Texas Dairy Matters

Higher Education Supporting the Industry

ANALYZE FEED FOR TOP PERFORMANCE

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One of the easiest ways to control costs is to monitor the feed ration. A nutrient analysis of the complete ration gives a quick reading of targeted nutrient specifications compared to the actual analyses. This is a small monthly investment to monitor that fine-tuned ration.

Feed costs typically account for 40 to 60 % of the cost to produce a pound of milk. Maximize returns on your feed investment by analyzing ingredients and adjusting your rations based on that information. Whenever wet weather occurs, changes in dry matter content can be expected, particularly in uncovered silages. Decreases in the dry matter content of silage result in too little forage in the ration.

An example of changes in dry matter of sorghum silage occurring on one producer's farm is shown in Table 1. Note that with rain, the dry matter percentage has declined. Also, there are changes in the crude protein, ADF and NE_L, possibly related to differences in variety or other agronomic practices.

Table 1: Change in sorghum silage dry matter following rain.

Component	September Sample	December Sample
Dry Matter, %	28.0	22.8
Crude Protein, %	6.0	7.6
ADF, %	38.0	41.1
NE_L, Mcal/lb	.56	.48

This herd owner complained that the cows weren't milking as well as they had been earlier. The new analysis revealed that the cows were actually consuming 1.5 lbs less dry matter and l.4 Mcal less energy per day. The protein and fiber also was elevated. His cows were getting more protein than they needed, but less energy than they need. Once the ration was adjusted the cows produced at previous levels.

How can you prevent the same thing from occurring in your herd? Schedule sample collection and analysis on a regular basis. At a minimum, check for variation in dry matter concentration during periods of rainy weather. If the dry matter percentage declines, increase the pounds fed to maintain dry matter intake and nutrient content. Evaluate whether the silage has darkened. This might indicate excessive heating -- which reduces the amount of protein and energy available. Silage isn't the only ingredient that changes. Commodities and hay can vary considerably between loads.

With updated analysis figures, reformulate the ration. A one-percentage unit reduction in total ration protein saves at least $0.05/cow/day in the feed cost. With 1000 cows, this adds up to a $50/day saving. The analysis fee is less than $50.00 per sample. Even on a small herd, the analysis investment provides at least a 4:1 return.