

Fertilizing summer grass pastures

By Daren Redfearn & Brian Arnall

Producers often decide to take advantage of the high forage production potential of introduced forages. These forages are planted and best managed with high fertility inputs, as opposed to native plant communities, which typically receive no fertility inputs. By default, producers have decided to provide the necessary fertility inputs that are required. The first step in the soil fertility program is to obtain a soil sample for analysis.

A soil analysis is used to determine the levels of nitrogen, phosphorus, and potassium in the soil, as well as the soil pH level. Under certain circumstances, analyses for other nutrients may be required. Based on the yield goal for specific forage crops, written recommendations for the level of each fertilizer nutrient required are usually furnished by the laboratory conducting the analysis.

After correcting the soil pH level to greater than 5.7 and meeting the P and K needs, there are only two basic fertilization principles that are required for introduced, warm-season grasses. The first principle is that N fertility is required for grass growth. The second principle is that N fertilization should be based on a reasonable yield goal

for the region of production. The first N application should be in early May, just as the grass is beginning to grow and ahead of late-spring rainfall. Properly timed fertilization can result in a better utilization of late-spring rainfall.

The critical order for proper warm-season grass fertilization is:

- Soil test
- Lime as recommended
- Apply phosphorus and potassium as recommended
- Identify a reasonable yield goal
- Apply nitrogen fertilizer ahead of moisture according to yield goal

Close attention to basic soil fertility fundamentals will ensure the desirable forage production and nutritive value. Poorly managed pastures, on the other hand, can result in high-cost forage that is low in nutritive value. Lack of attention to basic soil fertility will result in the increased purchase of off-farm-feed and forage, decreased animal performance and a reduced level of profitability for the forage-livestock enterprise.

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