

## Selecting the Right Lawn Fertilizers

By Larry Caplan, Extension Horticulture Educator, Vanderburgh County, IN

For the Evansville Courier and Press, September 11, 2016

Lawns look a bit rough this month. Not because of drought, but because of the opposite: too much rain. This has caused some minor disease problems, but the biggest concern is weed growth. Most of the weeds I'm seeing, especially yellow nutsedge and crabgrass, need to be treated early in the year, so I won't talk about them now. What we should be doing now is fertilizing the lawn so that it can outgrow the weeds and thicken up.

Garden fertilizer (10-10-10) should not be used in the home lawn. It contains too much "quick release" nitrogen, which will cause a rapid burst of growth, followed by nutrient starvation. It can also burn the grass if over-applied. Some fertilizers labeled for lawns contain large amounts of ammonium nitrate or urea, which are also quick-release products, and not what you want to use now. Based on lawn care research by Purdue, University of Kentucky, and every other Midwestern agriculture school, it's long been known that providing a steady supply of nitrogen throughout the early fall is the best way to help a lawn recover from summer stress, and get it ready for the winter.

To do that, you need to use a slow-release form of nitrogen. On the package label, you should see an ingredient list on the back side. It will list various types of fertilizer chemical products, and the percentages of each. You want to look for any of the following words for slow release: insoluble; sulfur-coated urea; polymer-coated urea; methylene urea; or "natural organics." The recommended product for a September treatment should have at least 50% of its total weight made up of these slow-release products.

Spread your fertilizer to apply one pound of actual nitrogen (N) per 1000 square feet of lawn. How much actual fertilizer you need to use will depend on the analysis of the product you are buying. The numbers on the bag show the percent, by weight, of the three main nutrients in the fertilizer product. The first number stands for nitrogen, and this is what we are mostly concerned with right now.

Let's look at how to calculate the amount of 16-8-8 fertilizer you need to fertilize a 5000 square foot lawn. It takes a little bit of math, but I'll walk you through it.

We want to apply one pound of N per 1000 square feet, and we have a product that is 16% nitrogen. Divide 1 pound of N by 16% (or 0.16). You should get 6.25 pounds of fertilizer product, which will cover 1000 square feet. Multiply this by 5 (for 5000 square feet) to get 31.25 pounds of fertilizer for your 5000 square foot yard. I usually round off to an even 30 pounds, but as long as you are within 10% of this target (anywhere from 27 to 33 pounds), you are applying the proper amount of fertilizer.

If this seems too confusing, you can follow the guidelines on the fertilizer label. Be sure to calibrate your spreader, so you are applying the right amount of product to your lawn. Purdue Extension has information on lawn fertilizing and spreader calibration, so please contact me at (812) 435-5287.