



UNIVERSITY OF
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EXTENSION

Institute of Food and Agricultural Sciences

Growing Concerns

Editor - Dave Palmer

www.prohort.net

News & Information for the Horticulture Professional

Apr-May-Jun 2004

Hillsborough County Extension Service
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Contents

Pink Hibiscus Mealybug
Problems with Palms
Counterfeit Roses
Texas Lawn Crew Arrested
Insect Breathing Mechanism
Did You Know?
A Note From the Editor
Websites of Interest
New or Interesting Publications
Events Calendar

Dave Palmer

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Pink Hibiscus Mealybug (PHM)

A pest potentially worse than Asian cycad scale is now on the loose in west central Florida. The pest is called Pink Hibiscus Mealybug (PHM). It was first detected in Pinellas County in Feb 2004. Since then PHM has been detected at several other sites in Pinellas. PHM was also detected in Hillsborough County for the first time in the middle of March.

PHM was first discovered in Florida in June of 2002. DACS and USDA, are currently releasing two very small parasitic wasps into the infected areas. These insects are not harmful to other beneficial insects, plant life or humans.

If you may have plants infested with PHM call the Department's toll-free helpline at 888-397-1517 to arrange for an inspection. **Do not spray pesticides on this pest!**

(Continued on pg 2)

Human beings are the only creatures on earth that allow their children to come back home. Bill Cosby

Pink Hibiscus Mealybug (continued)

Why is PHM such a big deal?

This pest is potentially much more damaging than Asian cycad scale. If you recall, the Asian cycad scale only attacked King and Queen sagos, yet that pest has had a devastating effect on Florida landscapes. **This pest attacks more than 200 types of plants!** Imagine what it could do if we don't bring it under control quickly.

PHM is a serious agricultural pest of fruit trees, vegetables and ornamental plants that occurs in most tropical areas of the world. It attacks many found in Florida, including hibiscus, citrus, guava, mango, avocado, tomato, cucumbers, peppers and many others.

It is a tiny (3mm) sap-sucking insect that forms colonies on the host plant, which can grow into large cotton-like masses

of white, waxy deposits on branches and leaves if left undisturbed. PHM feeds on the sap of the plant and releases toxic substances causing injury and death to the plant, though it is harmless to humans. It is spread by wind, ants or other small insects, or it can be stuck on clothing or on the hair of animals. PHM can be distinguished from other mealybug species by its reddish-brown, smooth body and pink-to-red body fluid.

Field studies indicate that the best method of control for PHM is biological control.

Homeowners and lawn/landscape maintenance companies operating in the area are asked to please NOT cut or remove suspect plants or use insecticides at this time. The cutting or treating of these plants could interfere with the biological control program and may increase the risk of spreading the infestation. PHM spreads most easily by the wind and the movement of infested plants. However, if plants have been or must be cut, please double bag all plant parts (leaves, branches, flowers, etc.) in plastic and put the bags out with regular household garbage, not with other yard trash. Lawn/landscape companies are asked to bag or cover all cuttings while transporting. However, to reduce the likely spread of PHM, **it is best to not cut or move any suspect plants at all.**

If you may have plants infested with PHM **call the Department's toll-free helpline at 888-397-1517 to arrange for an inspection.**



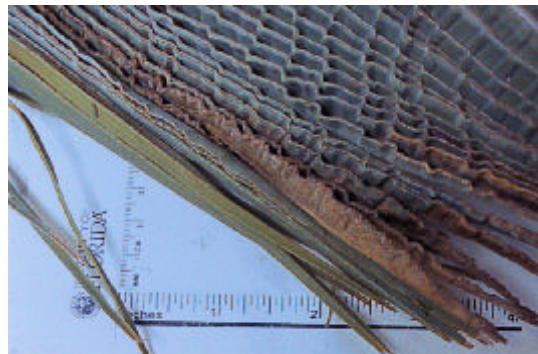
Problems with Palms

Ever since the long wet summer, we've see some strange problems on palms. On Queen palms, the newest frond will only **open partially or be deformed or crinkled**. The leaflets on a frond may appear **dried or wilted**. Some fronds will have gaps where leaflets should be but aren't. In some cases **the head of the palm is bent over and deformed**. It's taken the pathologists and the palm nutritionists time puzzling over the symptoms, doing lab tests and testing different treatments to determine that these symptoms are **boron deficiency**. Apparently boron deficiencies are "transient," meaning they come and go almost on a weekly basis. Lab tests can't always identify the deficiency. Despite the researcher's best efforts, however, The problem has proven difficult to cure. **Putting boron on palms isn't as easy as it sounds. Too much boron can be toxic to the palm, so caution is the way to go.**



Unopened frond

Yet another problem is a disease called ***Thielaviopsis paradoxa***. This disease can cause **the bud of a palm to rot or it can cause the trunk to rot**. In Palm Beach and Hillsborough Counties, and elsewhere across the state, this disease has attacked some Queen palms by **causing fronds to wilt and die from the bottom up**. These symptoms are caused by the trunk, and sometimes the bud, rotting. This rot prevents water from moving from the roots to the canopy. In Washintonia palms, **the trunk often rots without visible symptoms to the canopy**. Then suddenly the trunk breaks somewhere between the ground and the canopy and half the palm crashes to the ground. Research on this disease is almost non-existent. The disease is suspected of entering through holes in the trunk or natural cracks in the trunk. It may also enter when fronds that are not yet completely dead are cut off, creating a wound. Like many other palm diseases, **there is no known cure for *Thielaviopsis***. While little is know about how the disease enters a palm, **it is wise to sterilize pruning tools between palms, and avoid the use of chain saws as they cannot be effectively sterilized. Above all, don't replace a dying palm with another palm, as many of the diseases are soil-borne. See "New and Interesting Publications" on page 5 for other publications and websites on these problems.**



Unopened and crinkled frond.



Deformed head

Do what you can, with what you have, where you are. Theodore Roosevelt



Dried or wilted (dessicated) leaflets

Counterfeit ...Roses?!

Believe it or not, the Hills Floral Group, the largest floral distributor in the US, working with Customs and Border Protection announced the seizure of a number of shipments of roses grown and shipped illegally from Colombia and Ecuador and headed for consumers in the US. Royalty Administration International, an organization specializing in intellectual property rights administration was able to help precisely identify the roses as being grown by un-licensed growers. Customs reports that operations are ongoing and more seizures are expected.

(Source: *Plantfind.com*)

<http://www.plantfind.com/articles/viewArticle.asp?articleID=1179>)

I don't know how I got over the hill without getting to the top. Will Rogers

Texas Lawn Crew Arrested for Dumping Clippings

Fort Worth police have arrested 5 lawn care operators for dumping grass clippings in a public park. Investigators say the men dumped 960 pounds of grass clippings into Arcadia Trail Park. Neighbors initially reported the crime to police. The volume of clippings makes the crime a felony, with punishment up to two years in jail.

(Source: *Lawn and Landscape e-mail newsletter for Jan 2004*)

Researchers Discover Insect Breathing Mechanism

Insects don't have lungs. Instead they have a system of internal tubes called tracheae that are known to exchange oxygen through slow, passive mechanisms. Researchers at The Field Museum say that some insects, including beetles, crickets, ants, butterflies, cockroaches, dragonflies and others also use rapid cycles of tracheal compression and expansion in their head and thorax to breathe. In the 3 species most closely studied (the ground beetle, house cricket and carpenter ant) up to 50% of the air in the main tracheal tubes is exchanged every second. This is similar to the air exchange of a person doing moderate exercise. (Source:

www.fmnh.org/museum_info/press/press_insect.htm)

**Growing Concerns - Pg 4 of 8
Apr - May - Jun 2004**

Did You Know?

Some of the palms used in our area originate in dry arid regions. For example, the Canary Island Date palm, (*Phoenix canariensis*) as the name implies, is from the Canary Islands, off the northeast coast of Africa. These islands are warm, mild and quite dry, averaging 5-15 inches of rain per year. Compare that to Florida, where we average 45-50 inches of rain per year. And that doesn't count irrigation! Wet years here can have up to 65-70 inches of rainfall. Is it any wonder these palms are prone to diseases such as *Ganoderma* and *Fusarium* among others? True date palms, (*Phoenix dactylifera*) also originate from a dry climate.



Phoenix dactylifera



Phoenix canariensis

From the Editor:

Change can be an opportunity or a difficulty depending on your perspective.

Have you ever put on a set of clothes that was a little too small? I'm going through a version of that with my workload. Due to the combination of tight budgets, limited resources and a limited number of hours in the day, I've decided to cut both the **Retail Gardener** and **Growing Concerns** newsletters down from 12 pages to 8 pages. I hope to include more information in the **ProHort** email updates in place of those pages.

Another change - during the last several months we've made an effort to ask many of our readers whether they would like to receive either a fax newsletter or an e-mail notification of the newsletter rather than the hardcopy itself. Again this is an effort to serve as many of our clients as possible with limited resources. Those of you that want the hardcopy version of the newsletter will still receive it. I apologize for any inconvenience. Thank you for your continuing support. Dave

Give a man a fish and he'll ask for a lemon. Teach a man to fish and he'll leave work early on Friday.

Websites of Interest

Palm Production and Culture Resources - Although this website is intended primarily for the growers, it has a lot of good information for the installation & maintenance industries. This site contains publications on palm nutrition, installation and transplanting, treatment of cold damage and a photo gallery. <http://flrec.ifas.ufl.edu/Hort/Palms/palmproduction/palmproduction.htm>

New or Interesting Publications

Boron Deficiency in Florida Landscape Palms - An excellent publication that explains many of the strange symptoms we've been seeing on palms lately. Lots of pictures. Become familiar with these symptoms, your customers may ask about their palms.

http://flrec.ifas.ufl.edu/Hort/Palms/Boron_Deficiency/Deficiency_in_Florida_Landscape_Palms.htm

Thielaviopsis Bud Rot of Palms - In-depth information on the disease mentioned on pg 3.

<http://miami-dade.ifas.ufl.edu/programs/commorn/publications/thielaviopsis-bud-rot-of-palms.pdf>

Fusarium Wilt of Canary Island Date Palms - Another common disease of many palms.

<http://plantpath.ifas.ufl.edu/takextpub/FactSheets/pp0044.pdf>

miami-dade.ifas.ufl.edu/programs/commorn/publications/Fusarium%20wilt%20of%20date%20palms%20in%20South%20Florida.pdf

Maintenance Equipment Training Videos (in either Spanish or English) - available from the Associated Landscape Contractors Association. See their website at www.alca.org then go to the Bookstore then click on Education/Training/Safety.

Figuring out Fertilizer for the Home Lawn - <http://edis.ifas.ufl.edu/ep221>

Alleopathy: How Plants Suppress Other Plants - <http://edis.ifas.ufl.edu/hs186>

Florida's Best Native Landscape Plants - Gil Nelson, see the website at www.upf.com or call 1-800-226-3822

Termite Baits - <http://edis.ifas.ufl.edu/MG363>

Events Calendar

Apr 1 - Pesticide Testing - Polk County Extension office (1st working day of the month) Call 863-519-8677 for info.

Apr 1 - Pesticide Testing - Lee County Extension office (1st Thur of the month) Call 941-338-3243 for info.

Apr 2 - Landscape Industry Field Day - Ruskin, **Free, CEUs** Click Here to see the flyer or call 813-645-9527 for more info.

Apr 3 - FNGA Certification Review Class - Contact Marilyn Sileven at 1-800-375-3642 or e-mail to mmott@fnga.org

Apr 13 - Pesticide Testing - Hillsborough County Extension office 9am (2nd Tues of the month) Call 813-744-5519x103 or x104 for info.

Apr 20-22 - Fla Vegetation Management Assoc Annual Meeting - Daytona Beach Core, **Right-of-Way and Natural Area CEUs, ISA CEUs** For further information contact Dan Marsh at 386-947-6104 or Dan_Marsh@fpl.com

Apr 21 - Pesticide Testing - Pinellas County Extension office 9am (3rd Wed of the month) Call 727-582-2082 for info.

Apr 30 - Limited Comm Maint Exam Prep Class - CEUs, Contact David Shibles for further information - (863) 519-8677 X 109

May 1 - ISA Certification Exam, Orlando, Call 217-355-9411 for details

May 3-5 - Southeast Pest Management Conference Gainesville CEUs for more info, the website will soon be up at <http://sepmc.ifas.ufl.edu> the program is as follows:
May 3 - General Household Pest Management, May 4 - Termites and Wood-Destroying Organisms, May 5 - Lawn and Ornamental Pest Management

May 3-7 2004 Aquatic Weed Control Short Course, Fort Lauderdale, FL. CEUs see the website at <http://conference.ifas.ufl.edu/aw>

May 3 - Pesticide Testing - Polk County Extension office (1st working day of the month) Call 863-519-8677 for info.

May 6 - Pesticide Testing - Lee County Extension office (1st Thur of the month) Call 941-338-3243 for info.

May 11 - Pesticide Testing - Hillsborough County Extension office 9am (2nd Tues of the month) Call 813-744-5519x103 or x104 for info.

May 19 - Pesticide Testing - Pinellas County Extension office 9am (3rd Wed of the month) Call 727-582-2082 for info.

Jun 1 - Pesticide Testing - Polk County Extension office (1st working day of the month) Call 863-519-8677 for info.

Jun 3 - Pesticide Testing - Lee County Extension office (1st Thur of the month) Call 941-338-3243 for info.

Jun 8 - Pesticide Testing - Hillsborough County Extension office 9am (2nd Tues of the month) Call 813-744-5519x103 or x104 for info.

Jun 12 - ISA Certification Exam, Key West Call 217-355-9411 for details

Jun 16 - Pesticide Testing - Pinellas County Extension office 9am (3rd Wed of the month) Call 727-582-2082 for info.

Jun 15 - Quarterly Pesticide Training and Testing, Manatee County Extension, Palmetto, call 941-722-4524 for additional information CEU

DO YOU KNOW SOMEONE THAT MIGHT LIKE OR NEED TO READ THIS NEWSLETTER?

Which newsletter should you subscribe to?

The **Retail Gardener** is intended for both retail garden professionals and newer employees of other horticulture service businesses. It contains horticultural news and information.

Growing Concerns is intended to educate commercial and municipal horticulture professionals. It contains horticultural information but also some business and pesticide information. It may be better suited for supervisors, managers and business owners than entry level employees.

What formats can I receive the newsletter in? Due to the increasing cost of producing and mailing a newsletter on paper, and our steadily shrinking postage budget, it has been decided to allow primarily e-mail and fax subscriptions. **If you have a special case and would still like to receive these newsletters on paper, please call Dave at 813-744-5519x103.**

Name _____

Business Name _____

Phone Number _____ This number is my []Home []Work []Cell

How would you like to receive the newsletter(s)?

Fax (entire newsletter can be faxed) Fax number (_____) _____

E-mail (a hot link to the newsletter) E-mail address _____

Which newsletter? You may subscribe to both. (Circle the one(s) you want)

Growing Concerns The Retail Gardener

Name _____

Business Name _____

Phone Number _____ This number is my []Home []Work []Cell

How would you like to receive the newsletter(s)?

Fax (entire newsletter can be faxed) Fax number (_____) _____

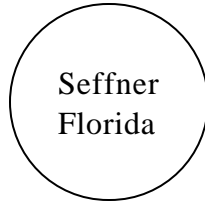
E-mail (a hot link to the newsletter) E-mail address _____

Which newsletter? You may subscribe to both. (Circle the one(s) you want)

Growing Concerns The Retail Gardener

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