

AqConcepts® SuperHume® with AgZyme®

and 20% reduction of 10-34-0 Increases Corn Yield by 20.4 bu/acre

with North Dakota State University in Carrington, North Dakota

Ag Concepts® Corp worked with Dr. Mike Ostlie of North Dakota State University on a study investigating the effects of AgZyme® and Ag Concepts® Super Hume® on corn at the Carrington Research Station in North Dakota. Six treatments were examined: check, 5 gallons of 10-34-0 per acre, 12.8 ounces of AgZyme® with 5 gallons of 10-34-0 per acre, 4 quarts of Ag Concepts® Super Hume® with 5 gallons of 10-34-0 per acre, 12.8 ounces of AgZyme® and 4 quarts of Ag Concepts® Super Hume® with 4 gallons of 10-34-0 per acre, and 12.8 ounces of AgZyme® and 4 quarts of Ag Concepts® Super Hume® with 3 gallons of 10-34-0 per acre.

Overall results, and averages by treatment can be seen in Figure 1. The highest yielding treatment was the combination of AgZyme® and Ag Concepts® Super Hume® with 4 gallons of 10-34-0 per acre at 167.6 bushel per acre. This combination of products with 20% reduction of 10-34-0 produced a statistically significant increase of 20.4 bushel over the 10-34-0 treatment. (LSD0.10 = 17.7) This treatment also had the highest test weight, 52.2 pounds per bushel, an increase over 51.6 lbs per bushel from the 10-34-0 treatment. (LSD0.10 = 0.6) Test weights in pounds per bushel came to 49.6, 51.6, 51.3, 51.5, 52.2, and 51.0 for each treatment respectively

Root weights were measured, dry root results can be seen in Figure 2. No significant difference were observed in dry root weights, but numerical increases of 15 grams for AgZyme® with 5 gallons of 10-34-0, 15 grams for AgZyme® and Ag Concepts® Super Hume® with 4 gallons of 10-34-0 and 20 grams for Ag Concepts® Super Hume® with 5 gallons of 10-34-0 were achieved. Grams of fresh root weight per 5 roots were 533g, 633g, 662g, 634g, 649g, and 588g for each treatment respectively.

The combination of Ag Concepts® products with 20% reduction in starter fertilizer show encouraging results with a statistically significant increase in yield of 20.4 bushel and an increase of 0.6 pounds per bushel in test weight. Although further research is needed, these results point toward significant impact on profitability using these products.

Fig 1: Corn Yield in Bushels per Acre

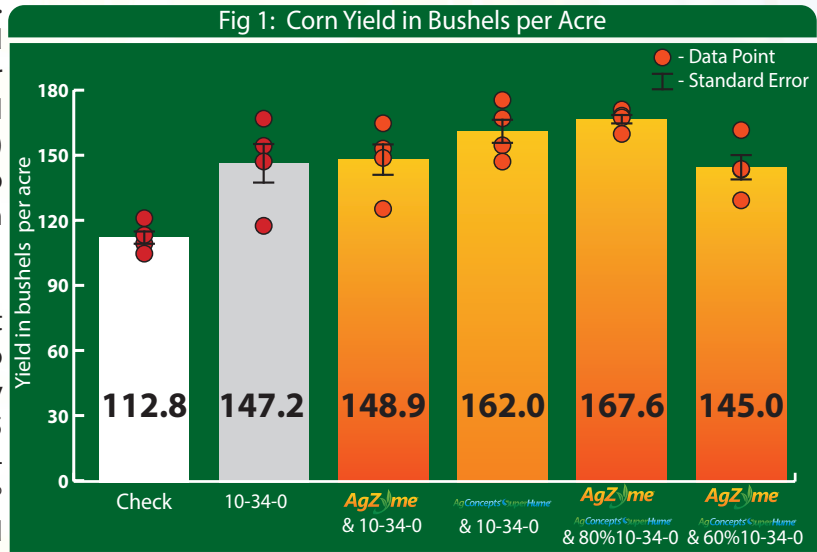


Fig 2: Dry Root Weight per 5 Roots

