

Fertilizer Program Comparisons in Dryland Corn Security Seed & Chemical Research Farm.

Experiment Info:

Planted: 5/20

Row Spacing: 30"

Previous Crop: Soybeans

Plot Size: 6 rows x 400'

Replications: 2

Soil Test Values (ppm):

7.1 pH: CEC: 8.8

% OM: 2.3

Bicarb:

K:

15

171

% K: 5.0

% Mg: 8.9

% Ca: 84.9

0 % H:

1.2

2.7 Zn:

Mn: 10

0.4 B:

Yield Goal: 165 bu

Target

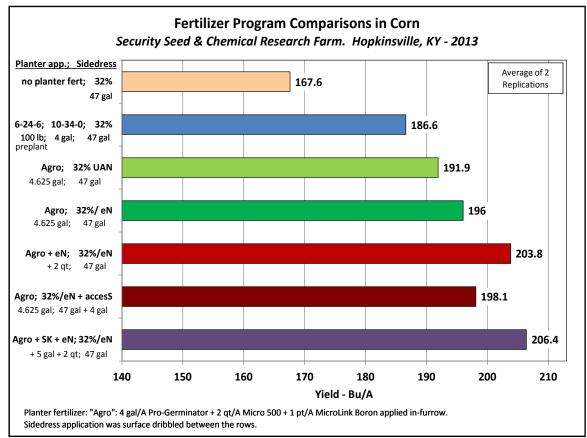
% Na:

Fertilizer Rate: 165-40-25

Objective:

Evaluate several different fertilizer sources and additives for effect on corn yield.

Application of essential nutrients is all part of obtaining optimum corn yield. Occasionally the weather is cooperative for exceptional yield, and this is when a well-balanced nutrient program is especially effective. An experiment was established in Western Kentucky to compare base programs of an area conventional program with that of an AgroLiquid program. Additionally, several nutrient additives were included to evaluate effects on yield. The conventional program was a broadcast application of dry 6-24-24, 10-34-0 in furrow and then 32% UAN sidedress. The soil test indicated high soil K levels, so the base AgroLiquid program was Pro-Germinator + Micro 500 in furrow and 32% UAN sidedress. Additives to the AgroLiquid program were: eNhance with sidedress 32% UAN, eNhance in furrow for sulfur, accesS with the sidedress for sulfur, and Sure-K applied in-furrow with the Pro-Germinator + Micro 500 to see if there is a yield increase in a high soil test K soil. The growing season was exceptionally good for high yield, with timely rainfall and favorable temperatures. Treatment yields appear in the following chart.



LSD(0.05): 13.8. LSD(0.2): 8.4. CV: 6.9%

Conclusions:

- All full treatment programs yielded significantly higher than the nitrogen only treatment.
- The AgroLiquid program with 32%/eNhance yielded significantly higher than the conventional treatment of 6-24-24, 10-34-0 and 32% UAN.
- Addition of eNhance to the in-furrow treatment resulted in a yield increase, and was evidently more effective than the accesS addition to the sidedress treatment.
- Addition of Sure-K to the in-furrow treatment with Pro-Germinator + Micro 500 + eNhance did increase yield, but only slightly in this high soil test K soil.