



# Green-Up News

For The Commercial Grower  
By Dana Venrick, Commercial Horticulture Agent II



Vol. 7, Issue 4  
July/August 2007

## GROWER FORUM

**2 CEUs Available**

Tuesday, August 14, 2007  
Pierson Lions Club  
143 W. First Ave, Pierson  
9:00 a.m.—Noon

- 9:00 -9:50 Selected Fertilizers Used in Foliage and Ornamental Fertilization—Dr. Jerry Sartain, UF/IFAS, Soil and Water Science, Gainesville
- 9:50-10:40 How Does Nutrition of Plants Affect Pest Control? - Dr. Bob Stamps, UF/IFAS MREC, Apopka  
(1.0 CEU)
- 10:40-11:10 Enrollment in the Voluntary BMP Program \_ How BMPs improve and your irrigation & fertilization and pesticide use efficiencies. Richard Budell, Director, Office of Agricultural Water Policy, FDACS (0.5 CEU)
- 11:10-11:45 Affect of Fertilization on Plant Diseases—Dana Venrick, Volusia County Extension (0.5 CEU)
- 11:45-12:15 Organic Matter, Composting and Recycling—Gayle Hoffman, District Administrator, Volusia Soil and Water Conservation District
- 12:15 Lunch Compliments of Farm Credit of Central Florida

Thank you Lindsey Harnish and Regina Thomas

### Inside this issue:

Reducing Weed Control Costs	2
Bifenthrin Has Expanded Uses	2
Pendimethalin Usage Relaxed	2
Win With BMPs	3
Treatment of Severe Palm Mineral Deficiencies	4
Dates To Remember	6

**FNGLA Meeting  
Wednesday,  
August 1, 2007**

**R.S.V.P for location**

**Meet & Greet at  
6:00 p.m.**

**R.S.V.P.  
Curtis Davis  
(407) 322-5133**



# DOWN CITRUS LANE

## REDUCING WEED CONTROL COSTS

Controlling weeds in citrus groves is expensive. In central Florida, annual costs are about \$220 per acre or 28% of the total \$778 annual production cost. With the rising costs of production, because of new disease pressures, and decreasing prices for citrus, let's look at various ways to reduce weed control costs.

Surveys need to be made for the type of weeds growing in the grove. They should be identified as to whether they are grasses, broadleafed weeds or sedges and be identified by name. Then the proper pre-emergent and/or post-emergent herbicide(s) can be chosen to give efficient control.

Be sure to control weeds at the right time. Young, seedling weeds are the easiest to control. Weeds in the vegetative stage are actively growing. Rapid growth while in the seedling and vegetative stages will improve control, as systemic herbicide movement within the plant is rapid.

Of course, always follow specific label restrictions and recommendations as you would with any pesticide. If the pH of the water is too alkaline (above 7.0) and too hard, be sure to lower the pH of the water first (e.g. ammonium sulfate to lower the pH of water in the spray tank before adding glyphosate). Read the label of any pesticide you are considering before purchasing for use.

Use both pre-emergent and post-emergent herbicides correctly. Pre-emergent herbicides may have limited activity on small seedling weeds. To work properly, pre-emergents require irrigation or

### PENDIMETHALIN USAGE RELAXED

EPA has approved a label change for Prowl H2O pre-emergent herbicide (pendimethalin, BASF) that allow growers to make applications to citrus up to one day before harvest. Previously, its use was limited to 60 days before harvest.

*\*Florida Grower Magazine—July, 2007*

rainfall to move the herbicides into the zone of seed germination.

Use post-emergents against those weeds that emerge after herbicide application. In many cases growers may want to mix both pre and post-emergence herbicides to improve weed control.

The amount and type of herbicide applied to a given location varies with the age of the tree as well as its location. Rates are usually lower for trees less than one year of age or where the soil is poorly drained. Again, pay careful attention to the herbicide label! It will save you mistakes and money. For recommended application rates of herbicides go to <http://edis.ifas.ufl.edu/CG013>.

Application methods are also important. For pre-emergents, uniform and complete coverage of the soil surface is important for best weed control. Be sure to check regularly for worn or damaged nozzle tips. As nozzles become worn, delivery rates increase and spray patterns become distorted, both of which waste money.

Timing is extremely important. Apply pre-emergents to a relatively weed-free soil. If lots of weeds are present, consider a post-emergent followed by a pre-emergent after weeds have been reduced.

*Thanks to:*

*Florida Grower*

*July, 2007*

### BIFENTHRIN HAS EXPANDED USES

The EPA has added more crops to the label for Brigade (bifenthrin, FMC Corp.). In addition, the existing citrus label has been expanded to include several species of root weevils and leafnotchers.

*\*Florida Grower Magazine—July, 2007*

# NURSERY/FERN/TURF

## WIN WITH BMPs

The University of Florida/IFAS has been conducting workshops at various locations to assist operators with implementation of Best Management Practices (BMPs). The hands-on experiences with calculations of irrigation distribution uniformity (DU), measurement—using the pour—through method—of container media soluble salts measuring electrical conductivity (EC), and other exercises, demonstrate the ease of complying with BMPs.

The Florida Nursery, Growers and Landscape Association (FNGLA), the Florida Department of Agriculture and Consumer Services (FDACS) office of Agricultural Water Policy (OAWP) have been working together to develop a statewide BMP manual for container nursery production. The manual incorporates practices which are scientifically based and economically feasible. Best of all, it is heavily based on grower input and the BMP practices are most of the things you are already doing in your operation.

It's a win-win situation. You have BMP guidelines for growing quality plants efficiently without contaminating groundwater. At the same time, if ground water contamination were to ever occur, you would have protection from clean-up costs. Later, BMP requirements will be more stringent, so now is the time to enroll!

The decision rests with you. For further information, please contact 'FDACS' OAWP's Dale Calhoun at (850)617-1714 or visit the OAWP website: <http://www.floridaagwaterpolicy.com>

## County FSA Committee Elections 2007

Interested in representing the agricultural community on the FSA County Committee? If so call Ken Windsor or Nola Burgess at the FSA office 352-343-2581.

August 1, 2007 is the last day to file nomination forms at the USDA Service Center (or mailed forms must be post marked).



## Alternative Weed Control— Another Way to Efficiently Control Weeds

Many Florida growers are using the little known flaming method for controlling weeds and plant harboring insects and diseases. Flaming equipment is clean and efficient, so there is no residue, run-off, or possible ground water contamination from herbicides. Weed flammers may save up to 50% over other methods of weed and pest control. Flaming can be used by both conventional and organic growers, as well.

Flamers are available for groves, vineyards, row crops, and potatoes. Propane torches are also available for home and garden use. Flame weed control is most effective on young, broadleaf weeds, but even mature stands of weeds such as johnsongrass can be killed after a few treatments. Weeds are not actually burned, but the sap is quickly heated (searing the plant), rupturing the cell walls, and “bleeding” the plant to death.

A supplier of reliable, field-ready flaming equipment, based on; your individual needs, is available for free, on-site evaluations. For additional information, call me at 386-822-5778.

# NURSERY/FERN/TURF continued

## TREATMENT OF SEVERE PALM MINERAL DEFICIENCIES

In the May/June, 2007 issue of Green-Up News, the treatments of severe nitrogen (N) and potassium (K) deficiencies were discussed. Here the treatments for other severe mineral deficiencies are discussed.

Treatment of severely Mg-deficient palms can require one to two years or more and is accomplished by broadcasting a controlled-release magnesium source (prilled kieserite is an excellent source) at rates of 2 to 5 pounds per tree 4 to 6 times per year to the area under the canopy. This treatment is to be considered as a supplement to regular applications of a balanced 8N-2P<sub>2</sub>O<sub>5</sub>-12K<sub>2</sub>O+4Mg palm maintenance fertilizer. To reduce the potential for salt injury, Mg and maintenance fertilizer applications can be offset by six weeks.

For Mn-deficient palms, soil applications of manganese sulfate are effective, but spraying the foliage with this product may achieve more rapid, though short-term results, especially on alkaline soils. This should be considered as a supplement to soil applications, not as a replacement. Manganese sulfate solutions to be applied to the foliage can be made by mixing 3 lbs of this product in 100 gals of water.

Soil application rates are dependent on palm species, soil type, and severity of Mn deficiency. These rates will range from as low as 8 oz for a small palm or one growing on an acid sand soil to 8 lbs for a large species growing on a limestone soil. Broadcast this product over the soil under the palm canopy. Applications can be repeated every 2 to 3 months, depending on the severity of the problem and soil type, but a response may not be seen until 3 to 6 months after applications. Avoid using composted sewage sludge or manure products near palms. Excessive Mn applications normally result in an induced Fe deficiency, with its characteristic new leaf chlorosis.

For treatment of Fe deficiencies, soil applications of iron sulfate are generally less effective than some of the chelated compounds such as DTPA, EDDHA, or HEEDTA, since free Fe<sup>++</sup> ions are rapidly oxidized under most soil conditions to the less soluble Fe<sup>+++</sup> form. On alkaline soils EDDHA is the most effective product, followed by HEEDTA and DTPA. FeDTPA is the most effective product for foliar application, but it is important to note that all of these chelates can be phytotoxic to palms and other plants when applied at high rates. Follow application guidelines on the label for

these products. Keep in mind that most Fe fertilizers can cause brown staining, so take to keep them away from non-target objects.

Fertilization to correct or prevent B deficiency in palms is problematic at this time. The only B sources currently used on palms are water soluble sodium borates. In high rainfall climates such as that of Florida, an application of water-soluble B can be completely leached out of the root zone with a single heavy rain. Slow release B fertilizers are an obvious solution to this problem, but rates have yet to be determined for palms. Several slow release B fertilizers being tested at the University of Florida for their release characteristics appear to release slowly over a period of at least one year. Thus regular use of these products could result in a build-up of B within the soil to potentially toxic levels. Unfortunately, the difference between deficiency and toxicity levels of B within palms is rather small, and correction of a B toxicity caused by over-application of slow-release B fertilizers could be very difficult.

Current recommendations for correcting B deficiencies in palms are intentionally conservative because of the potential for toxicity. Dissolve about 4 oz of Solubor or Borax in 5 gallons of water and drench this into the soil under the palm canopy. Do not repeat this for at least 5 months, since it will take this long to see the results of the first application.

Information from Fertilization of Field-grown and Landscape Palms in Florida by Dr. Timothy K. Broschat  
<http://edis.ifas.ufl.edu/EP261>



# NOTICE

## TO CONTINUE TO RECEIVE THIS NEWSLETTER, YOU MUST REPLY!!!

The federal government requires us to update our mailing lists on an annual basis. **If you wish to continue to receive the Green-Up News, please complete and return this form.** Please return this form by August 31, 2007.

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Email \_\_\_\_\_

**Mail to:**

Volusia County Extension Service  
3100 E. New York Ave.  
DeLand, FL 32724

**FAX:** (386) 822-5767



## Budget Cuts + Rising Expenses = E-mail & The Internet

Starting with the November-December issue, the “Green Up News” is going electronic. Volusia County Extension Office wants to know if you would like an e-mail notice when the latest issue of “Green-Up News” is published on our website. **Please be sure to include your e-mail address** (if you have one) so that we may serve your needs quicker and more efficiently.

You may currently view our newsletters and sign up on your own by logging on to  
<http://volusia.org/extension/horticulture.htm>

**For growers without internet access, hard copies will still be available at the Agricultural Center, Central Florida Fern Co-op, and Pierson Supply.**

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## Dates To Remember

- July 24** New Guidelines and Regulations for the Citrus Health Response Program –FDACS-UF/IFAS, Indian River Education Center, 2199 South Rock Road, Fort Pierce, 9:00 - 11:30 a.m. <http://www.irrec.ifas.ufl.edu>
- Aug. 14** Growers Forum (See front page for details)
- Aug 30** Pesticide Training for Private and O&T License Certification, Orange County Extension, Orlando. For farmers, ranchers, plant nurseries, golf courses or athletic fields pesticide applications. For information call Celeste White at 407-254-9210
- Oct. 4** Limited Landscape Maintenance (Commercial) Pesticide Applicator Training and Testing. Call Dana Venrick or Jeanne Blanchard for details 386-822-5778.

Sincerely,  
  
Dana Venrick

Extension Agent II – Commercial Horticulture