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DeltAg Product Brief
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Get a Great Start...with *PercPlus* & *Zinc Plus*

With this great weather the past few days across the Mid-South, we are seeing many growers hit the field with the beginnings of our 2012 corn crop. We are getting many questions about starters and DeltAg product chemistry.

While phosphate liquid is a great addition in-furrow, we need to be careful not to over-do-it and end up with too much ammoniated nitrogen in the furrow with the seed. While this can be a safe bet most years, given the wrong weather event, it can become devastating to a seedling corn stand. I have only seen this a few times but it is enough to be cautious when applying more than four gallons of starter in-furrow that carries ammoniated nitrogen with it.

In our experience at DeltAg, we have been very diligent to study and test and work hard to be sure we know what will give you the absolute best results year in and year out. Frankly, we have seen *PercPlus* in-furrow at 8 to 10 ounces as an additive to two, three and four gallons of 10-34-0, 9-18-9, 3-18-18, 6-26-6 and many other liquid phosphates, both poly and ortho and consistently increase final yield over the starter alone. One comfort is that we have no mixing issues that we are aware of with *PercPlus* and the many starters on today's market. **Want Results? Add *PercPlus* to your Starter!**

Zinc for Corn: As growers have received soil reports back from soil labs over the past years growing corn, it is obvious that the labs have somehow decided that corn needs zinc and it would appear that the amount needed is growing. Frankly, I just do not think it is so. The reality is that the amount of zinc actually required by a 150 to 200 bushel corn crop is very small. Some published data indicates the need to be 0.2 pounds and some as high as 0.35 pounds. That's right, 1/4th to 1/3rd of a pound of zinc for corn. That's it! The idea that we need some three or more pounds per acre of actual zinc originated with the use of dry zinc sulfate. In University trials back in the 50's and 60's, this material was found to yield economical returns in corn when ten pounds was applied and preplant incorporated. Ten pounds of zinc sulfate is 33 to 35% actual zinc, so it was delivering 3 to 3.5 pounds of actual zinc. Does every corn field need zinc? Absolutely not! But...if we can get a small amount out there early and close to the root system at a reasonable cost to help with a better start, why not?

Applying Zinc in Corn: Everything considered, a grower's desire is to get the nutrients applied that his crop needs, but in the simplest and least expensive manner possible. "**Agronomically Sound Practices**" are, or should be, practices that are safe for the worker and the crop, affordable, will enhance final yield and will not over-complicate day to day operations for the grower. That being said, there are issues that need to be considered.

In-Furrow: Yes, zinc may be applied in-furrow and yes, it is probably the best method, everything considered. However, issues to consider are two fold;

Is the zinc a 'safe' material to apply directly on the seed?

Do you have the ability to actually tank-mix the zinc with your liquid starter?

Zinc Sulfate Liquids: While materials derived from zinc sulfate have been proven safe on seed for many years, they do require some care when being tank mixed with phosphates, especially ortho-phosphates. However, the Zinc Sulfate liquids have out-performed other materials almost 100% of the time with in-furrow and other soil applications. So the bottom line is that sulfates are safe on the seed, they get the best results in tests, they are typically less expensive with better crop response and final yield, yet they do require some caution when mixing. **Helpful Hint:** Diluting the starter with a small amount of water can help compatibility most of the time.

Chelated Zinc Materials: However, there are other zinc materials that are more expensive, have been shown to possibly be detrimental to the seed when directly applied, and show very little yield response.....but they mix well. This is a choice the grower or perhaps the Field Rep he trusts will have to make. None of us want to be called to a clabbered mess or worse a damaged seedling stand and an upset client....none of us. *Zinc Plus* or *MicroVite* from DeltAg have been used with many different phosphate starters with great results. We simply recommend the addition of a small amount of water to thin the liquid down some and a small amount of recirculation or agitation...no problems.

Best Starter Method for Corn: After many years of University trials and on-farm strip trials, and considering cost, crop safety, economics and grower ease of application, our final recommendation is:

In-Furrow: Add 8 to 10 ounces of *PercPlus* to your starter for great results.

2X2 Side-Dress: Add 32 ounces of *DeltAg Zinc Plus* to your liquid nitrogen at planting in the 2 X 2.

6X6 Side-Dress: Provided this trip is made by V3; Apply 32 Oz *Zinc Plus* with the liquid nitrogen.

These practices have been shown to get our best crop response while at the same time being safe for the seed and seedling and as easy as mixing water with water. Good Luck with Planting and with 2012.

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