



2012 AgroVantage Plot Results

Location: Lititz, PA

Corn Test Plot – Averages of 2 replications

AgroVantage System

	Check	AgroVantage System In-row Feast 3-18-18 – 3 gallons, Side-Kick – 1 gallon, Feast Calcium – 1 pint, Feast Manganese – 1 pint, Soil X-CYTO – 10 oz., Foliar Feast 3-18-18 – 2 gallons, Side-Kick – 2 quart, Feast Calcium – 1 pint, Feast Manganese – 1 pint, Feast Boron – 1 pint Foliar X-CYTO – 10 oz. Side band & Side dress Guardian-DL – 1.5 quarts Feast Boron – 2 quarts
Yield, bpa	175.1 bpa	200.6 bpa
Advantage		+25.5 bpa

The AgroVantage System products are designed to produce optimum yields efficiently. The product types used in this study included starter and foliar fertilizers, secondary and micro-nutrients, nitrogen stabilizers and PGRs (plant growth regulators). The “system” inputs in this trial produced about \$178.50 of additional income for an investment of about \$98.00!

(Lititz, PA data continued)

Foliar Feeding

	Check	Foliar Feast 3-18-18 – 2 gallons, Side-Kick – 2 quart, Feast Calcium – 1 pint, Feast Manganese – 1 pint, Feast Boron – 1 pint Foliar X-CYTO – 10 oz.
Yield, bpa	195.5 bpa	200.6 bpa
Advantage		+5.1 bpa

Foliar feeding is an effective method for supplementing plant nutrition at critical times during the plants lifecycle. In this study Feast plant foods and Foliar X-CYTO (PGR) were applied at V5 stage of growth at a cost of \$34.86 for a return of \$35.70. The economic result for this investment was break-even. The likely reason that a greater response did not occur, extreme heat and drought conditions followed the treatment application making moisture a limiting factor. The basic building blocks for plant growth and development are always required as foundations for high yield!

Guardian with Dairy Manure (7,000 gallons of liquid dairy manure broadcast)

	Check	Guardian-DF 8 lbs/acre
Yield, bpa	188 bpa	195.5 bpa
Advantage		+7.5 bpa

Nitrogen efficiency is as important when manure is the source of nitrogen as it is when commercial fertilizer is the source of nitrogen. Ensuring adequate nitrogen nutrition is a cornerstone for supporting top yields. The Guardian technology stabilizes ammonia form nitrogen in the soil, protecting it from being made unavailable to the plant. In this study a \$32.00 investment in Guardian returned over \$52.00 in extra yield!

(Lititz, PA Data Continued)

Guardian with 30% UAN (banded)

	Check	Guardian-DF 5 lbs./acre
Yield, bpa	196.1 bpa	200.6 bpa
Advantage		+5.5 bpa

In this example of Guardian performance an investment of \$19.65 returned \$38.50. Again, regardless of nitrogen source the goal is to maintain plant available nitrogen longer. The UAN solution contains 75% of it's nitrogen in either ammonia form or ammonia forming (urea) sources. Guardian stabilizes nitrogen in the soil by stopping the transformation of ammonia to nitrate; nitrification.

Guardian with Ammonium sulfate (AMS)

	Check	Guardian-DL 1 quart/acre
Yield, bpa	195.1 bpa	198.1 bpa
Advantage		+3.0 bpa

Guardian-DL is a liquid suspension form of the Guardian technology. In this study the product was used at the one quart/band application rate. The product cost \$8.48 and returned about \$21.00. Ammonium Sulfate has an analysis of 21-0-0-24S, all of the 21 % nitrogen is in the ammonium form, therefore Guardian stabilizes 100% of the nitrogen applied.