

Hay and Forage

Tether your nitrogen

By PAM GOLDEN

MUCH has been written about volatile markets and the risk inherent in high prices coupled with tremendous instability.

Now, University of Georgia Extension forage specialist Dennis Hancock says producers have the opportunity to grow more grass with greater stability. His research shows profitability is a probability when forage producers use Agrotain-treated urea.

"As a general rule, it reduced volatilization by 60% and increased yields by 11% overall," Hancock says of his trials. "It is economical because we are increasing our yields by over 10%, as a general rule. It's adding somewhere in the neighborhood of 4 to 6 cents per pound of nitrogen."

To do the math, assume a value of \$100 per ton for forage dry matter and an application of 200 pounds of N. The increased value of the net yield is \$2.67 when using urea and \$2.78 when applying Agrotain-treated urea.

"Essentially, it's 11 cents' worth of forage more for every dollar spent on N when we're using the Agrotain," Hancock says. "It does look

Key Points

- Forage producers lose nitrogen from urea volatilization.
- Agrotain-treated urea reduces nitrogen losses.
- Net gain to producers is about 11% in yield.

very promising in terms of both reduction of volatilization losses and in terms of yield response. We've seen very positive and significant impacts in terms of using it."

The value is consistent, but whether Agrotain-treated urea outperforms standard urea every time depends on the weather. Apply urea and get a quick rain, and chances are the yield response will be about the same as if Agrotain were applied at the

same time with the same rain.

But that's not typical.

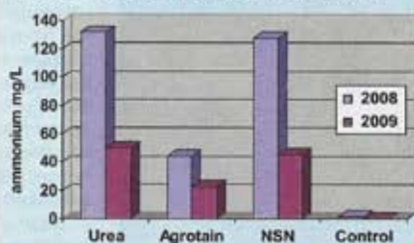
"It's typical that we're going to put out our nitrogen thinking it's going to get rained on, and the weatherman changes the forecast," Hancock says.

With standard urea, a producer prays for rain within two or three days. Agrotain generally is effective for twice as long.

"I view it as basically a risk reduction tool," Hancock says. "We still want to get a rain shower out there as soon as we can, but what it does is reduces the rate the ammonia is created. It reduces the amount of ammonia that is released and gives us a greater window of opportunity.

"There's never a downside as far as the cost outlay, but there's always the possibility of an upside. It's a good bet," he adds.

Losses to volatilization



FORE! This graph shows the amount of N released to the air in two forage trials done by Dennis Hancock to test the volatilization of urea and urease inhibitors in 2008 and 2009. The year-to-year differences reflect weather impacts. As in golf, a lower score is better.



DENNIS HANCOCK