**Green-up grass without excessive growth**

*Central Oregon Ag Research Center advice*

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Last summer I was shopping for fertilizer for my lawn. "Do you want green-up or growth?" the lady behind the counter asked. Not to appear stupid I said, "Green-up."

After all, wouldn't it be the best of both worlds if you could have a green lawn without mowing?

This spring I was looking at fertilizer bags in a box store. This takes a little thought and mental calculations to compare products and decide what is the best buy. I wondered how the average person makes that decision. The first three numbers on a fertilizer bag are the percent of nitrogen (N), critical to plant growth and development; phosphorus (P), important for quality flowers and root growth; and potassium (K), important to produce quality fruit.

Growers face a bit of a dilemma related to fertilizer choices as well. Researchers at the Central Oregon Agricultural Research Center have been working to answer the question, "How much nitrogen (N) fertilizer am I losing into the air through volatilization?"

Fertilizer is applied to Kentucky bluegrass fields in the fall when irrigation is no longer available to move the fertilizer into the soil. This makes it more vulnerable to volatilization.

Under these conditions, urea often loses 25 percent or more of the nitrogen in a three-week period. That can be a lot of money evaporating into the air.

If urea fertilizer is coated with Agrotain, a product that slows down the process causing volatilization, the amount of loss depends on the amount of Agrotain applied to the urea.

At the rate of 5 pounds per ton, Agrotain-treated urea loses 5-7 percent through volatilization. This is similar to the best performing fertilizer product, ammonium nitrate.

Nitrogen largely controls both plant green-up and growth; you have probably noticed that the greener your lawn, the faster it grows.

Of the three elements, nitrogen is likely what your lawn is lacking, so focus on the first number on the fertilizer bag. The larger the number, the more nitrogen there is.

Calculating the cost per pound of nitrogen provides a comparison between products on the shelf. If N is 20 percent, for example, a 10-pound bag of fertilizer would contain 2 pounds of nitrogen.

If you think of fertilizing your lawn on the seasonal holidays, you won't be far off. These include Easter, Memorial Day, Fourth of July, Labor Day and Veterans Day. An amount often recommended is 1 pound of nitrogen per 1,000 square feet of lawn area.

Getting back to the question, "Do you want green-up or growth?" we planted our Kentucky bluegrass lawn from seed, using a slow-growing variety recommended by a local friend in the grass seed industry. I was able to fertilize the lawn for a green color, but because of the slow growth, it only needed to be mowed every 10 days to two weeks. In this way, I was able to create the best of both worlds, green-up without excessive growth.

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Marvin Butler is the Central Oregon Ag Research Center director. He can be reached at 541-475-7107.