

# Polk County Urban Horticulturer Newsletter

March 2004

## FERTILITY

**Turf** - If you have not already applied fertilizer to your lawn, now is the time. We generally recommend spot treating with herbicides in February and applying fertilizer in March - not mixing the herbicide and fertilizer. I suggest that you look at the fertilizer label and select one that has similar first and last numbers (nitrogen and potassium) and low phosphorous (middle number) like a 15-5-15 or a 16-3-16.



At times, I have mentioned products like 15-5-15 or 15-0-15 as examples which some people say they can't find. There are other product ratios available to the homeowner which may be fine. The important things to consider when selecting a fertilizer is finding a product which fits your pocket book, has equal amounts of nitrogen and potassium and has 30-50% slow release nitrogen. The old stand-by 16-4-8 is still available and is probably acceptable, but current thinking is that high potassium products are a better choice as they build strong roots which makes the turf more tolerant to stress, like drought, diseases and pests.

Soil phosphorous should be determined before

selecting a fertilizer product with no phosphorous at all. If you have never had your soil tested to determine the amount of phosphorous, then I suggest you call the Extension Office for a soil testing kit. With this kit you take the soil sample and send it to the soil testing laboratory at the UF/IFAS. Within 2 weeks the Soils Lab will report back to you with the soil pH and the quantities of calcium (Ca), magnesium (Mg), phosphorous (P) and potassium (K) in your sample. There is a seven dollar fee for this test. Most soils in central Florida have more than adequate phosphorous, so you may need just a little phosphorous or none at all on your lawn. Phosphorous leaches, so there is no sense applying it, if it is already present.

Also, do not add dolomite or calcium to your lawn until you have had a pH test run. Just because a lot of oak leaves end up on your lawn does not mean the soil is acid and in need of a dolomite treatment. St. Augustinegrass ideally needs a pH of 6.5. If you add dolomite or calcium when the pH is 6.5, then you are actually making matters worse, because at a pH of 7.0 or above, certain nutrients like iron and manganese become marginally available to the turf and deficiencies will become evident.

The situation is even worse if you routinely

add dolomite to Bahiagrass which likes a pH of 5.5.

Before selecting a fertilizer, look on the label for the amount of water insoluble nitrogen. Under nitrogen on the label, you will see the various nitrogen products like ammoniacal nitrogen and urea which make up the total nitrogen in the bag. Products like ammoniacal nitrogen, urea and ammonium sulfate are fast release. In other words, they are taken up by the grass or leached away by rainfall and irrigation in just a few days or weeks. The last item under nitrogen is usually the amount that is slow release or is often called water insoluble. So, if the nitrogen content is 15%, then the slow release portion should be a minimum of 5%. Many fertilizer products have no slow release nitrogen at all. These are usually the very inexpensive products. You will pay a little more for a good quality fertilizer, maybe \$12-14 for a 50 pound bag.

For a moderately fertilized lawn, UF/IFAS researchers recommend an application of a complete fertilizer in March, an application of just slow release nitrogen in May (like Milorganite), an application of iron(Fe) in July, another application of slow release nitrogen in August and another application of a complete fertilizer in October.

If you use a fertilizer with 30-50% slow release nitrogen, apply 1 pound nitrogen per 1000 square feet of turf. To determine the amount of fertilizer in the bag to apply to 1000 square feet of turf, divide 100 by the percent nitrogen. For example, apply 6.7 lbs per 1000 square feet of a 15% nitrogen fertilizer.

If you decide to use a complete fertilizer with no slow release nitrogen, then only apply ½ pound per 1000 square feet, but make two applications 30 days apart. This will give the turf time to absorb a maximum amount of nutrients before being leached.

**Palms** - I receive many questions about palm fertility. Palms are prone to micronutrients deficiency. The ideal fertilizer for palms is one which has a ratio of 8-2-12-4 which has 8 % nitrogen(N), 2% phosphorous(P), 12% potassium(K) and 4% of magnesium(Mg). You usually see only three numbers (8-2-12), but the fourth, if expressed, is magnesium(Mg).



Both the nitrogen(N) and potassium(K) (first and third numbers) should be in a slow release form. The fertilizer should also contain 1-2% iron(Fe) and manganese(Mg), plus trace amounts of zinc(Zn), copper(Cu) and boron(B). Locally, the closest product to this that I have seen is the Lesco product 8-2-10 for palms. It has a high amount of slow release nitrogen(N) and potassium(K), 3% magnesium(Mg), 3% manganese(Mn) and 3% iron(Fe). Some fertilizers specially formulated for palms often lack one or more of these ingredients.

The first symptoms of potassium deficiency is orange or yellow spots on the frond leaflets. It is often induced by a high nitrogen to potassium ratio which results when slow release nitrogen and fast release potassium fertilizers (typical turf fertilizers) are used close to palms in the landscape. Potassium deficiency will often lead to the death of the palm.

Manganese deficiency results in a “frizzle top” appearance of the new growth. As the deficiency progresses, succeeding leaves will emerge completely withered or frizzled and the death of the bud will follow.

Magnesium deficiency is very common in Florida sandy soils. Date palms are particularly susceptible. Visible symptoms begin on the oldest leaves and progress upward to the younger foliage, typically a

broad light yellow band along the margin of the older leaves with the center of the frond remaining green. Magnesium deficiency is rarely fatal to the palm.

Mature palms should be fertilized 3-4 times per year with a good palm fertilizer at a rate of 5-8 pounds per application. For palms under 8 feet tall, 2-5 pounds per application should be adequate. A rule of thumb would be to apply ½ pound fertilizer per 2 feet of overall height up to about 15 pounds for a palm greater than 30 feet tall. Place the fertilizer under the canopy of the palm, but not up against the trunk to avoid damaging young roots.

### **Florida Friendly Landscaping Tips for Existing Landscapes**

**By Anne Yasalonis, FYN Coordinator**

**Here are three tips that homeowners with an existing landscape should follow to maintain a beautiful and low maintenance landscape:**

**1. Retain vs. Remove:** There are probably many things in the landscape that you wish to remove. They may be high maintenance, planted in the wrong place or not to your liking. The first thing to do is analyze your landscape and figure out what goes and what stays. You may wish to sketch yourself a plan with the plants you wish to retain. Working with a sketch will help you when you are ready to replace those plants. Remember to retain and protect native plant material and get rid of any plants listed on the Florida Invasive Plant Species list

(<http://www.fleppc.org/Plantlist/01list.htm>).

**2. Time to Replant; Right Plant Right Place:** When you finally decide to make that first trip to the nursery (sketch in hand!) you should have some idea of what you are going to purchase. Before you pick out that shrub, perennial or tree make sure you know where

you are going to put it. Also be familiar with the site conditions throughout your yard. Is the plant going to be in a sunny or shady location? Is the soil very sandy or stay moist? How is the drainage? Are there structural limitations you must take into consideration (such as power lines or roof overhangs)?

Drought tolerance, low maintenance, minimal fertilizer and pesticide use are also some things you may want to take into consideration before purchasing a plant. Just how much time and money do you want to spend on that plant? If the answer is “not much”, go with a native or a “water wise” plant. There are many lists of these plants available through the Polk County Extension Service. If you need plant recommendations we are always here to help.

**3. Plant it Right!** Now that you have purchased some plants it is important to plant them correctly. Here are some planting tips:



**a.** If you have utility wires or a soffit above or your plant will eventually cover a window, you may want to plant somewhere else to avoid unnecessary pruning.

**b.** You may want to soak the root ball (in the pot) in a tub for a few hours before planting to ensure that the root ball is thoroughly wet. A dry root ball coming from the garden center may be difficult to wet after planting.

**c.** The planting hole should be dug 2-3 times the diameter of the root ball. Fill the hole with water and allow the water to seep into the ground.

**d.** Break up any compacted soil around the planting hole so that the roots can spread.

**e.** Find the point where the top-most root emerges from the trunk and plant it within two inches of the surface.

**f.** If there seems to be a lot of circling roots, make some slices into the root ball to break them up and loosen them.

**g.** When you have the root ball placed in the planting hole and leveled, fill 1/3 of the hole with back fill soil that you have removed from the hole, and then add water. Continue this process until the hole is filled with soupy mud. Gently press down around the root ball to force out any air trapped in pockets around the root ball.

**h.** Do not cover the top of the root ball with any extra soil. This is called capping and often will lead to the death of the plant, because the capping soil will prevent water from wetting down into the root ball.

**i.** Make a 2-3 inch high water ring with soil or mulch around the root ball which will hold irrigation and/or rain water.

**j.** Water daily for the first 2-3 weeks, then gradually cut back to every other day and then every third day until established.

If you think you need help with your landscape planning, you may want to attend a landscape design workshop which will be given by the Extension Service in May on Monday evenings. For information, contact Anne Yasalonis at (863) 519-8677 Ext. 121.

## MISC. MARCH GARDENING

**Flowers to plant** - African daisy, ageratum, balsam, begonia, black-eyed Susan, blue daze, bush-daisy, celosia, cleome, coreopsis, cosmos, dahlia, dahlberg daisy, dusty miller, four o'clock, gaillardia, geranium, goldenrod, impatiens, Joseph's coat, marigold, melampodium, moon vine, morning glory, nierembergia, salvia, strawflower, torenia, verbena, vinca and zinnia.

**Herbs to plant** - Anise, basil, bay laurel, borage, cardamon, chervil, chives, coriander, costmary, dill, fennel, ginger, lemon balm, sweet marjoram, Mexican tarragon, mint, oregano, rosemary, sage, thyme and watercress.

**Vegetables to plant** - bean, calabaza,

cantaloupe, cassava, chayote, corn, cucumbers, dasheen, eggplant, Jerusalem artichoke, jicama, luffa, malanga, New Zealand spinach, okra, pepper, pumpkin, southern peas, squash, tamarillo, tomato and watermelon.

**Pruning** - Most gardeners are ready to do a little pruning in their landscape. Here are a few suggestions: prune before spring growth begins, remove dead and declining branches first, make pruning cuts back to a bud or branch angle, as a rule of thumb do not prune more than 30% of height, use hand shears or loppers to do most of the pruning, do not prune spring flowering plants until flowering is completed and be advised that pruning paint may make matters worse when used on a pruning cut.

**Florida bulbs** - Try bulbs like amaryllis, caladiums, cannas, gladiolus, rain lilies, blood lilies, African lilies and many others which are available at many retail garden centers. You can usually find them in nylon net bags. Most will grow in the full sun. They should last for a few years. Periodically remove old flower heads and leaves. Dig and divide every 3-4 years.



Have a good gardening day,

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