UNIVERSITY OF FLORIDA | EXTENSION
Institute of Food and Agricultural Sciences

Tropical Fruit Growers Newsletter

July - September 2003

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Tropical Fruit Growers Newsletter
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UPCOMING EVENTS

LOCAL WORKSHOPS, SEMINARS & FIELD DAYS

Scouting for Insect and Disease Control
When: August 28, 2003, 10 a.m. - Noon
Where: Ag Center, 18710 SW 288 Street

Lychee and Longan Production
When: September 4, 2003, 10 a.m. - Noon
Where: Ag Center, 18710 SW 288 Street

Basic Water Quality Issues and Your Fertilizer Program **CANCELED**

Worker Safety Seminar
When: Friday, September 19, 2003
8:00 - Noon - Spanish
1:00 - 4:00 p.m. - English (if enough register)

Carambola Cultivar Evaluation, Field Day
When: September 25, 2003, 10 a.m.- Noon
Where: TREC, 18905 SW 280 Street

South Dade Hydrology Update
When: September 30, 2003, 10 a.m.- Noon
Where: Ag Center, 18710 SW 288 Street

Avocado Production and Nitrogen + Boron Effects on Avocado Production
When: November 6, 2003, 10 a.m.-Noon
Where: Ag Center, 18710 SW 288 Street

Lychee and Carambola Nutrition in Miami Dade County
When: November 13, 2003, 10 a.m - Noon
Where: Ag Center, 18710 SW 288 Street

Papaya Growers Field Day
When: December 12, 2003. 10 a.m.- Noon
Where: TREC, 18905 SW 280 Street

NATIONAL

American Society for Horticultural Science
When: October 3-6, 2003, Rhode Island

INTERNATIONAL

Interamerican Society for Tropical Horticulture
When: September 2-5, 2003, Brazil

Avocado Congress
When: October 19-24, 2003, Malaga, Spain

COMMENTS

AVOCADO - Many of you already know that

Mexico has applied for authorization of year round export of `Hass' avocados to the U.S. including the production areas - California, Florida and Texas. Though there is extreme opposition from growers of these production areas and from their legislators, most growers think that this will be authorized by the U.S.D.A. Several USDA researchers are opposed to allowing the imports because pest problems in the Mexican production areas were not well studied and there are high probabilities that one of these pests will be introduced to the production areas. This is not hear say, actually, APHIS inspectors have already intercepted avocado shipments infested with several of those pests. Thus, from January 1, 1998 to July 7, 2003 there were 88 detections of quarantine pests at the border in 18 ports of entry (seed and stem weevils, fruit flies and seed moths). Fifty other Lepidoptera species were also intercepted. Of the interceptions, 42 were seed weevils, 19 of the seed moth, 5 fruit flies. If the imports are allowed-the chances of these pests becoming established in the production areas are very high as the climate is very favorable. As of 2002, production from 40,600 acres has been allowed. The number of certified acres from Mexico in 1997 was only 3,703. If the imports to Texas, Florida and California are allowed, the number of certified acres in Mexico will double or triple in a short time. The USDA projects 275 to 442 million pounds of `Hass' avocados from Mexico. Since the beginning of Mexican avocado exports in 1997 to the present, over 700 fruit flies and 2100 stem weevils have been intercepted by the USDA. Also, California is already experiencing a Mexican fruit fly quarantine in one production area (right now in Valley Center) and the *Persea* mite and avocado thrips have been introduced from Mexico. The fruit fly infestation has cost California growers $15 million to date. Why should US growers be subjected to these risks which have devastating consequences for them? Look at what is happening to the Florida citrus industry with citrus canker. If you are an avocado grower,

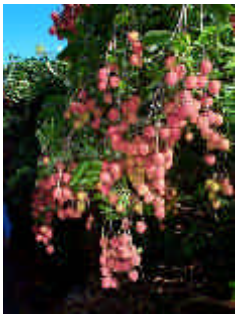
you should be concerned. The period for comments had a deadline which has passed already. However, growers are asking for an extension of the comment period until all data has been made public and criticized. Be sure to keep in touch with the Avocado Administrative Committee office as to how their petition is progressing.

We have had a good early season. Prices have been acceptable. Production volume has been down as predicted and will be quite a bit lower than last year. Several growers are having trouble with worms. Some are reporting heavy damage to young leaves. We have not had this type of damage since the late 80's. At that time, after large areas were affected, a virus disease that infected the inch worms (Lepidoptera), controlled the problems. However, many growers had to spray before the virus disease disappeared. I remember even seeing damage to fruits.

Prune as soon as you finish your early cultivars and apply fertilizer, nutritional sprays and iron chelate drenches. Weeds and vines get out of control easy until the dry, cool season arrives. Keep on top of them.

MANGO - For most growers, this season was- as it has been for many years, one of frustation, not being able to sell the crop at a profit. Production was very good. A few growers still managed to sell their crop at a good price. This usually takes improving your marketing skills and quite a bit of work. I think once buyers compare our quality to that of Mexican imports, they are more willing to do a little extra marketing to specialized chains. Hopefully, the clientele that appreciates good quality will steadily increase. We are out of mangos now. As with early avocados, it is time to prune, fertilize and apply iron. It is also a good time to control scales which seem to peak at this time.

LYCHEE - This was the best year we have had as far as production goes. Most growers were able to sell the crop at good prices $1.25 -1.50/Lb. A few at very good prices #2.00/Lb and some at low prices - less than $1.00/Lb. Many growers have told me that they are happy with the prices which were not as high as last year's but the increased volume helped get good profits per acre. As in the past, anthracnose on %Mauritius' was a problem for many growers. I think a spray program similar to that for mangos is going to have to be adopted by %Mauritius' growers. Reports from TREC also indicate that many groves were affected by a problem similar to anthracnosis in its appearance but the anthracnose fungus could not be isolated from several samples taken to the clinic. This new problem needs to be studied. The literature mentions that a problem with similar symptoms has been associated with low humidity and high temperatures. These two weather factors were experienced in our area this spring. This problem may not be easy to research.



The bark scales and nutritional deficiencies continue to affect many growers. Lychee propagators need to pay a lot of attention to the source of trees used for air layering. Most, if not all the bark scale problems we have, can be traced to source trees being infested with bark scale. Use only clean, scale-free trees! All

growers should have a program to monitor and also to control scales. The bark scale is a very serious pest.

As far as nutritional deficiencies, there are still growers that do not spray with minor elements or apply iron chelate drenches. Many show up here wondering what is wrong with their lychees or mangos. These two crops plus mamey and carambola are very prone to nutritional deficiencies. In most cases, excellent response follows applications of minor elements.

Check the upcoming workshops on tropical fruits in Upcoming Events.

LONGAN - As for lychees, most growers had a very good crop. You cannot stay in business

if you do not get good production. However, many growers failed to understand the effect of large crops of longan with respect to fruit size and tree health. You must remove 50 to 70% of the fruits from panicles with heavy loads and this must be done when fruits are pea sized. If you wait too long to thin the fruit, the fruit will not size up and you will have fruits with the seed surrounded by a thin layer of pulp. This fruit is not salable as some of you experienced. In many cases, specially with young trees - 3 to 5 years old, excessive crop leads to yellowing, defoliation, dieback and dead, severely damaged trees. You have control both of these problems and is up to you to carry on these practices.

Prices were variable . Growers that did not thin the fruit could not sell their crop or many had to almost give it away. Prices were as low as $0.50/Lb. Growers that thinned the fruit had good size. Many told me they should have thinned more. You can make good money with longans at $1.00 to $1.50/Lb. And some of you sold the crop at these prices.

Since we had such a good crop this year and lychees and longans tend to strongly alternate (next year=light or no crop), it may be a good time to try potassium chlorate ($KCl0_3$) in the pre-bloom period (in 10-15 trees if you do not have experience) to see if it will induce a bloom and a crop on longans for next season. As far as I know, $KCl0_3$ has not worked with lychees. Be sure to use it as recommended. Read Dr. Crane's work, as toxicity has been reported, specially using rates in the high range. We have not seen bark scale in longans but I have seen an abundance of the "banana shaped scale". This scale can defoliate trees and you can get a lot of sooty mold on the leaves and fruits. Naturally, fruit with sooty mold is very difficult to clean and is culled by buyers. Now, after pruning your trees, it is a good time to apply a spray to control scales. Insecticidal soap or oil are good choices. You need good coverage to control the "banana shaped scale" since it infests the undersides of leaves.

We are a little alarmed at the frequency of samples brought to our office that have damage by the "Sri Lanka Weevil". The damage is similar to that of the citrus root weevil, Diaprepes and May beetles but is more severe. This weevil attacks a wide range of tropical fruits and I think that, in the near future, we are going to have lots of problems in many tropical fruits. Remember to come to the Lychee/Longan Production workshop on September 4, 10 - noon at Extension.

PAPAYAS - This time of the year is perfect for most tropical fruits and papayas seem to really like heat and rains. There are several, very good looking groves in the area - a credit to growers that have learned to do a good job growing this difficult to grow, high inputs crop. The effort by these growers results in high yields of clean fruit. Mites, the ringspot virus and the papaya fruit fly are big problems. Papayas are also very susceptible to flood damage. I know there is competition from Mexico/Central and South America/Caribbean, but high yields sometimes, compensate for low prices.

Papayas are highly nutritious. This reminds me to encourage you - all tropical fruit growers, to always promote the nutritive value of tropical fruits. In this respect, tropical fruits are at the top, much better than other fruits - I am not putting down other fruits but this needs to be better exploited by the tropical fruit industry.

SAPODILLAS - This is a reliable, very well adapted fruit to our area, that usually have few problems. However, this season I have seen quite a bit of damage by a moth that attacks flowers and fruits. Particularly, I have seen important damage to fruit consisting in holes (1/8-1/4") that go from the skin to the interior of the fruit which naturally ruins it. Dr. Jorge Peña is ahead of the game, as he already has a student working on the problem. There are several Lepidoptera involved. Control is difficult when the insect is inside the pulp. Another problem is that there are no approved chemicals to control this pest. Infested fruit that falls to the ground should not be left in the field because this serves as a source of reinfestation. Control needs to aim at breaking the insects life cycle and removing fruits, though laborious, is an excellent sanitation practice. As soon as we learn more about the insect and its control from Dr. Peña's work, we will let you know.

SENDING FRUIT TO CALIFORNIA - I have added this column because we continue to have problems with fruit shipped to California. If you send fruit to California, the first thing you need to know is that fruit must be pest free. You also need to be registered with DPI. Be sure to talk to DPI inspectors before you ship. They will give you a run down on the rules and how inspectors search the shipments for compliance with the rules. I can not believe, for example, that some shippers include LEAVES and STEMS! in some shipments. Well, I have been sent pictures from California showing them. This is suicide and 9 out of 10 times the fruit will be confiscated. Actually this is exactly what has happened already with mameys and lychees before and right now with longans too. The sad part is that this is extremely costly to you, as not only California confiscates the shipment but they also have a charge for disposing of the fruit that in some cases nears $1,000. My advise is that if you do not have the time to supervise fruit shipments to California and are not willing to go the extra mile to be sure there are no problems, DO NOT SHIP!. Another problem that may result from sending fruit with problems, is that California is already considering not allowing any shipments of mamey, lychee and longan to their State. I know this is an excellent market for our fruits and we should exploit it but we must be committed to do a very good job and comply with all of their rules and requirements. I have been asked to comment on this by DPI

because they are worried from their conversations with their counterparts in California, that they will not allow more shipments - **NOT GOOD FOR US THAT NEED MARKET EXPANSION!**

CULTURAL PRACTICES

If you have finished harvesting the crop from early cultivars, it is time to prune. The same is true for mangos, longans and the earliest of the avocados like Donnie, Simmonds, Pollock, Russell, etc. Pruning early, gives time for the trees to flush once or several times before the bloom season arrives. Top large trees like avocados, mangos, etc. to a height of 14-15 feet. Also hedge to leave a 5 to 6 feet space between adjacent rows. The trees should have pyramidal shape meaning wider at the bottom than at the top. This can be done by pruning at a $5\text{-}10^0$ angle from the vertical. This allows light coming from above to reach the bottom of the trees to avoid losing lower branches - a common problem in mature groves.

It is also a good time to spray for scales if they are a problem. You should have already applied several minor element sprays (to the leaves). If you have not done it, apply two consecutive sprays or one now and one two weeks later and then one each in September and October. Remember, our calcareous soils with a 7.8-8.4 pH bind zinc (Zn), manganese (Mn) and iron in a way that roots cannot absorb them. The first two Zn and Mn, are easily absorbed by young leaves. Unfortunately iron (Fe) is not, so we must apply iron using a chelated formulation specially made for our alkaline soils. Apply 3 to 4 ounces per adult tree as a drench under the canopy. The time to apply minor elements is from April to September or October. The best time for iron is from June to September.

Vines and weeds are growing fast, making it difficult to keep up with them until the cool dry weather arrives in November. Stay ahead of them. Do not allow vines to climb on trees. Removing them is very tedious and expensive. Be ready for the worse part of the hurricane season. Have chain saws, machetes, ropes, chains, etc. ready to be used if needed.

Watch out for mite, lace bug and thrips damage to avocados. Their population peaks at this time.

Mangos, lychees and longans should have received the last fertilizer application. Remember to withhold irrigations for these crops after September.