2012 AgroVantage Plot Results

Location: Cadiz, KY

Corn Test Plot

WEX® Soil Amendment

	Check	WEX – 1 quart/acre	Advantage
Yield, BPA	206	207	1.0 bpa
Test weight	53	53	nd
Moisture %	18.8	18.4	-0.4 pts

WEX Multi-Purpose Wetting Agent is used for two primary purposes; as an adjuvant to optimize pesticide spray applications and as a soil amendment to enhance crop root development which can lead to higher yields and quality. In this study the soil amendment aspect of the product was tested. Typical yield response to this treatment is in the 4-5 BPA range, in this case only one additional bushel was produced. While the response was minimal the economic return was still about a two to one ROI!

Amplify®-D Seed Treatments

	Check	Amplify-D	Advantage
Yield, BPA	206	216	+10 bpa
Test weight	53	52	-1 lb
Moisture %	18.8	18.7	-0.1 pts.

Amplify-D is a seed germination aid based upon the concept of providing an extra source of adenosine mono-phosphate as a seed treatment. Research has shown that maintaining adequate levels of this critical bio-chemical in the germinating seed enhances the rates of germination and emergence. The end result of these improvements are better plant stands and fewer low vigor plants that fail to produce grain. In this study, a 10 bushel increase was obtained, providing a $70 return for a retail investment of $4.50.

Fertilizer Comparison

	Check*	C.P.S. Black Label 6-20-0 + Zinc – 2 gpa	Insta Gro 3-18-18 5 gpa	Security Seed Pro-Germinator 9-24-3 + Sulfur & Zinc 5 gpa	Feast 3-18-18 5 gpa
Yield, BPA	200	191	201	197	206
Test weight	52	52	53	52	53
Moisture %	18.75%	19.3%	19.6%	19.6	18.8%
Moisture Advantage		+0.55	+0.85 pts	+0.85 pts.	+0.05 pts.
Yield Advantage		- 9 bpa	+1 bpa	-3 bpa	+6 bpa

*average of 2 replications
All treatments received 2 tons of dairy manure.

The various starter fertilizer comparisons in this study help document a couple of important concepts.

First and perhaps most important is does product quality really matter? The Insta Gro 3-18-18 product produced a one bushel yield response, not a good economic result, while the Feast 3-18-18 (same analysis) produced a six bushel increase, a significantly better economic result.

Second, does providing a balanced N-P-K analysis make a difference? The lowest yield in the study (191 BPA) was produced by the only fertilizer that did not provide any potassium. The second lowest yield was produced by the fertilizer that provided very little potassium.

What is the take home message from this study? Starter fertilizers that are high quality and N-P-K balanced support optimum crop performance.

AgroVantage Full System

	Check*	Conklin AgroVantage System**	Advantage
Yield, BPA	200	220	20 bpa
Test weight	52	53	+1 lbs
Moisture %	18.75%	17.97%	-0.78 pts

*average of 2 replications
**average of 3 replications
All treatments received 2 tons of dairy manure.

The AgroVantage System is a combination of products and services designed to produce optimum yields efficiently. The products include seed treatments, starter and foliar fertilizers, secondary and micro-nutrients, nitrogen stabilizers, inoculants and spray adjuvants. Services include soil and tissue analysis and recommendations, agronomic training, field day, event and networking opportunities. Top producers including numerous national corn yield contest winners from across the country turn to the AgroVantage System for ideas and products that add extra bushels to their yields.

Foliar Fertilizer

	Check	Feast 3-18-18 foliar application 3 gpa	Advantage
Yield, BPA	202	220	18 bpa
Test weight	52	52	nd
Moisture %	18.2%	18.2%	nd

In this study Feast 3-18-18 applied at 3 gallons per acre during the early vegetative stage of development (V4-V5) produced an extra eighteen bushels or around $125.00 (corn at $7.00). The cost of materials is $22.50, leaving a profit of over $100.00 per acre. Foliar feeding produces best results when conditions favoring high yields are present. The foliar applied fertilizer produces a surge in plant growth that results in additional soil demand for plant food and moisture. The effects of this early stimulation of the plant can produce larger root systems and leaves early and more grain at harvest.