

# 2016 Fertility Study on Corn

For the second year in a row we had the Security Seed fertility program that was replicated at six locations. Each location had different soil types, fertility levels, and overall environmental conditions. The purpose of this study was to evaluate a prescription fertility program based on the soil fertility and environmental condition compared to a blindly lead straight rate fertility program. At Security Seed AgroLiquid is the foundation of our fertility program with other fertility options used as needed. At each location there were four fertility programs which are listed below.

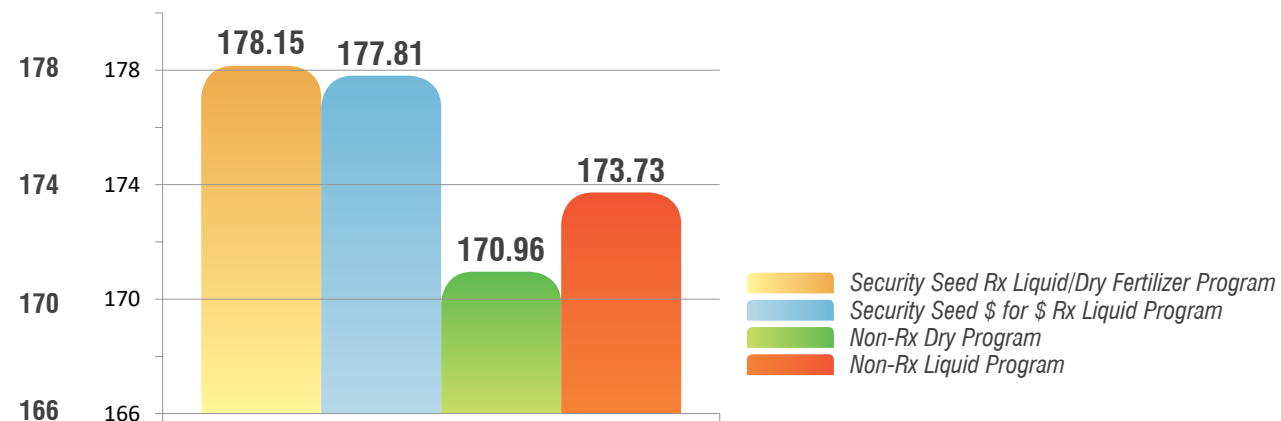
**Security Seed Rx Liquid/Dry Fertility Program** — This program is a prescription program based off of the unique soil fertility tests at each location therefore it is different at each location. This program is designed to address any imbalances in soil fertility while providing proper nutrients and maximizing yield potential. In some locations we could achieve this goal using a total liquid program while other locations had imbalances which required a combination of liquid and other soil amendment products.

**Dollar for Dollar Rx Liquid Program** — This program is a full liquid program which was based off of the soil fertility test at each location using approximately the same dollar amount as the dry fertility program which was \$51.95 per acre. This program was different at each location and was designed to evaluate the benefit of making recommendations based on soil fertility while working within a budget.

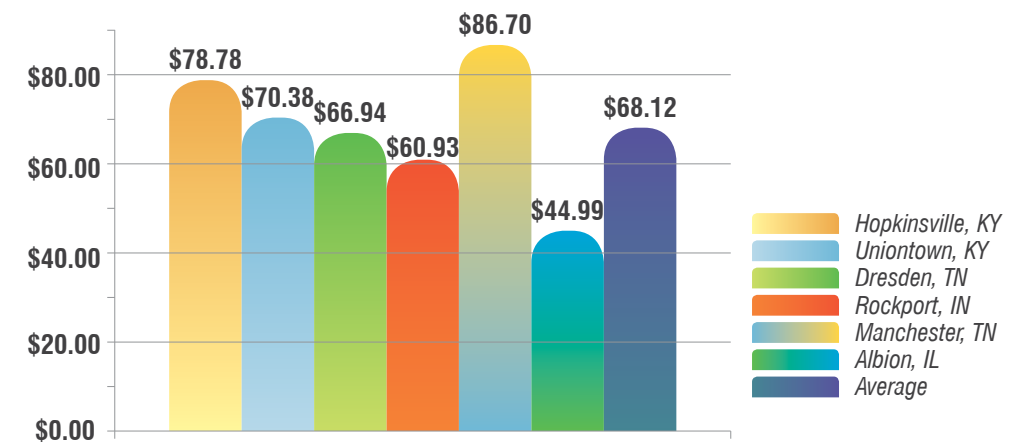
**Traditional Non Rx Dry Program** - This program was 300lbs of 9-23-30 and was the same at all locations

**Non Rx Liquid Program** — This program was 5 gallons of Pro-Germinator and 5 gallons of Kalibrate and was the same at all locations. This program was designed to evaluate using the same fertility recommendation across different fertility levels and environments.

**2016 Fertility Study**  
Bushel / Acre  
(Average 6 Locations)



**Cost / Acre - Security Seed Rx Liquid/Dry Fertilizer Program 2016**  
(Average 6 Locations)



**A Note about Manchester:**  
The Rx program cost more at the Manchester plot because we addressed imbalances and lower potassium levels in the soil.

This requires some dry material which takes time to break down especially in a dry year like 2016.

It would be unlikely to see the full benefit of this program in one season. This is the main reason the dollar for dollar program had a higher ROI in 2016. In most cases, an ArgroLiquid program gives a quicker ROI.

**Cost / Acre - Security Seed \$ for \$ Liquid Fertilizer Program 2016**  
P, K, and Micro Nutrients  
(Average 6 Locations)

