



2013 AgroVantage Plot Results

Location: Kalona, IA

Corn Test Plot

Feast[®] 2-15-19w3S

| | Check | Feast 2-15-19w3S | Advantage |
|-------------------|-------|------------------|------------|
| Yield, bpa | 157.1 | 163.6 | + 6.5 bpa |
| Moisture % | 16.9% | 17% | + 0.1 pts. |
| Test weight, lbs. | 55.5 | 56 | + 0.5 lbs. |

Starter fertilizers are reliable tools for efficiently providing needed plant food and increased yields. In this study, a 6.5 bpa increase was produced by using Feast 2-15-19-3S in the row.

Feast Micronutrients: Chelated Calcium, Zinc and Manganese

| | Check | Feast Chelated Calcium | Feast Chelated Zinc | Feast Chelated Manganese |
|-------------------|-------|------------------------|---------------------|--------------------------|
| Yield BPA | 158.2 | 167.1 | 171.4 | 175 |
| Moisture % | 16.5% | 17.7% | 16.6% | 17% |
| Test weight, lbs. | 55.5 | 56 | 55.5 | 56 |
| Yield Advantage | | + 8.9 bpa | + 13.2 bpa | + 16.8 bpa |

In the past several years with the newer hybrids and increased yields, it has become more and more apparent that micro-nutrients are commonly a limiting factor for corn production. In this example the Feast Chelated micro-nutrients of Calcium, Zinc and Manganese had huge increases in bushels per acre over the check!

Feast® Complexed Boron

| | Check | Feast Complexed Boron | Advantage |
|-------------------|-------|-----------------------|------------|
| Yield BPA | 168.5 | 179.5 | + 11 bpa |
| Moisture % | 16.8% | 15.4% | - 1.4 pts. |
| Test weight, lbs. | 55 | 55.5 | + 0.5 lbs. |

Boron is another micro-nutrient that corn needs, but it can NOT be placed in the row with the seed. This application of Boron outside of the row gave an incredible 11 bpa increase and decreased the moisture by 1.4 pts!

Guardian® Slow Release Nitrogen Fertilizer

| | Check | Guardian DL Side-dressed | Advantage |
|-------------------|-------|--------------------------|------------|
| Yield BPA | 173.8 | 178 | + 4.2 bpa |
| Moisture % | 18.8% | 15.9% | - 2.9 pts. |
| Test Weight, lbs. | 55 | 55 | -- |

Guardian is a Nitrogen Stabilizer that allows the Nitrogen to stay in the Ammonium form longer and thus keeps it from leaching out of the root zone for a longer period of time. This process gave an increase of 4.2 bpa and dropped the moisture by an incredible 2.9 points.

Soybeans

Magnify® LST seed treatment

| | Check | Magnify LST | Advantage |
|------------|-------|-------------|-----------|
| Yield BPA | 38 | 40 | + 2 bpa |
| Moisture % | 11.5% | 11.5% | -- |

Magnify LST will provide 10-20 times the level of live, nitrogen-fixing bacteria to each seed in a soybean planting system than traditional technology. In this Soybean plot in increased yields by 2 bpa and the Return on Investment was over 16 to 1!

Wex® Non-ionic surfactant soil amendment

| | Check | Wex | Advantage |
|------------|-------|------|------------|
| Yield BPS | 42.9 | 46.1 | + 3.2 bpa |
| Moisture % | 11.3% | 11.1 | - 0.2 pts. |

When Wex is applied in a soil amendment application, it is typical to see enhanced root mass development, which provides a strong foundation for supporting high yields. In this example, applying 1 qt/A pre-plant at a cost of about \$5.00 produced a 3.2 bpa increase and a net return of about \$35.00 per acre!

Feast[®] 2-15-19w3S and Feast Micronutrients

| | Check | Feast 2-15-19w3S Feast Chelated Zn | Feast 2-15-19w3S Feast Chelated Mn |
|-----------------|--------------|---|---|
| Yield BPA | 39.4 | 42 | 43.3 |
| Moisture % | 11.5% | 11.2% | 11.7% |
| Yield Advantage | | + 2.6 bpa | + 3.9 bpa |

Does the use of Starter fertilizer pay for Soybeans? In this plot, the use of 2 GPA of 2-15-19-3S in the furrow with a splitter plus Feast Chelated Zinc gave an increase of 2.6 bpa and with Feast Chelated Manganese gave an increase of 3.9 bpa. That is a solid 1.5-2.5 times ROI.