NITRATE ALERT FOR CATTLE

Warren Gill
Professor
Department of Animal Science

Producers should be aware that depending on the levels of Nitrate in harvested hay, it can be a very serious, deadly problem for cattle.

Nitrate poisoning in Tennessee typically occurs with cattle fed fertilized sorghum-sudan hay harvested during a drought. It also occurs in pearl millet, Johnsongrass, corn silage or other forages which have received nitrate fertilization and were harvested following a period of weather stress. Bermudagrass, while not typically known as nitrate-accumulating plant, has occasionally tested high enough in nitrates to pose a potential problem.

Important point: Weather stress can include drought, or too much rain. Nitrates accumulate in the plants that are growing too slow (drought) or too fast (rainy period). Toxic nitrate levels have been observed in hays harvested following a rainy, cloudy period.

If there is any possibility that sorghum-sudan or pearl millet hay (haylage) or corn silage was cut under a stress condition, have the forage screened for nitrates. The screening test is easy, simply obtain a newly mixed nitrate-screening kit from the University of Tennessee Forage Testing Laboratory or local UT Extension office and follow the directions.

If a more detailed, quantitative test is needed, the C. E. Kord Diagnostic Laboratory in Nashville can provide this service, or use a private Laboratory.

Remember, Nitrates can kill cattle! Have any questionable forage screened or tested before feeding.