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

PRESIDENT: FRED ENGELBRECHT WEBSITE: www.rarefruit.org (CHARLES NOVAK)

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

NEXT MEETING: APR 12 & 13 @ USF (SEE BELOW)

PROGRAM: THE USF SPRING PLANT FESTIVAL IS SCHEDULED FOR APRIL 12 & 13. Consequently, we will forego our usual monthly meeting which would be on the 2nd Sunday, April 13, to participate in the USF Plant Festival. All members are invited to participate and bring plants to donate or sell. Parking is free but admission is \$4.00, for which the Club will reimburse workers who participate in the Sale. This is an interesting affair and well worth the admission. Likewise, it is a social event as well as a money maker for the Club. We will have no tasting table or plant raffle. But we desperately need workers. Let's make this USF Sale our big one. Please join us!

USF SPRING PLANT FESTIVAL

The RFCI will participate in the USF Plant Festival on APR. 12 & 13, 2008. This is an important fund raiser and all members are invited to attend, to assist in the Sale, to sell plants, to enjoy the camaraderie and visit other groups.

Our participation will begin around 3:00 Friday afternoon, Apr. 11, raising tents, setting up tables, arranging plants and posters, till about 6:00 p.m.

On Saturday, Apr. 12, the Gardens will be open from 7:00 to 9:00 a.m. for our final preparations.

The front gate will close at 8:30 a.m. on Saturday & Sunday, and participants will enter by the side south gate after the front gate closes, on foot, until 9:00. The public will be admitted at 10 a.m. on both days. Admission is \$4.00.

From 7:00 to 9:00 a.m. on Saturday & Sunday, traffic will be one way, in the front gate & out the side gate. The Festival will end at 4:00 p.m. on Saturday & 3:00 p.m. on Sunday. Only after 4:15 on Saturday & 3:40 on Sunday, will we be allowed to bring vehicles in to re-supply or remove plants.

Parking for participants not bringing plants or supplies is across the street from the front entrance to the Gardens in the south parking lot.

The USF Botanical Gardens takes 10% of our gross sales; the remaining 90% will be split 70/20% between the participant & the RFCI, so mark your plants accordingly, remembering that you get 70% of the selling price.

We have provided ID cards for RFCI workers. Only those with ID cards will be admitted before the Sale begins. If you are refused admittance, someone from our group will vouch for you to gain admittance. Wear your RFCI T-shirt.

DIRECTIONS TO USF PLANT FESTIVAL

Enter the Gardens from Bruce B Downs one block north of Fowler, turn East on Pine St. & Left at Alumni Drive. Go one block to the Gardens entrance on the left. We will be in the southeast corner of the Gardens.

IMPORTANT: Members bringing plants to sell need to restrict sales to fruiting plants only – no ornamentals or flowers.

Message from the President.

My thanks to the members of our Board for their hard work and cooperation in completing another successful year with many informative programs, plant sales ,citrus celebration and field trip. And to our members thank you for your vote of confidence in re-electing all the members of the Board.

In addition, I would like to welcome our two new members to the Board, Mark Folartz as regular and Ed Andrews as alternate. We encourage members to participate and bring new ideas for the club.

I trust that everyone had a happy Easter and is ready for Spring!

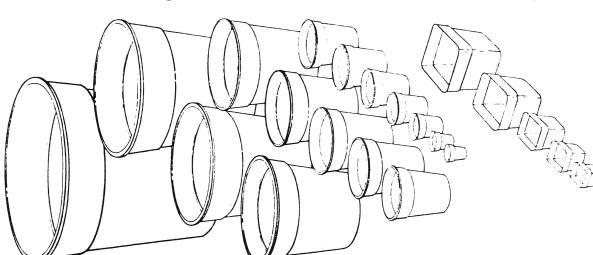
And that means the Spring Plant Sale at USF on April 12th and 13th and as usual are counting on your help for a good turn out.

The club will provide lunch and drinks for those helping us with the sales and answering the many questions of our customers. See you there!

MARCH PLANT EXCHANGE

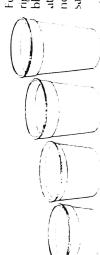
| PLANT | DONOR | WINNER |
|--------------------------|------------------|-------------------|
| Loquat | Bob Heath | ? |
| Loquat | 66 | ? |
| Pineapple | .4 | R. Gomez |
| Pineapple | 46 | Ed Andrews |
| Gac | 46 | Sanda Worsham |
| Gac | 66 | ? |
| Red Passion Fruit | •6 | John M. |
| Yellow Passion Fruit | 66 | Leann R. |
| Orange Berry | 66 | ? |
| Talisia Eswlenta | Bob Heath | Roberta Harris |
| Cubanella Peppers | Johnston | ? |
| Poinsettia | 66 | Verna Dickey |
| Aloe | Paul Branesky | ? |
| Tabervea Ipe Tree (pink) | Beth Reddicliffe | ? |
| Horse Chestnut Tree | | Roberta Harris |
| Avocado | W. Vega | Elva Kennis |
| Avocado | 66 | Lolita Harris |
| Avocado | 66 | Tom Johnston |
| Mandarin Orange | | Kathleen Johnston |
| Dragon Fruit Cactus | W. Vega | Meredith Ritley |
| Oroblanco Fruit | Zmoda | S. Lohn |
| Grapefruit | Ed Andrews | ? |
| Jasmine | 66 | E.H.M. |
| Pineapple Slip | T. Scott | ? |
| Lemons | M. Lohn | ? |
| Caribbean Avocado | Keith Kirby | ? |
| Passion Fruit | David Miller | ? |
| Ginger | 66 | Elva Kennis |
| Plumeria | | Vega |
| Tangerine Fruit 3 bags | J. Cimafrança | ? |
| tungerine trute a cago | ••• | |

Containers 1

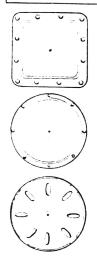


A plant pot is perhaps the commonest piece of equipment that the gardener will need for propagation. By choosing only three or four sizes in the same pot range, tasks such as watering and day-to-day management become standardized and are thus easier.

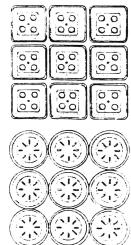
but both three-quarter pots and half tor dwart) pots-sometimes called pans-are available. At the other extreme particularly Normally a pot is as deep as it is broad, Select a container that holds only sufficient deep pots called "Long Toms" are obtainable. compost for the task in hand.



be adequate holes for the adequate drainage holes; by the same token if a capillary watering system is used then A vital consideration when choosing a pot is its capacity for drainage. It is not necessary to crock pots if a well-drained compost is used, but the base of the pot must contain moisture to rise up into the compost from the capillary medium, be it sand or matting. Only the pot shown below left has adequate there must drainage.



to their surface area—a conventional 3} in; diameter round pot only contains as much Square pots make better use of space than round ones as they can be fitted together of bench or ground space. They also generally contain a greater volume of compost relative exactly to cover an area without any waste



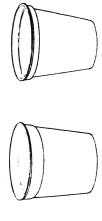
square pots are a nuisance to fill as the gardener must be sure that the compost is compost as a $2\frac{3}{4}$ in square pot. However, pushed well into the corners.

Another major initial consideration is whether to use rigid or nonrigid containers. Pots with rins tend to be more rigid than those without, and they are easier to stack. rigidity, although nonrigid containers such as nonrigid containers is that their tendency to For propagation there is no substitute for black polyethylene sleëve pots may be used at the potting-on stage. The problem with sag makes them a nuisance to fill.

The material from which a pot is made is durability and weight (in that order) have rigid pots are made of some form of plastics also important. Traditionally, pots were always made of clay, but considerations of cost, now reduced their use. Nowadays most and these have the advantage of being cheap, however, become brittle in time with exposure lightweight and durable. Some plastic pots, to ultraviolet light. Polypropylene pots of heavy quality will generally provide best value. Plastic pots are also easily washed and stored, whereas clay pots require soaking,

scrubbing and sterilizing between use, which is time consuming. Because clay pots are porous, the compost dries out more quickly than it would in plastic pots, and so more day-to-day management is needed.

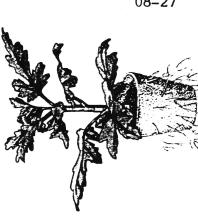
Broad pots have greater stability, so, where a choice is available, look for a pot with a broad base and almost vertical sides. This shape also allows a greater volume of compost within the pot and therefore a more usable surface area.



gardeners use yoghurt cartons, vending tainers instead of "proper" pots. These are have adequate drainage holes, and are used Because of the problems of cost many in conjunction with a suitable compost and machine cups, and cream and cheese conquite satisfactory provided they are clean, management system.

the gardener, who can leave a plant's roots undisturbed when he transplants the whole peat pot, which will eventually rot in the ground. Pots made of paper and "whalehide" are equally satisfactory.

The main disadvantage of disposable pots is that they are relatively expensive.



DISPOSABLE POTS

The commonest of these are compressed peat pots through which a plant's roots will pass. These have considerable value to It is also possible to obtain various types of disposable pots, which are usually made of some form of processed organic material.

08-27

LYCHEES and LONGANS by Bob Murray

Bob Murray opened with the comment, "I come to you as a farmer and we'll be talking today about lychees and longans and the Sapindaceae family. Remember the classification. The Anacardiaceae, that's the cashew family and mango family. *Mangifera indica*, that's the common mango. There are cultivars of these as Tommy Atkins, Kent, Julie, etc. So it's family, genus, species and cultivar."

And we saw the first slide, which showed the differences in size, color, skin texture and shape of the longan and lychee, fruit of the soapberry family. As a general rule, longans are usually round and have a pattern on the skin. When you are involved in horticulture as we are, you will find that most of the information you receive is flawed. Studies have found that a lot of lychees that have different names are all the same lychee. The guy who says he has 8 different cultivars may really only have one. The other thing we have found is that lychees outcross readily, which means they accept the pollen from other members of the family to which they belong, which contains species that you have never seen and probably don't recognize a lychees. Members of that family include the chinaberry tree, longan, rambutan and others, some of which are more tropical than others and very sensitive to cold.

The next slide showed the rambutan, a very nice fruit, very tropical, which just won't take the cold in this area, which is true of many tropical fruits, rambutan, pulasan, langsat, durian, all of these are extremely tropical.

The next slide showed one we have probably seen called Australian tamarind. You notice that it has 3 sections. It is quite sour, not much of a fruit, but it is used in cooking. We know that lychees outcross, accept the pollen from other members of their family, Sapindaceae; lychees accept it but longans reject it. As a farmer, Bob knows this because if he grows plants from lychee seeds, no two of them look alike. But if he plants longan seeds, they grow up to all look alike. Longans resist outcrossing but you can get a cross between

longans & lychees on the lychee side, probably. If you are growing a Valencia orange tree and in your yard is a big red grapefruit tree, the orange tree flowers, the grapefruit flowers and pollen from the grapefruit get on the orange flowers and you get fruit. What do you get? You'll get Valencia oranges. The seeds, though, if you plant them, will be hybrids of the Valencia orange and the Ruby Red grapefruit. That is outcrossing and it is very important.

If you intend to hybridize, it is critical when you're working on a hybridization program, what will accept the pollen of what, and what won't. What is the quality of a really good lychee, big fruit easy to peel, retains its juice, good flavor and the ratio of flesh to seed, and everybody wants a small seed. Lychees have an affinity for other cultivars' pollen. They would prefer not to have their own. We don't allow sister to marry brother or father to marry daughter because the offspring of these combinations may be defective. If you get a defective offspring in fruit, you're probably going to have a cultivar that's not up to quality. Since Bob has been in the lychee business as long as he has, he says he can probably tell what variety it came from if you just show him the seed, because the seed is so critical and he's so used to seeing them. If you plant a single block of lychees of Brewster cultivar, the potential for seeds of reduced size are very high because they don't like their own pollen, although they may use it. But if you plant any other Sapindaceae near that block of Brewster lychees, you'll probably get bigger seeds. So how bad is this? If a farmer in Florida, as they all do, planted 3 or 4 different varieties to have an early one, a late one and a longan flavor so he has a very wide group for sales, he is guaranteeing himself that he will not get fruit with small seeds even if the cultivar has a propensity for having small seeds.

Next Bob showed us a slide of a variety called Hoc Ip. Even when the Hoc Ip is pollinated and gets a small seed or is crossed and gets a larger seed, the seed is still small. In the case of some others, there are truly varieties that produce what is normally called an aborted seed. The seeds have no embryo and the seed coat is convoluted on itself and is very small, as in the Sweetheart. But

WHAT'S HAPPENING Mar-Apr 2008 By PAUL ZMODA

Dear Readers, this installment of What's Happening marks 16 years of writing it. I hope you have enjoyed sharing my experiences of growing, experimenting and eating from plants which, to many people, are totally foreign.

At the supermarket these days we see rising prices of even basic food items – potatoes are 89 cents a pound, for crying out loud. To alleviate your cash register shock, I urge you all to "grow your own" whether it is simply a fine crop of lettuce, beans, squash or a bumper crop of lemons – something which can be used to the maximum by you and have enough left over to sell to local markets, share with friends and family or to barter with for something you need.

We have been blessed by very adequate rainfall lately. We experience up to an inch or so every week. This is enough to keep our plantings going strong as well as cutting down on supplemental watering.

I finished pruning all citrus, grapes and pomegranates. Olives and white sapotes received a light touch-up pruning. I then gave the citrus and other evergreens a thorough foliar feeding with fish emulsion, 20-20-20 and Epsom salts.

I grafted white sapote root stocks with scions from the Homestead and Redland varieties. Also grafted were Sunrise carambola. I also top-grafted four kinds of citrus onto our established trees.

Most of the citrus are happily flushing new growth and flowering. The aroma is intoxicating when standing downwind of lemons, limes, sweet oranges and tangelos. This experience is one of the best Florida has to offer us.

Our selection of wild plums are blooming in such a grand profusion – each specimen, when the flowers are fully opened, offers a breathtaking display of pure white beauty.

St Patrick's Day found me at Mixon Fruit Farms in Bradenton FL. I was planting 400 feet of trellis with my new grape "Il Primo". Mixon is reinventing themselves as a tourist destination complete with tours of their citrus orchards, wildlife rescue and education center and tropically planted pavilion suitable for weddings and other special gatherings. Visit them virtually on your computer: Mixon.com

New plantings: potatoes, basil, tomatoes, squash, pole beans & peppers.

Scheduled Programs/Speakers/Events:

April 12-13: Spring USF Botanical Garden Plant Festival

May 11: Gene Joyner, Unbelievable Acres, West Palm Beach

Board of Directors:

Fred Engelbrecht - President Bob Heath, Jimmy Lee, Charles Novak, Jerry Amyot – V. Presidents Linda Novak - Secretary

Susan McAveety - Treasurer

Andrew Hendrickson Paul Branesky
Sally Lee Verna Dickey
Teri Worsham Mark Foltarz

Thom Scott Judith Cimafranca Ed Andrews (Alt.)

PASSION FRUIT by STEVE LOHN

Passion fruit are part of a group called Passiflora. They are very easy to start from seed, germinating in 10 to 20 days. Passion fruit live for 3 to 5 years, making them a very short lived plant. All passion fruit are very aggressive climbing vines and can kill small trees if not kept in check. There are many different Passiflora, all bear beautiful flowers of various colors; some are fragrant but only eight of these bear fruit.

Three are commercially grown in Florida: PURPLE PASSION FRUIT (*Passiflora edulis*). The purple passion fruit is self pollinating but very susceptible to nematodes. In Florida they need to be grafted onto another rootstock such as yellow passion fruit. The purple passion fruit produces a 2" long egg shaped fruit in spring and early summer.

YELLOW PASSION FRUIT (P. edulis flavicarpa). This fruit is not self pollinating, it needs to be cross pollinated. Yellow passion fruit are similar to purple, but are a deep yellow and a little longer, fruiting from mid summer to fall.

GIANT GRANADILLA (P. quadrangularis). The granadilla grows on a four-sided stem with very large leaves. The flowers are much larger than the other passion fruit, 5" fragrant flowers. The oblong golden fruit are ready for picking in about 2 to 3 months. The granadilla also needs cross pollination. (2 years ago I grew a granadilla without cross pollination with very good results.)

The other five fruit bearing Passiflora are: blue passion fruit (*P. caerulea*), red passion fruit (*P. coccinea*), (*P. Elizabeth*), Maypop (*P. incarnata*), (*P. incense*). Reportedly, of these five, the fruit with the best flavor are (*P. coccinea*), (*P. Elizabeth*) and the (*P. incense*).

Passion fruit are heavy feeders and need to be watered regularly. They should be fed every 4 to 6 weeks with a low-nitrogen fertilizer (6-6-6 or 8-8-8). Their growth slows down in winter and does not need water at this time. This is also the best time to prune the vines, remove dead and weak wood.

Fourth Fruit Photo Shoot: Reminder: Photos must be received by June 30, 2008. Winning photos will be determined by a vote of the general membership at the next club meeting after the June 30 deadline

| | TASTING TABLE | March 2008 | |
|--------------|--|-------------|------------------|
| Johnston | Pineapple Angel pie | Coronel | Papaya, bibingka |
| Reddicliffe | Fiesta marble cake | Lohn | Valencia oranges |
| Palis | Greek penne chicken salad | Harris | Coconut cake |
| Gonzalez | Rice with vegetables | Musgraves | Orange cake |
| Tamura | Organic vegetable salad | Lee | Doughnuts |
| Topping | Vegetable dip & chips | Foltraz | Deviled eggs |
| Lori Maranto | Orange salad, deviled eggs | Engelbrecht | Coffee, juices |
| Kennis | Flan w/coconut milk | McAveety | Citrus salad |
| Hendrickson | Cara cara w/honey & cinnamon | Scott | Star fruit |
| Sawada | Seafood yaki soba | | |
| Shigemura | Pot roast, tomato rosemary muffins, dessert trays | | |
| Novak | Peanut butter brownies, citrus coleslaw, honey lime fruit toss, juices | | |

Thanks to all members who donated to the Tasting Table. Please put your name on containers and serving utensils so they can be returned to you. Remember to get your free Plant Exchange ticket.

we don't call them aborted seeds like most everyone else does.

The next slide showed various lychee seeds and their shapes. At the bottom we could see one that was very tiny. It is a typical Hoc Ip seed, that is self pollinated. So what we try to do is avoid outcrossing and get a plant that has a genetically deformed seed. Because when you plant the aborted seeds, they grow readily but they are weak and spindly and don't produce or even grow normally. There are a great variety of results from these so-called aborted seeds, or self pollinated seeds. We can grow them from cuttings.

Fortunately, if you decide to propagate a plant, you have several choices of how to grow it and you'll find that certain options are better than others. For example, why do we graft mangos? Because the tree from an air layer on a mango performs poorly. An air layer does not produce a tap root so the mango is top heavy. Same thing with the lychee. An air layered lychee's roots are so brittle, and the tree has no tap root. We can do what is called air layering, and we are all familiar with that. If a lychee tree is produced from an air layer and performs well with a good root structure, that is a way to do it. In 40 days you have a tree that's big or bigger. If you graft onto a seedling of unknown quality and put on the desired cultivar, then on the mature tree, you'll get what you grafted, which we will expect to be identical to the parent. But not always! Not always! Think about that, "not always". Most of the time in cloning, things stay as they were. But sometimes you get a degeneracy, something that is poorer in quality than what you began with. In the case of lychees, I takes a tremendous root structure with feeder roots, since it has no tap root. It sends down roots at about a 45 degree angle to firmly anchor the tree, so it does a very good job as an air layer, as do longans. But not carambolas and mangos. In the case of mangos and avocados, you plant the seed and you graft on the desired variety in a plant with a good root stock and tap root. But in the case of a lychee, we usually go with an air layer. But there are other problems. If we graft 2 trees and they are both done on the same day, you will see how one performs well and one doesn't. "Not always."

The next slide showed a lychee that had been brought in from Thailand to Miami in the Homestead area. This tree is 2" shorter than when we planted it 5 years ago. Sometimes on their own root trees will not perform, so look for a bigger seed to put that tree on to get better root growth.

The next slide showed a tree in Bob's grove taken about 20 years ago. The tree did not perform well, it didn't look right, but it is fruiting. A study was made about the flowers of lychees and they found that the one seed on the right is female, the one on the left is male with anthers shedding pollen. They will set fruit pollinated with their own pollen. But if they outcross, they will produce a much larger seed. All the flowers in between show traces of the others. So Bob doesn't know whether any of those other flowers will make fruit but he does know they have the mechanisms to create fruit. But something we don't know about is going on with these other flowers. And if you have any other flowers in the neighborhood shedding pollen, the female flower will accept it. But if it's a longan shedding pollen, she doesn't want it, but may accept it.

The next slide showed flushes of new growth on 3 different plants in Bob's nursery. One is typical lychee, one is longan with purple leaves, one is a seedling with pendulous leaves, silver underneath and purple on

the top. That is a longee, a combination of a lychee & a longan. They took a seedling which was obviously different and grew it up. In China there are things they call longee which are crosses between longans and lychees. Bob thinks this is the cross that is now called Sweetcliff lychee. The Sweetcliff is round, has a pattern on its skin, very delicious and big, a consistent bearer and a nice fruit with a round longan type seed. But the flushes and flowers were distinctly lychee. We know that in grafting we can induce adulthood to a plant whereas the juvenile period of a seedling lychee is 8 or 9 years. In grafting, you insert an adult piece of wood, putting it on a juvenile seedling. But if you insert juvenile wood on a mature tree, you'll get a juvenile growth for some time.

The next slide was an Emperor lychee on the right side. On the left was Sweetcliff. The slide showed

the relative size of he Emperor and he Sweetcliff and the size of the leaves on the Sweetcliff. In between is the 88-1, Bob's round longee. It was a good fruit but it did not bear well so it has been eliminated.

Bob had several slides of different graft techniques and graft unions and graft compatibility where in a high wind the grafted tree may separate at the graft area. He said it's important to know what you're doing when you graft.

To produce well, a lychee has to have a wet period and a dry period. Our summers usually are wet, our winters dry, but in Florida this is not always the case. So what do we do? The rule is that by October, have your fertilization finished. Clean up your insect and scale problems so the tree goes into the winter clean. Keep it irrigated, don't let

the leaves wilt and fall off. It takes 2 things for fertilizer to break down. It takes water and the right temperature. So if the temperature falls below 60 or so, the fertilizer is not going to be effective and we don't want to go into the winter stressed and have a flush of growth. If you have a tree that's flushing in late October, the best procedure might be to cut all the flushing off. Then if the timing is right and the temperatures are correct, we'll have good flowering. If a lychee is flushing out in October, November, December, we probably won't get any fruit, but if we remove those flushes back to the hardwood, maybe the tree will reflower.

At that point Bob invited us all to visit his nursery but please call in advance because sometimes they're very busy.

Go Green... Dig Your Weeds - Don't Spray Them

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