noon and 1:00 p.m. Sunday.
- 6) There are no discounts at all on fresh fruit or baked goods, etc. sales.

## CITRUS CANKER by Leon Hebb of the Citrus Canker Eradication Program

We have been involved in a citrus canker program since August 24, 1984. The things I'm going to show you today, I hope, will explain how we have gotten to where we are, where we stand and maybe explain why we had to do things the day we did. Classically, citrus canker worldwide is what we're looking at in this first slide. Citrus canker is one of the primary destructive diseases in citrus throughout the world. Its origin is either China or India or somewhere in the Far East where citrus originated. But anywhere citrus and citrus relatives are grown extensively, canker seems to take its toll. It attacks leaves, branches, limbs and fruit. In mature fruit, if the fruit doesn't drop off the tree, canker resembles citrus scab on temple orange, as you can see in these slides. However, fruit usually falls from the tree before it reaches maturity. The lesions of citrus canker will expand even on the trunks of trees that may be 20 years old and these lesions on the trunk act as reservoirs of the pathogen to re-infect the tree if it is defoliated and pruned back to remove the obvious canker lesions. Fruit drop is a primary destructive effect of canker. Valencia orange seems to be more resistant to canker than some other varieties. It's much more difficult to infect a Valencia orange than a Pine-apple, Parson Brown, Hamlin, or Navel orange. Also, the Mandarin types are more resistant, such as the Orlando tangelo, Temple, Clementine and Dancey. There are no completely immune varieties but the closest to this would be something like a kumquat.

In 1984 in a large citrus nursery, canker was detected in the nursery stock. The grower was having such a problem that he called the State in to help him identify the problem and assist in correcting it. On the trifoliate types, swingle, trifoliata, etc. root stock, the lesions often look like this slide where you have a dark brown dying center and often a dropped out center, giving a shot hole effect. This effect in the nursery canker is not like Canker A, where the lesions are raised instead of flat. The nursery strain is similar to the "A" Strain in that it develops quickly and has a wet margins and the *Zanthemonium* bacteria can be cultured from it. Tests seem to indicate that the pathogen in the nursery strain is identical to Canker A. For this reason the program of eradication was initiated but no one had any conception of the complexity that would result, the number of nurseries & properties that would become involved & the high cost that would result. The program in general was supported by the industry and more than half of the trees destroyed were destroyed by grove owners themselves without resorting to assistance from the State. Growers only asked the State for instructions on how to do it safely and proceeded to destroy exposed trees.

Since 1984 we have found the citrus nursery strain in 32 nurseries. Four of these were very severe outbreaks. By Nov. 11, 1984, the citrus canker eradication program recognized that this was not Canker A but something similar and began to deal with it with what was known at the time. To support this, early in the program inoculations were made of fruit with the nursery strain and the results were lesions. This was of great concern to the citrus nursery industry & the pathologists that were studying canker. Normally, canker doesn't infect fruit after it gets about the size of a marble but as you can see in this slide, lesions have formed on this orange which was inoculated late in the fall. So the 15,000,000 citrus nursery trees that were destroyed were not without some basis. Nor was it done without the support of the industry and the nurserymen, even though all the nurserymen had not had problems. But I should point out, that early in the program in 1984, the USDA was advocating financial assistance to nurseries to allow them to re-establish their nursery stock and businesses so that the destruction would not be a complete loss. For two and a half years the federal government and the state of Florida did have a financial assistance program and the majority of nurserymen, even some that are suing us now, were compensated & given financial assistance for some portion of their losses to re-establish their nursery stock. The legislature, however, only allocated about 50% enough money as its share of the cost so that the actual compensation to the nurseries amounted to approximately 75% of the cost of the trees destroyed. But considering the inequities involved and the large number of nurseries whose trees were destroyed and the complexity of the problem, I believe that the compensation was a good attempt.

By April 1986 we had so many nursery trees being destroyed and so many new nurseries being found infected, there was no way to continue compensating people so the legislature did not allocate enough funds to continue with this and the U.S. Dept. of Agriculture dropped its

budget. The Florida Dept. of Agriculture did likewise. So, since about April of 1986 there has been no money for compensation to the nurserymen.

In inspecting the nurseries we had to be careful not to spread the infection from one that was infected to another that wasn't. One other thing we didn't know at that time was what would be a good de-contaminant for the canker bacteria for personnel & equipment. We were aware that bichloride of mercury had been effective in the canker outbreak in 1912 but we didn't really want to use it because of its side effects. We did find that in South America they were using the same kind of bacteriacides that are used in soap for hospitals and cleaning solutions in floor cleaners in institutional facilities so these are the de-contaminating solutions we use on personnel & equipment. At the beginning, because the infected nursery was so close to other nurseries, we used a tomato vine burner to destroy the trees. This is equipment that is used in tomato fields after the crop has been picked to burn off the dead vines. This slide shows it in use. It has a propane tank for fuel for the burners & is pulled by a tractor over the rows. It burns about 60 gallons of propane an hour. We operated this equipment day & night for 3 weeks in order to destroy the trees. After the trees were burned, in about 2 or 3 weeks, we had little sprouts coming up from 2 or 3 inches below the ground from the root of the tree. A large percentage of these new sprouts had canker lesions. So after destroying all the live matter above the ground, the sprouts that came up still had the disease. This was very disturbing to us. There was apparently enough bacteria in the soil such that when the new sprouts came up, they were immediately infected. So we found it necessary to pull the dead nursery trees, pile them into piles & burn them. For this effort, we used prisoners & paid the prison system a nominal sum for their time. We had as many as 300 prisoners working at one time pulling trees. This was probably our most difficult time because of the vast number of people we were trying to control, the new personnel & the tremendous number of trees that had to be destroyed. At the most, we had only 14 full time experienced personnel. At the same time we were burning trees in the nurseries, we were inspecting the trees that had come out of the nurseries recently and went into groves, approximately 1.7 million trees. Grove owners were eager to get rid of the trees; they didn't want the risk of spreading the disease to their mature grove trees. The growers destroyed over half of these trees. The trees were pulled up by their workers, piled in a bare area of the property & burned. 1.7 million trees were destroyed and none of these trees were ever identified as having canker.

At the same time growers were asking for methods to decontaminate their vehicles and their personnel. We advised them as to the compounds & methods of spraying & use of the compounds. The people in the program were having to decontaminate their bodies 15 to 20 times a day. You can imagine having your skin sprayed with alcohol 20 times a day. At the end of the day you wouldn't have any skin left. Picking bags, ladders, tractors, hedging machines, all this equipment had to be considered as a means of spreading the pathogen.

Brazil is still trying to solve their problem & probably will because when they discovered they had canker, they didn't mess around. If they found canker in one tree, they destroyed every tree within 5 miles. And they didn't offer any compensation. Every tree was just destroyed. Ever since the beginning of our outbreak, the USDA has strictly regulated the movement of all citrus fruit moving out of Florida. At present, they have 2 certification methods. One is called "the certificate shield" which allows fruit meeting certain requirements to move anywhere throughout the U.S. including citrus growing areas. The other is a limited permit which allows fruit which has a little more risk attached to it to move to non-citrus producing areas.

Before July 1986, Florida was dealing only with the nursery strain. At that time on Anna Maria Island, 385 properties were determined to contain citrus trees with the Canker A strain. These were all door yard trees but the north half of Anna Maria Island, the Holmes Beach area, was heavily infected with Canker Strain A. There was also a lot of trees with nursery strain but it was simply a coincidence that Canker A & nursery strain occupy the same area. There was no connection between the two. Within a week, the Bougainvillea area of St. Petersburg was discovered to be infected with Canker A. Something like 34 trees were discovered to be positive. At the same time we found a 365 acre grove in Palmetto infected, at the Manatee Fruit Company. In the Oneco area, Palm Lake Estates, Gulf Lake Estates, there was something like 40 or 50 trees involved, all with Canker A, and some of these trees were 50 or 60 years old. So here we're talking about mature trees, not new nursery stock. Canker H had spread from some probable small source in Manatee or Pinellas County, to a wide area of infestation. The USDA immediately quarantined this entire area.



In the infected area, we had to destroy all the infected trees, both in groves and in door yard situations. Two years after we discovered the Manatee Fruit Company infestation, we had another infestation which may or may not have been related to the Manatee Fruit Co. infestation, about 3 miles to the northeast. This was a block adjacent to I-75 and in this area we had a lot of Navel orange, pink grapefruit, Mandarin types, white grapefruit, 80 acres altogether. There were 970 trees infected in this grove. It developed so quickly that there were only 27 trees that showed the symptoms on the fruit. The rest was probably spread by harvesting crews and hedging operations. Most of the infection was on the late summer flush. In this case, the Technical Advisory Committee recommended that we allow the grower to go in and harvest his fruit and move it out to a juicing plant. But after considerable consideration of the problems of harvesting 20,000 boxes of Navels, hauling them down I-75 to the juicing plants, transporting the bacteria all this way, we just couldn't go along with it. We recommended to the grower that he destroy 19 rows of trees which he agreed to, and he destroyed about 13 or 14 acres and we paid the cost of it. In addition, we went in and herbicided the isolated infected trees and two rows in each direction. So there were about 55 scattered trees that we defoliated. However, the grower decided, rather than risk an additional outbreak, that he would defoliate the entire 66 remaining acres, which we supervised & he did a fine job of it. But just 2 weeks ago, we found another tree with one twig, four leaves, and 6 lesions, and we destroyed that tree. This is just an example of the cooperation we get from the growers who are very concerned about the spread of canker and are willing to take their losses to protect the industry.

In 1985 Risk Assessment was implemented but did not become a reality until the spring of 1986. Anytime now when we have positive exposed trees in nurseries, we take a risk assessment. We analyze all situations in the nursery, everything from how often they water, how often they apply copper, the aggressiveness of the strain affecting the property, etc., and we try to deal with that specific situation and recommend the least amount of destruction, the shortest quarantine period and any action by the nurserymen to result in less property loss. Right now we do not recommend destruction of property unless the infestation is in a very aggressive state. This is with nursery strain. With A strain we would probably always recommend destruction of plant material. There are two nurseries at present that are highly suspect in Polk County, two in Collier County and three in Highlands County. One of them is about 60 acres and trees from these nurseries are spread all over the state. We have traced trees from Holmes Beach to Bradenton to Sarasota, Palm Beach, etc. And if it weren't for the little paper you have to fill out when you buy a citrus tree, we wouldn't be able to do this. But that paper certificate that tells where you're going to plant that dooryard tree is very important to us and keeps us from having to look at every tree in the state all over again.

\* \* \*

### August Plant Drawing

<u>PLANT</u>	<u>DONOR</u>	<u>WINNER</u>
Spanish Lime	Armando Mendez	Frank Honeycutt
Atemoya	Armando Mendez	Frank Tintera
Lychee	Armando Mendez	Fernando Galang
Bromeliad	Armando Mendez	C. Pruet
Jumbo Grape	RFCI	Fernando Galang
Nesbit Grape	RFCI	Joan Murrie
Miracle Fruit	Louis Zoehrer	Fernando Galang
Mangoes	Jim Murrie	WL Bradshaw
Plumeria	Lloyd Shipley	Yuku Tanaka
Ornamental Eggplant	Lloyd Shipley	Louis Zoehrer
Tree Basil	Heath	Frank Tintera
Sugar Apple	Heath	Stark
Sugar Apple	Heath	Doris Lee
False Roselle	Monica Brandies	?????

(continued next page)

<u>Plant</u>	<u>Donor</u>	<u>Winner</u>
Moringa Tree	Monica Brandies	Bill Mendez
Tree Roselle	Monica Brandies	Heath
Tree Roselle	Monica Brandies	Stark
Seminole Pumpkin	Monica Brandies	Heath
Canistel	Stark	John Bobby
Kwaimuk	Stark	Doris Lee
Banana	Bruce & Sherry Pearson	Alicia Pruet
Banana	Bruce & Sherry Pearson	?????
Fig	Bruce & Sherry Pearson	Jim Murrie
Fig	Bruce & Sherry Pearson	Larry Fox
Peach	Bruce & Sherry Pearson	Armando Mendez
Peach	Bruce & Sherry Pearson	WL Bradshaw
Pecan	Bruce & Sherry Pearson	Molly Charlton
Hooded Nun seeds	JoAnn Cimino	John Bobby

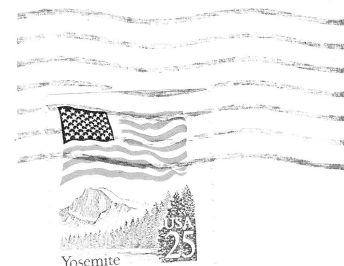
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AUGUST HOSPITALITY TABLE:

Janet Conard	- Banana Nut Cake
Bob Heath	- Carambola
Al Hendry	- Pear Trifle, Brownies, Tamarind Juice, Passion Fruit Juice, Soursop Juice
Joan Murrie	- Mango Crisp
Alicia Pruet	- Carrot Bread with Raisins, Zucchini Cider Bread
Bea Seekins	- Kumquat Bread, Pineapple-Ginger Spread
Lottice Shipley	- Melon, Cheese & Crackers

\* \* \*

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**FIRST CLASS MAIL**

REMEMBER TO PUBLICIZE  
THE TREE SALE TO  
ONE AND ALL  
SEPTEMBER 24