BATTLE RIVER AGRONOMY UPDATE

JANUARY 2016

On January 5th, Dr Ross MacKenzie wrote an article in the Grainews entitled "Western Agronomy Research Cuts". For those people who aren't familiar with Dr MacKenzie, he is a retired agronomy research scientist with Alberta Ag who specialized in soil and crop research. His article should be required reading for anybody who farms today and is frustrated by conflicting and confusing claims about seed treatments, micronutrients, and various fertilizer practices including variable rate applications. His article very concisely maps out the deterioration of government research funding and the corresponding demise of the ability of western Canadian farmers to access independent research. This has been accompanied by changes to the Canadian Fertilizer Act which means that new products do not have to prove label claims to be marketed. Many producers are still not aware of the fact that the only thing the manufacturer is truly bound by anymore is the analysis of the product. So if a label says a product has an analysis of 10-10-5-5, you can count on that. Beyond that it is "Buyer Beware".

I am a cynic by nature, so my response to the plethora of miracle products on the market today is to discount the whole "yield boosting" industry and concentrate on basic fertility, proper seedbed preparation and all the other best practices that I know can impact the bottom line and stay away from this whole area. As Dr. MacKenzie says in his article "farmers end up using the "by guess and by golly" method to find out if a product or practice works or not. More often than not, farmers learn costly lessons when products don't work as promised" The sad part about how fertilizer and soil amendment products are sold these days is that there is no real way to separate the wheat out of all the chaff we are presented with, given the state of research in our industry. I am always left with the nagging thought that surely some of these products must work as advertised, but how can we figure out which ones?

Obviously, the best way would be to have our government funded research restored. Given the lack of understanding about our industry that we consistently see from all levels of government, this is a bit of a long shot. Most farmers fall back on the "by guess and by golly" method. With geo referencing, the amount of application flexibility that we have with today's equipment, and the ability to map the yield at the end of the year, it's easy enough to do test strips, but how do we set things up so we actually get results that we can apply to the farm? If that is where you are at, I have a few suggestions for people who want to try some "on farm trials" of these new products or practices.

- 1) Have a plan. Approach your on farm trial like it is a High School science experiment. You need to have a clearly defined goal, and then devise a method that will achieve your goal by removing as many variables as you possibly can. Finally, there has to be a way of measuring the result so you can draw some meaningful conclusions.
- 2) Keep it as simple as possible. If you make it too complicated and try to learn too many things it makes the execution difficult and the results inconclusive. The more variables you let creep into the trial, the harder it is to link causes and effects.
- 3) Replicate it. You can't do one strip on one field and expect to know everything there is to know about the product or practice.
- 4) Don't jump to conclusions. Whether you get a positive or negative response, keep in mind that all you have really learned is how that product performed on that field, with that crop and under those environmental conditions. A result needs to be repeatable for it to have any meaning, so don't abandon things that don't work the first time and more importantly, don't commit major resources to things that look good after one try.
 - Obviously, there is no substitute for professional, independent research, but if you do want to try some of the many options being offered on the market today, I urge you to approach them cautiously and with the same level of scepticism that a professional researcher would show.