

## The time is upon us to fertilize fields of Brome or Fescue

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This information pertains to Ag production fields, not yards. If you have not yet applied nitrogen for spring production you may want to make plans to do so. The most effective use of the nitrogen will be realized if it is applied by the end of February, but you will still get good use if applied by mid March. Nitrogen amounts for your cool season grasses is directly related to your yield potential and goals. Putting on more nitrogen than the cool season grass can use will not only cause a waste of money, but it will result in N run-off/leaching and provides fertilizer for the summer annual weeds.

The average yield in Butler County is 2 ton per acre. This can be achieved with 60 - 70 units of nitrogen if the field has an adequate level of phosphorus and PH. 50 units of N per acre will produce 1 3/4 ton, while 80 - 90 units are required if you have a 3 ton/acre potential. If the cool season grass is being used for grazing, 70 - 90 pounds of nitrogen may be required.

Phosphorus can be a limiting factor to cool season grass production. Low P levels will result in a weaker plant that does not fully utilize the soil, water and nutrients. This will lower the yield potential. The optimum P level for cool season grasses is at least 15 ppm. A soil PH below 5.6 will also hinder production. A soil test that represents the top 4 inches of the field is the only way to determine the amount of Phosphorus and the PH of soil. Soil with adequate P levels requires 25 to 30 pounds of P annually to replace the amount removed with the plant. Lower levels will require added P to raise test levels. A soil PH level below 5.6 will require a top-dress application of 2000 pounds ECC of lime. Potassium is also important but is seldom required in Butler County because of our high soil levels of that nutrient.

### Testing the soil

As mentioned above, a soil test for ag production established grass stands should represent the top 4 inches of the field. This is accomplished by taking core samples (approx. 1 inch in diameter) from 12 to 15 locations in the field. We have a limited supply of soil probes available for check-out. Each core should include the top 4 inches of soil. Place all the cores in a bucket and break them up and mix them together. Keep about a pint of the mixture (fill a quart bag about 1/2 full) and bring it to our office. For a \$13 fee/routine test, we will send the sample to KSU for analysis. When they return it to me, I will make the recommendations and send them to you. The recommendations are only as good as the sample. If you want more information on the procedure, give me a call. You can pick an information sheet on sampling at our office or get it at the [www.butler.ksu.edu](http://www.butler.ksu.edu) site.