For a Healthy, Long-Lasting Lawn Fertilize with the Right Numbers

Larry Williams is a horticulture agent with the University of Florida IFAS Extension in Okaloosa County. For more local gardening information, visit http://leon.ifas.ufl.edu/ A healthy lawn with the right fertilizer.

For Thursday, April 26, 2007 Release
Tallahassee Democrat

Improve your lawn and the environment by using lawn fertilizers with the right numbers.

Many popular lawn fertilizers have too much nitrogen and too little potassium. A common example is 29-3-4. These numbers represent the percent nitrogen (N), phosphorus (P) and potassium (K), respectively. A 29-3-4 fertilizer has a lot more nitrogen (29%) than potassium (4%). Despite the fact it’s readily available, it’s not a good choice for a Florida lawn.

It’s better to select a fertilizer where the first and third numbers are equal or close to equal and the center number is very low. Examples include 15-0-15, 10-4-10, 12-2-14, and 18-0-18.

You may be able to produce an attractive lawn for three, four, five years or so using a high nitrogen and low potassium fertilizer such as 29-3-4. But at some point in time, your lawn will begin to decline. This is the misleading part. When the lawn begins to deteriorate, most people blame mole crickets or something else. They never realize the true cause for the decline in their lawn. The excess nitrogen creates a nice green lawn short term (for a few years). But the lawn needs adequate amounts of potassium and other essential plant nutrients, which are not provided by a 29-3-4 or similar analysis fertilizer. As a result, the lawn declines with time.

Of the three primary nutrients (N, P and K), potassium is second only to nitrogen in utilization by lawns. Adequate potassium has been linked to reduced disease problems, improved drought and cold tolerance and enhanced root growth.

Lawn grasses use much less phosphorus (center number) than nitrogen and/or potassium. Because of this and because phosphorus has been implicated as a cause for problems in our surface waters, it’s recommended to
base phosphorus rates on the results of a reliable soil test. In the absence of a soil test, select a fertilizer with 2% or less phosphorus. For a newly planted lawn, choose something like 8-4-8 or 10-4-10 when a soil test indicates a need for extra phosphorus.

Finally, look for slow release lawn fertilizers. It’s best to purchase a lawn fertilizer with at least half the nitrogen in a slow release (water-insoluble) form. In the case of 15-0-15 fertilizer that would be 7.5% water-insoluble nitrogen. Also look for fertilizers that contain at least one percent iron as well as a little manganese and magnesium.