Fertilize Appropriately

Photo by David W. Marshall, UF-IFAS Leon County Extension: The correct landscape fertilizer is, in most cases, a 15-0-15 fertilizer with 7.5% slow-release nitrogen.

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Last week we discussed the first principle of creating a Florida-friendly yard… right plant, right place. This week let’s look at another principle, fertilizing appropriately.

Some keys to remember about fertilizing are “less is better” and “when in doubt, don’t”. Plants can exist quite well on their own as long as they are in the right place, have sufficient water, and we humans don’t interfere too much with them. Consider all of the plants and wildflowers in the forests and meadows. They exist quite well in spite of being totally ignored by anyone’s attempts at fertilization. Part of the reason they exist so well is that the natural system of recycling nutrients through leaf drop and natural recycling is not disrupted by humans raking away all the leaves.

In our landscapes, however, we often do things such as scraping away topsoil or removing falling leaves that result in the soil having less of certain essential elements for plant growth. So, to achieve more fruit, faster growth, better color, or more attractive flowers, we sometimes will add fertilizers to replenish these essential elements or nutrients. However, if an element is not in short supply, adding more nutrients through fertilizer won’t help. In fact, adding too much can cause problems for the plant and for our environment. The ingredients in fertilizer are like salt. Too much piled around a plant can actually burn plant tissue by causing water loss from the tissue.

Living directly on top of the underground river that feeds Wakulla Springs, I had never thought about the impact of what we do above the ground in our yards. But recently I studied through the Master Gardener program about how fertilizers and pesticides we apply in our yards can contribute to the deteriorating condition of Wakulla Springs and other waters. After attending some community meetings, it was easy to see how some changes in habits could make a big impact on protecting our water resources.
From personal experience, I know that many mature plants can flourish with no additional fertilizer. I grow a number of landscape plants in my own yard. Their primary source of nutrients has been the oak leaves that I raked from my yard and placed as mulch around them. Yet they are healthy plants, producing beautiful flowers each year.

So, try to mimic nature and practice recycling nutrients in your own yard through mulching (another principle to having a Florida-friendly yard).

Still, there are occasions where you will want to fertilize to obtain a desired plant response. If your lawn is thin, and it has plenty of sunlight, water, and good soil conditions, an application of fertilizer in the spring may be what’s lacking to help those thin spots fill in. If you’re growing annual flowers such as pansies or petunias, you will have better flowering if you fertilize lightly each month. But when you apply fertilizer, be sure that you use the right kind and that you don’t apply more than the recommended amount.

It’s a good idea to have a soil test occasionally so that you will know what’s lacking in your soil. You can pick up the materials for mailing a sample to the University of Florida IFAS Extension Soil Testing Laboratory in Gainesville by stopping in at the Leon County Extension office, 615 Paul Russell Road.

A typical fertilizer contains N (nitrogen) – P (phosphorus) – K (potassium), in that order. A 5-10-15 fertilizer, for example, contains 5% nitrogen, 10% phosphorus, and 15% potassium. Many fertilizers that are sold give plants too high of a nitrogen to potassium ratio. A perfect example is the 27-3-3 lawn fertilizers that are sold. That’s a 9:1 nitrogen to potassium ratio! Too much nitrogen over too short a period of time can result in excessive vegetative growth of plants which just causes us to mow and prune more often.

Fertilizers such as 27-3-3 also lack sufficient potassium. Potassium is needed for strong cell walls in plants to increase plant hardiness, such as cold hardiness or drought hardiness.

Many of our Florida soils already have adequate phosphorus available for plants. Excess phosphorus can run off into our stormwater and into our lakes, stimulating algae and plant growth, resulting in fish kills and water pollution problems.

Considering these factors, a 15-0-15 fertilizer is a good general-purpose landscape fertilizer. It has a 1:1 nitrogen to potassium ratio and no phosphorus.

Use a fertilizer that has one-third to half of its nitrogen in a slow-release form. A 15-0-15 fertilizer with 7.5% slow-release nitrogen will reduce the rapid growth flush that too much nitrogen applied at once can cause. It also reduces the amount of nitrogen that leaches down below the root system into our groundwater. The amount of slow-release nitrogen should be indicated on the fertilizer label, though sometimes it is referred to as water-insoluble nitrogen. Be aware that “organic” does not necessarily mean slow-
release. It all depends on the type of organic materials in the fertilizer.

Finally, never apply more than one pound of actual nitrogen per thousand square feet of area. If you use a 15-0-15 fertilizer, this is only six to seven pounds of fertilizer.

If you would like more information on selecting fertilizers, go to http://leon.ifas.ufl.edu/gardening_landscaping.htm and read the article on “Selecting the Right Fertilizer”.

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