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## BUGS and SHRUBS BUZZ

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**Commercial Green Industry  
Ornamentals and Turf Newsletter**



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In 2003, 280 people took pesticide exams.

- Of those, 82 were the Limited Commercial exam. • Collier County now has 82 Lawn and Ornamental license holders, up 24, a 41% increase over 2002. • 120 Commercial Landscape Maintenance Limited Pesticide ("Roundup") Certificate holders, an increase of 56 individuals or 88% more than 2002. • In 2003 we offered the limited commercial landscape pesticide test after the 8 hour class in 5 of our programs (2 in English and 3 in Spanish). • Of the 62 people that took the test, 51 passed (82%). • 26 of 85 that attended our 3 Hispanic training classes, took the exam, of those, 16 passed for a 62% pass rate. • Of the 81 that attended the English version of the Limited Commercial, 36 took the exam and 35 passed for a pass rate of 97%.

Because only a few landscape workers have this required certificate (<1%), acquiring it is a huge step upwards in their line of work. They can legally use pesticides and they don't have to worry about their company being fined by the BEPC (Bureau of Entomology and Pest Control) inspectors. I've heard that fines of \$500 are now being levied on first time violators.

Much thanks goes to U.F. Extension educators Cesar Asuaje and Carlos Balerdi for their teaching efforts and for traveling over here from the east coast to conduct these classes.

Striving for Legislative Improvement! The Limited Certification for commercial landscape maintenance certificate holders now have a "grace" period. Chapter 482.156 was amended in July. This means that you have 30 days after your expiration date (for your certificate!) that you won't be charged the late fee (\$50). From days 31 to 180, from the expiration date, you can still get your CEU's but have to pay the late fee.

In the Oct.-Nov.-Dec. 2003 Landscape Maintenance Association's newsletter, "The Cutting Edge" the LMA presented the following proposed changes to the Limited Landscape Maintenance certificate, Ch. 482.156:

As a core issue, the LMA requests that study materials and the test be printed in Spanish. This is critical to the industry and to our customers.

The LMA also wants to maintain the current Limited Commercial Landscape Maintenance (Round-up) certificate, including the capability to perform IPM using "Caution" label pesticides, but make some modifications to make it more equitable with other pesticide certificate categories. Please refer to the LMA newsletter for the full story. Hopefully, LMA will hang in there and push some if not all of this through the legislature.

1. Eliminate the words "herbicide" and "insecticide", replacing them with the word "pesticide".
2. Reduce the Work Experience requirement to 1 year. Currently, it is 3 years.
3. Maintain the educational requirement, but reduce the class hours to 6 hours.
4. Allow the application of a herbicide to a turf area ONLY for replacing that area with new turfgrass, an ornamental bed or hardscape. This would help landscape designers, installers, sod growers and nurseries to replace poor-performing turf areas.
5. Add the capability to supervise up to 5 employees and issue ID Cards to them. There should be no prior work experience required for the ID Cardholder. ID Cardholders would be required to receive an initial 2-hour class covering Pesticide Safety, Personal Protective Equipment, Reading a Label, Proper Mixing/Loading/Application and Proper Equipment Operation."

If you would like to have a voice in these pesticide laws, join LMA (Landscape Maintenance Association) see organizations on back page, and get active with working at having pesticide laws that will help us train people rather than the way it is now.



**Palm Lethal Yellowing Disease (PLY)** is still active in the City of Naples and north Naples. The City is considering mandatory inoculation with a new outbreak on N. Gulf Shore Drive. Please report suspicious palms that are in the county, outside of the city limits, to me. Inside the city limits, please report palms to Joe Boscaglia, (239) 213-7123.

See: <http://collier.ifas.ufl.edu/Horticulture/LethalYellowing2003.htm> for symptoms. Please don't call if it is a queen palm, as this is one disease they do not get! And if the coconut still has its fruit, it most likely does not have the disease. We will not remove dead palms, there needs to be some green left. The plant hoppers won't feed on dead palms, hence those are not a threat to the spread of the disease.

Cycad Aulacaspis scale. The best strategy is a systemic compound, such as Disyston, which would be absorbed into the root system as a root drench treatment and then move upwards into the foliage to get the scales on the fronds and on the trunk as well as the scale insects feeding underground. Merit (imidacloprid) has been shown to be unreliable in the most recent U.F. testing by Dr. Mannion.

Try using Dimethoate 400 (EPA Reg. No. 34704-207) as a root injection/drench. For small cycads, up to 2 ft. in height (measured from ground to bud), apply 1 oz of Dimethoate 400 in one gallon of water and if taller than 2 ft., add 0.5 gal of this mixed solution per 6 inches in additional height. Larger queen sagoes may need twice the dose, that is 2 oz per gallon. Remember most dimethoate products (such as Cygon 2E) are not labeled for residential use anymore. Read the label to determine legal site applications. Tests conducted at U.F. by Dr. Catharine Mannion show that Distance (an insect growth regulator, pyriproxyfen from Valent) gave the longest term results of the foliar applied products. ?A new systemic compound that smoked this scale in my test may be available late 2004 or 2005. It is a Valent product called dinotefuron. Hang on to those cycads, help is on the way!

## Doug's Bugs and Pests

Some new pests that have been observed include "wax scale" on Mexican petunia (*Ruellia* sp.) and:



Crown gall on plumbago, caused by a bacterium, probably *Agrobacterium tumefaciens*.



Sugarcane beetle, *Tomarus tropicus*, grubs in St. Augustine grass in Punta Gorda.



Lobate lac scale was confirmed in north Naples (Pelican Marsh area) in December 2003. This is a killer scale, see web site: <http://collier.ifas.ufl.edu/Horticulture/Lobate%20Lac%20Scale%20Alert.htm>



This wax scale insect is ornate, but a plant killer, especially on Indian Hawthorn, Ixora, and Eugenia to name a few.



Ixora plants are festooned with sooty mold due to green scale and hemispherical scale infestations in late December.

## Sooty Mold in the Landscape: What Can it Mean?



A palm aphid infestation is providing the honeydew for the opportunistic sooty mold.



This adult palm aphid looks like the black whitefly. There are some immature palm aphid stages, called nymphs.

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I've noticed a dark and sooty appearance to plants lately. Take a closer look. Look for wax scale, which resemble bird droppings or ornate candle droppings. We are now seeing wax scale on Mexican petunias, which we thought were relatively pest free! On palms, look for a rather unusual looking aphid, that resembles a scale or certain whitefly 'pupae'.

Sucking insects such as soft scale (wax, green and cottony cushion scales), mealy bugs, aphids, whiteflies and treehoppers suck nutrients from plants by tapping into the vascular tissues with their thread-like mouthparts. They exist on the plant's liquid and nutrients, thereby "starving" the twigs and branches that eventually shrivel and die.

Honeydew seems like a strange name for a waste product that comes out the back-end of an insect. However, because of its rich sugar content, a black sooty mold (fungus) will eventually colonize the honeydew waste product. A severely infested tree with soft scale can be identified from a distance by its dark, shadowy appearance due to the sooty mold accumulation. The sooty mold does not harm the tree other than the thick coating can block photosynthesis and thus minimize plant nutrient production efforts. Hovering yellow jackets and bees will also give away a sticky insect infestation, as they are attracted to the sweet honeydew. During the dry season the honeydew isn't washed off the plants as much as during the rainy season and the sooty mold builds up in obnoxiously thick layers.

What to do Ant control is a new twist when dealing with these sucking pests because ants tend to farm these snack producing insects, aphids, especially. Ants like sweets and the more six-legged, sweet honeydew producers, think of them as little candy stores, the better. This means that the ants move insects to other plants and start a new infestation. The ants guard the honeydew producers and fend off predators and parasites from attacking the defenseless and nonchalant plant sucking insects. Control of shrub and tree attacking insects that attract ants is now a part of household ant pest management.

Check plants monthly and, if needed, use horticultural oil, usually a 2% mixture of a paraffinic mineral oil, that is labeled for use on the plant species you will be spraying. The oil also will dry up the sooty mold fungus so that after 2 applications it will start to flake off and blow away. Some newer products that will give longer residual such as permethrin based insecticides will also keep the ants away and control the plant pests. Use ant bait stations, placed away from the house, but near the shrub beds to minimize ant protection of these pests. Another new systemic, soil drench product called Bayer Advanced Garden™ Tree and Shrub Insect Control (contains 1.47% imidacloprid) is reported to give 4 to 12 months residual, depending on the organic matter content of the soil.

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