

2012 AgroVantage Plot Results

Location: Montrose, IL

Corn Test Plot – Averages of 3 replications

WEX[®] Soil Amendment – corn

	Check	WEX 1 quart/acre	Advantage
Yield, BPA	69.92	73.2	3.28 bpa
Test Weight	53.3	55.03	1.73 lbs.
Moisture %	23.76	21.7	2.06 pts

WEX[®] is a Multi-Purpose Wetting Agent that is used in soil amendment applications to provide enhanced root development which can result in yield improvement. WEX is typically applied pre-plant in combination with herbicides. In this study an additional 3.28 bushels of corn was harvested where WEX was applied; almost \$23.00 value considering a \$7.00 corn price. While the yields are very low due to extreme drought, the advantage of enhancing root development is clear!

Amplify -D Seed Treatments - corn

	Check	Amplify-D	Advantage
Population per acre, planted at 34,000	28,858	32,375	3,517 more plants/acre
Yield, BPA	69.92	74.30	4.38 bpa
Test Weight	53.3	55.17	1.87 lbs.
Moisture %	23.76	21.8	1.96 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 so that this critical bio-chemical's concentration in the germinating seed does not become low enough to limit the rate of germination and emergence. The resulting increase in uniform rates of germination and emergence producing better plant stands and fewer low vigor plants that fail to produce grain. In this study four measures of response were observed; increased plant stand (plus 3,517 plants per acre versus control), increased test weight, lower grain moisture at harvest and a four plus bushel increase in grain yield.

Magnify LAI Microbial Inoculant – corn

	Check	Magnify LAI	Advantage
Population per acre,	28,858	31.966	3,108 more plants/acre
planted at 34,000			
Yield, BPA	69.92	72.94	3.02 bpa
Test Weight	53.3	56.23	<mark>2.97 lbs.</mark>
Moisture %	23.76	21.73	2.03 pts.

Magnify LAI is an azospirillum bacterial inoculant which is applied as a seed treatment or as an additive to in-furrow applied fertilizers. The two primary modes of action are enhanced nitrogen nutrition as the result of fixation of atmospheric nitrogen in the root zone and production of plant growth regulators which produce enhanced plant vigor. In this study four measures of response were observed; increased plant stand (plus 3,108 plants per acre versus control), increased test weight, lower grain moisture at harvest and a three bushel increase in grain yield.

Soybean Test Plot – Averages of 3 replications

Feast 3-18-18 & Side-Kick – soybean

	Check	Feast 3-18-18 2 gpa –	Advantage
		splitter, Side-Kick 2 gpa- 2X2	
Yield, BPA	55.78	61.19	<mark>5.41 bpa</mark>
Test Weight	56.37	56.73	<mark>0.36 lbs.</mark>
Moisture %	13.5	13.87	0.37 pts

A common strategy regarding soybean fertility is to fertilize for corn and let the following soybean crop live off of the leftovers. The AgroVantage System's approach is different, we recommend use of starter and foliar fertilizers to provide plant food for optimum yield. In some cases (when soil testing indicates) we may recommend other additional plant food applications as well. In this example of fertilizing soybeans with starter fertilizer and some additional potash and sulfur 2x2 the additional yield produced an extra \$80.00 per acre on an investment of about \$28.00.