



UNIVERSITY OF  
FLORIDA

IFAS EXTENSION

5 April 2005

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*On your mark...*

Measure your lawn and calculate the amount of fertilizer that you will need.

*Get set...*

Visit your nearest home garden center and purchase the proper fertilizer.

*Go!!*

Get fertilizing!

By the number of calls that we have been receiving at the extension office these past few weeks, it seems that most homeowners are waiting for a sign from our horticultural experts that it is time to fertilize their lawns. Here is your sign - its time. In fact, in a normal year you might already have wanted to fertilize by now to catch the first flushes of spring growth. But since we have yet to see consistent days of warmer weather, our lawns have been a little slow to get going. You might even have noticed that just last week lawns were beginning to grow more and began to green up a bit from the winter dormancy. Although we in the south don't have the harsh winter temperatures that they do up north, most lawn grasses here in Florida still experience a period in which their growth slows down considerably and even stops until the temperatures begin to warm up again. If you were new to this area and mistakenly fertilized during the cooler months (from October through February), you might have noticed that it did little to no good in bringing color back into the lawn. In reality, it was probably just a waste of money since the grass plant itself is not growing and not taking up the nutrients from the fertilizer during this time. Unfortunately, most of that fertilizer went unnoticed by the plant and was probably leached through the soil or washed away by one of the heavier rains. Never fear though, all is not lost and you have learned a valuable lesson for next winter.

If you have had a hard time understanding the correct amount of fertilizer to put down on your lawn, you are in good company because most people, even the experts, have a hard time with this concept. Fertilization can be complicated because the directions on the bag and the formulation label, were designed for lawyers and professional landscape maintenance people, and not your common homeowner. Since the "label is the law" for fertilizers and pesticides, manufacturing companies are very careful to create a label and instructions that will hold up in a court of law if they are ever sued. Unfortunately for most of us, that makes the label very confusing and the actual directions for fertilizer application clear as mud. This can lead to one of the following improper application practices: putting on too much fertilizer, which can burn your lawn, or

worse, pollute a surface water body through stormwater runoff, or not using enough fertilizer which, of course, will not promote the growth and color that you want for your lawn. So what is a homeowner to do? Well, you should read this article thoroughly and then cut it out and save it for the future because I am going to explain the nuts and bolts of fertilizing your lawn.

First of all, if you have never had your soil analyzed for nutrient content you should do it before you start to fertilize. The reason for this is that the soil analysis will give you an idea of what nutrients are readily available already in your soil and also make proper recommendations as to what fertilizer formulation you should use. Preliminary soil samples can be done at your local extension office or you can decide to have a more in-depth analysis that is done by the University of Florida in Gainesville. Your local extension office in Vero Beach will have all the information that you will need for both of these soil tests. Secondly, you will have to decide the level of maintenance that you want to put into your lawn. The more fertilizer and water that you apply, the more you will have to mow throughout the summer. If you are at all like me, then mowing the lawn is the last thing that you want to do when the temperatures are in the mid-80's at 8:00 in the morning. If this is the case, then you will only need to fertilize once during the spring, and once in July with the possibility of an iron supplement in late summer (to be discussed in a later article). Those who desire a very manicured appearance for their lawn will be on the other end of the spectrum by fertilizing twice as much and can expect to put in quite a bit of time and money to maintain this effect.

The third step will be to select a fertilizer in the proper formulation that you will need for your lawn. The brand name of a fertilizer product is not necessarily important, but rather the actual formulation of the product. All fertilizer bags will put the percent of nitrogen, phosphorous and potassium (N-P-K) on the front of the bag. These are the major macronutrients that are essential for plant growth. The formulation will read something like 8-8-8, or 10-10-10. This means that there is 8% or 10% of each nutrient (N-P-K) in the bag. If you have a formulation that states 10-2-5 that means that there is 10% nitrogen, 2% phosphorus and 5% potassium in that bag. Some fertilizer recommendations will read "1 pound of N per 1000 sq/ft" and this can be very confusing because the bag itself only lets you know the percent of material in the bag, not the individual weighed amount of each nutrient. If it is a 50-lb bag then you have to calculate the actual amount of the product based upon the percent of material in the bag and you will need to do this for each of the nutrients contained in that bag. To do this you would take the percentage of nutrient in the bag and multiply it by the total weight of the entire bag. For example, if you had a 50-lb bag of fertilizer with 15% N, you would take 0.15 and multiply by 50, thus giving you the weight of the amount of N in that bag, or 7.5 lbs of N. Since you will need 1-lb N per 1000 square feet (per recommendation above) this bag will cover 7500 square feet of your lawn area.

There are many different types of fertilizer formulations based upon the fact that plants have different growth responds due to certain nutrients. For example, nitrogen is usually associated with general plant overall growth such as size, height and color. Phosphorus is associated with photosynthesis and bud development, whereas potassium assists with the conversion of sugars

into energy and root development. Since our Florida soils usually have a high amount of phosphorous already, you can select a formulation that only contains nitrogen and potassium. You should look for fertilizer bags that say 15-0-15 with micronutrients for spring fertilization. The bag will also tell you what form of nutrient is in the formulation. You will want to look for "slow-release" with reference to the type of nitrogen in the bag. Slow-release forms of N, such as "sulfur-coated urea" or ureaformaldehyde help prevent leaching and nutrient runoff. Select products that have a 30-50% slow-release content. Formulations that use "quick-release" products do not safe guard against runoff and can potential degrade water quality through non-point source pollution.

The next step is application of the fertilizer in which you will generally use a fertilizer spreader to apply the product accurately. Your fertilizer spreader will come with a set of instructions that will help you calibrate the equipment so that it puts out the exact amount of fertilizer desired. Follow the instructions carefully to avoid over- or under-fertilization. Once you have finished this procedure, the final step will be to lightly water the fertilizer into the soil. This can be achieved by turning on your irrigation system for 5-10 minutes, lightly hand-watering or allowing for a rain occurrence. Just as a warning though, heavy watering or rainfall will only increase the amount of fertilizer that can be leached through the soil. Care must be taken not to allow this to happen or the application of fertilizer will be wasted and the plants will not receive the nutrients that they will need to continue growing.

I would like to add some final words of advice; over-fertilization will not help your lawn grow faster. In this particular case 'more' is definitely not better and you can even do more harm than good by burning the plant with too much fertilizer. Also, beware of products that say "weed and feed", these products should not be used within 5-10' of the canopy of trees that you wish to have in your landscape. The 'weed' component is an herbicide that is deleterious to trees and can cause the slow decline and possible death of your favorite shade tree. With all of this said, good luck and give us a call at the extension office if you have any questions or comments.

*The Indian River County Extension office is located at 1028 20<sup>th</sup> Place, Suite D, and the telephone number is (772) 770-5030. You can email your questions or comments to our agents at indian@ifas.ufl.edu or visit our website at <http://indian.ifas.ufl.edu>.*

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