

THE DIFFERENCE BETWEEN THINKING AND KNOWING

*Dr. Gary Bates, Director
UT Beef and Forage Center*

A few weeks ago I was at one of our field days, and had someone talking to me during a break. The basis of the conversation was this person telling me that they understood I had to teach things the “university” way. That I had to stay with things that had been researched, and couldn’t teach some of the popular ideas that some think improve forage production. Later that day I thought back over the conversation, and came to a simple conclusion. I don’t feel like I need to apologize for keeping my recommendations based in scientific principles that have been researched.

Over the last twenty years of my career, I have come across many “practices” that will improve some aspect of forage production. It might be a fertilizer, fertilizer additive, piece of machinery, or maybe some new forage species. I have seen some of these presented in such a way that they just have to be the difference between success and failure, but there isn’t any science or research on which to base these recommendations. The person promoting or selling the product make it sound like the best thing ever. There are also times that someone is promoting a product or practice that has been shown to be effective, it’s just they are trying to say that the practice will accomplish more than the research shows. Either situation is wrong.

One characteristic that makes a good educator or influencer is the ability to understand science and to dogmatically stick with what research results show. If you try to come up with what you think will happen in a certain situation, there is a good chance you are going to be wrong. If you base your thoughts on what science has shown, then we know we have a repeatable situation, and you can depend on the results.

Here are a few examples I have seen where a recommendation sounded good but wouldn’t hold water:

Rotational grazing will keep you from having to ever fertilize again – I was on the program with an individual that made this statement. Good grazing management will help several different ways. It may even reduce your fertilizer needs. But it will not mean you never have to fertilize ever again. Also heard an educator (not UT) say rotational grazing is the way to get rid of horsetail. That is so crazy it doesn’t even deserve a response in this article.

Spraying raw milk on pasture will improve yield – Not sure what the idea behind this was, but it has made its way around some of the smaller, grazing dairies. There is no science behind why this would possibly work, but it sounds good. Enough questions that we did a small study. As expected, it didn’t work. All it did was waste our time.

Foliar fertilizers will make forage yields better – As fertilizer prices get higher, often there is a run of foliar fertilizers that get promoted as an efficient fertilization method. No research that I have ever found shows that foliar fertilization is better. Also, science has shown that plants are much more efficient at taking up N, P, and K through their roots than through their leaves. If you look at the amount of nutrients needed by the plant, and compare it to the amount in the

liquid, there is no realistic way the foliar fertilizer can provide the amount needed by the plant. Again, sounds good but not scientific basis.

Let's be very clear on my point. I am not trying to say that every new product or practice is voodoo. But before you just accept what someone is trying to sell you, or something new they are trying to get you to do, make sure they can show the scientific basis why it works, and research that illustrates that it has worked.

Important dates: August 6, 2013 – Steak and Potatoes Field Day, Plateau Center, Crossville
Oct 10, 2013 – Northeast TN Beef Expo, Greeneville
Nov 8, 2013 – TN Forage and Grassland Council meeting, Nashville