

Most Companies Sell What They've Got!

The following is a letter I wrote in response to some questions I was being asked about concerning an upcoming meeting on Liquid fertilizers. What to look for, ask, and understand:

Most companies sell what they've got. That may sound a little weird, but each decides what they are going to promote, then sells it. That is true of your local Ag Retailer also. Most do not have proof! They may in some cases know that this one is better (or appears to be) than some other product. But there is very little proof in the AG Community when it comes to fertilizer.

That's where my replicated starter fertilizer plots are a bit different. It is an attempt to at least put probability on the side of the person using the different products. There is a lot of MAP, or DAP, used as a "P" source starter fertilizer, or even 10-34-0 liquid, but little proof that it works better than broadcasting the fertilizer. Those named products seldom do better in replicated plots (In Michigan and Northern Indiana) than does just broadcasting your "P" source. They only beat the "No Starter" treatment about 50-60% of the time, even in cold weather at planting time.

Most "Seed-Placed" starters also fail. Why? They didn't do any research! If they had, they would have known it, but then they wouldn't have had a product to sell. Example: NaChurs/Alpine sells "White Acid" products for foliar feeding soybeans. It has been documented by several university studies that Green acid products usually out perform the White acid products in these cases. So why now that NAS has 6-24-6 (a green acid product) don't they sell it? Because back when they showed the world how to foliar feed, the only products they had at the time were white acid. So that is what they were selling. It was sold for it's absolute purity and safeness when foliar feeding, because you wouldn't expect all those impurities to be a safe thing to do, would you?

I should tell you I spent 13 years with Alpine Plant Foods/ NaChurs-Alpine Solutions. The last 6 years was within that NaChurs organization. They could not bring themselves to admit that they had been selling the wrong stuff for 40 years. That had sold a lot of gallons over the years, and there was a certain amount of pride in that. A lot of the sales happened at a time where farmers did not have easy access to weigh scales. There were a few of us who had come from the Alpine side of that equation that saw things a bit differently.

Anyway, enough history. What to look for: If foliar feeding beans a 3-18-18 tends to give the best results of the white acid products (probably 5-15-15 would also fit). It is much more consistent than is a 9-18-9 type product. The 9-18-9 would give more nitrogen, but usually the 3-18-18 will out-yeild it. Unless you have a nitrogen deficiency. These two products, if of a white acid background, mix well, and work while including them with Round Up. Don't mix them unless you have the correct mixing

order. If you use the green products with the Round Up you will probably adversely affect your weed control.

For seed-placed starters with corn: the more nitrogen in the analysis beyond 6, the harder on the seed the mix will become if it also contains potash in the analysis. For instance, 10-34-0 at equal gallons applied is not as hard on the seed as is 9-18-9, or 8-19-3 (9-19-3). It doesn't have any potash in the mix, and it has a different form of nitrogen than does the 8 and 9 numbers. If you bring this up, I will be hung on the cross by most "Premium" Starter companies. The difference is that I have done the research; they in most cases are operating on a theory that is now about 60 years old. That's the problem, the only fertilizer products they had to work with in the 40's when some of those ideas were developed was what they had (white acid) or some really junky stuff, or the dry fertilizer products. There wasn't that much commercial fertilizer even being used back then, and most of it was pretty poor stuff! Therefore, theories were developed based on that time frame. Very little research has been done since that time.

The one thing seed-placed starters have going for them compared to standard placed starters, is that the closer you place the fertilizer product in relation to the seed, the better the response. Provided you use some common sense, and use a product truly designed for that purpose.

The safer products for seed-placement tend to have a nitrogen number of 6-7 or less. For instance, 6-24-6, or even the 3-18-18, is safer than a 9-18-9. A 5-15-15 contains too much "Urea" in it to be very safe on light soils. That's what the 8 and 9 "N" numbers have that tend to make them unsafe for seed placement. In light soils the "Urea" tends to burn crops if it is dry at planting. There is a reason Universities have said for years to stay away from "Urea" in a seed-placed product, and safety is the reason!

The companies promoting these higher Urea products usually are saying that 3 gallons per acre is "all it takes". In reality they are saying, "we are trying to build a margin of safety into this thing, and 3 will do it". Ag Spectrum around here has said for years 3 gallons is all you need. Several years ago (maybe 10+) I was planting my replicated plots with the cooperation of the Ag Spectrum representative (he drove the tractor, I rode the planter). I asked how much he wanted (3 gallons), I told him I was planting mine at 5 gallons because that was what we recommended of our 6-24-6 product.

I asked if I beat him, would he say, "well if you had used 5 gallons of mine the result would have been different". He said he probably would. We used 5 gallons of both! Years later I used 3 gallons of Ag Spectrum. The only difference was the 3 gallon rate lost them less money than the 5 gallon rate. 5 gallons cost more than 3 gallons, and when you are on the losing side more cost just makes it worse.

The spring we planted the original AS plot was a particularly bad spring weather wise (cold and wet). The AS without their micronutrient package yielded no better than the "No Starter" treatment. When we added the Micros, the yield went up around 7 bushels per acre. These plots were 3 replications each at that location.

The 6-24-6 with Brian weighing the plots out-yielded the AS's micro treatment by 4 bushels/acre. And I learned to appreciate the Micro Pak that was contained in the Alpine 6-24-6.

What the Alpine 6-24-6 had going for it was that it was an extremely safe product to put in contact with the seed, and it had a multi micronutrient package for the tough starts. LFB Solutions 6-24-6 is designed around that idea. I should state that the 6-24-6 starters without the micros don't do as well either. The micros give the product a consistency that the product would not have year-in-year out, otherwise.

Keys **1)** what is the nitrogen make up? Urea is good for foliar feeding, not so good with seed-placement. **2)** White, or Green Acid? Green acid actually can do a better job on foliar depending on how you want to use it. If with Round Up, go with the white acid for foliar feeding beans. If no RU, go with the Green acid. **3)** For seed-placement keep the nitrogen level down. Try to eliminate the Urea. **4)** Does this product have a micro package included? White acids won't store with micros already mixed (they settle out). Green acids (ortho/poly mix) suspend micros in storage quite well for longer periods of time. For instance, store in the fall, use next summer. **5)** Does the product have a strong emphasis on Zinc with some other micros as well. Such as Mn, Mg, Iron, small shot of Boron, small shot of sulfur? Don't want too much boron or sulfur, but small amounts can work well. **6)** For the price, is there any chance you will get you money out of it?

The only thing worse than **non-performance?** Non-performance, and a high price for the non-performing product!