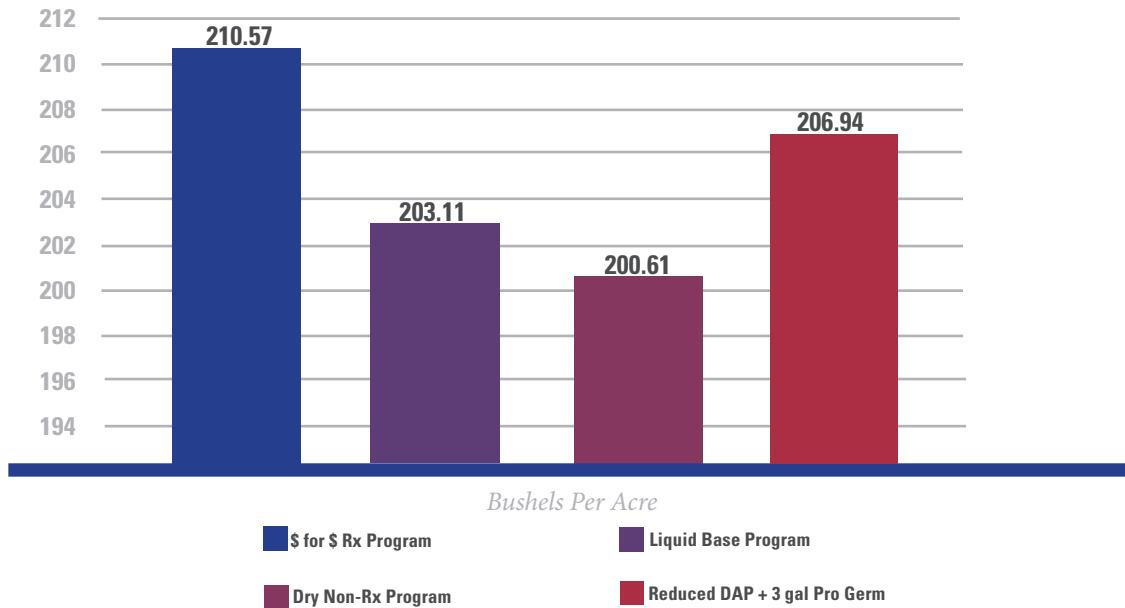


2018 Fertility Study

2018 Fertility Study on Corn | (Average 5 Locations)



For the fourth year in a row, we built a Security Seed fertility program that was replicated across a minimum of five different locations. At each location we had different soil types, fertility levels, and overall environmental conditions. The purpose of this study is to evaluate a prescription fertility program based on the soil fertility and environmental conditions compared to a blind, straight rate fertility program.

In Security Seed's crop nutritional plans, In-Furrow supplied nutrients have become the focus of providing basic nutrition, especially micro nutritionals. Because of their safety when used in-furrow, AgroLiquid fertilizers are the foundational products used in this system.

There are a lot of ways to approach crop nutrition, but we believe the prescription program represents the best possible way to grow a commodity crop in our geography. Selecting the right product is important but getting the right nutrients into the plant is most important, and there are different ways to do that.

It's a two sided equation: balancing high quality fertility products with the nutritional needs of the plant itself. We have tested in-furrow fertilizers for over 10 years and today we have the ability to recommend the best scenario for each farm.

What Is Each Program?

Dollar for Dollar Prescription Fertility Program:

This program is an all liquid in-furrow program which was based off of the soil fertility at each location using approximately the same dollar amount as the dry fertility program which was \$54.75 per acre.

This program was different at each location and was designed to evaluate the benefit of making recommendation based on soil fertility while working within a budget.

Product prices are based on Spring 2018 pricing.

Traditional Non Prescription Dry Program:

This program was 300lbs of 9-23-30 and was the same at all locations.

Non Prescription Liquid Program:

This program was 5gals of Pro Germinator and 5gals 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.

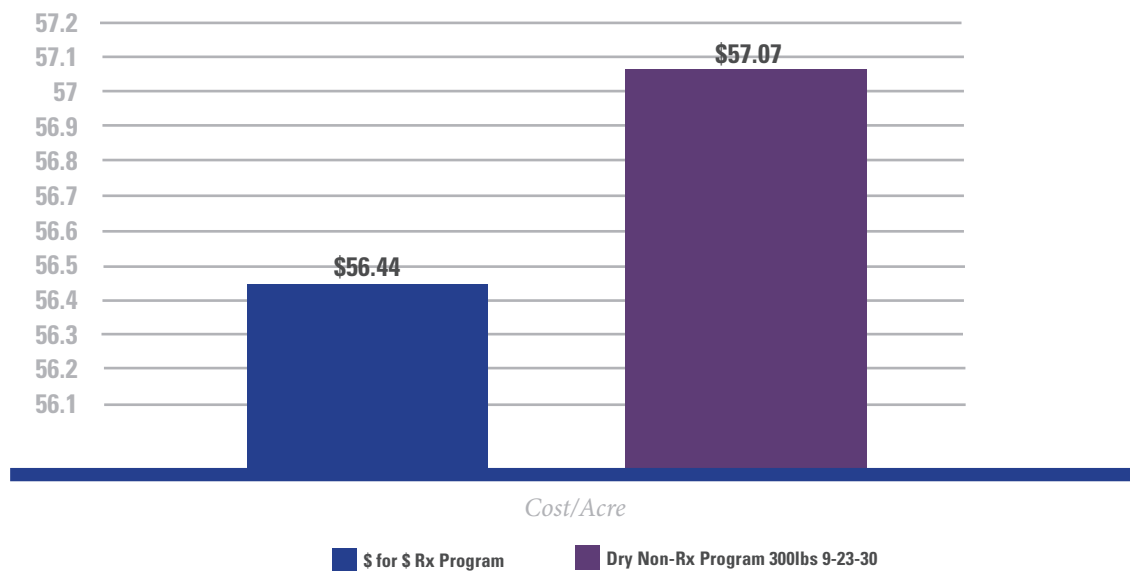
Reduced DAP + 3gals of Pro Germ Program:

This program was like the Dry Fertility program in that it was a straight rate of dry fertility spread at each location. The only difference was that we cut back on the rate of DAP by 65 lbs (or 30 lbs of actual P) and Replaced it with 3 gallons of Pro-Germinator that also had 1 quart of Micro 500.

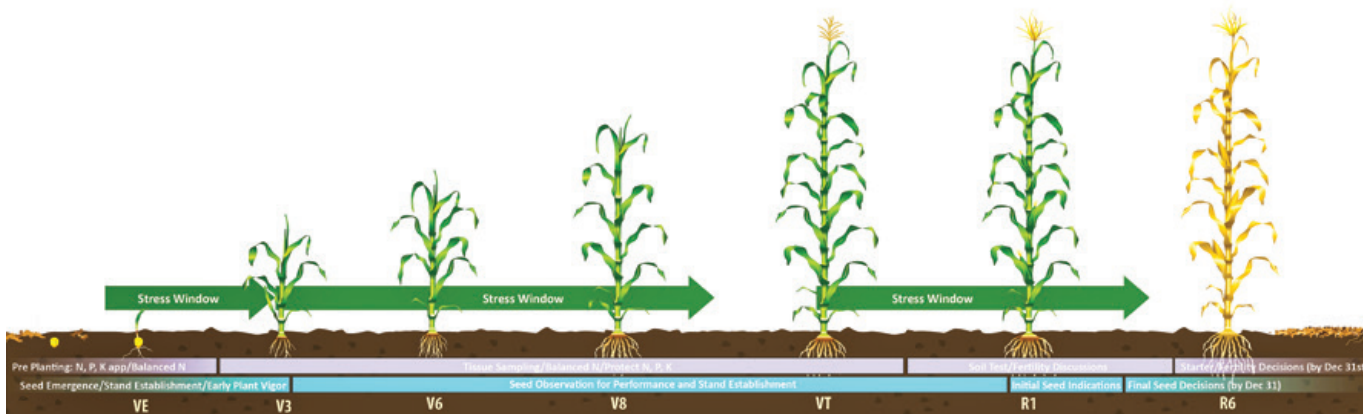
We set these protocols in the spring and all pricing is thus from spring 2018.

Cost Comparison

2018 Fertility Study Cost Comparison I (Average of 5 Locations) (Cost of Nitrogen Not Included)



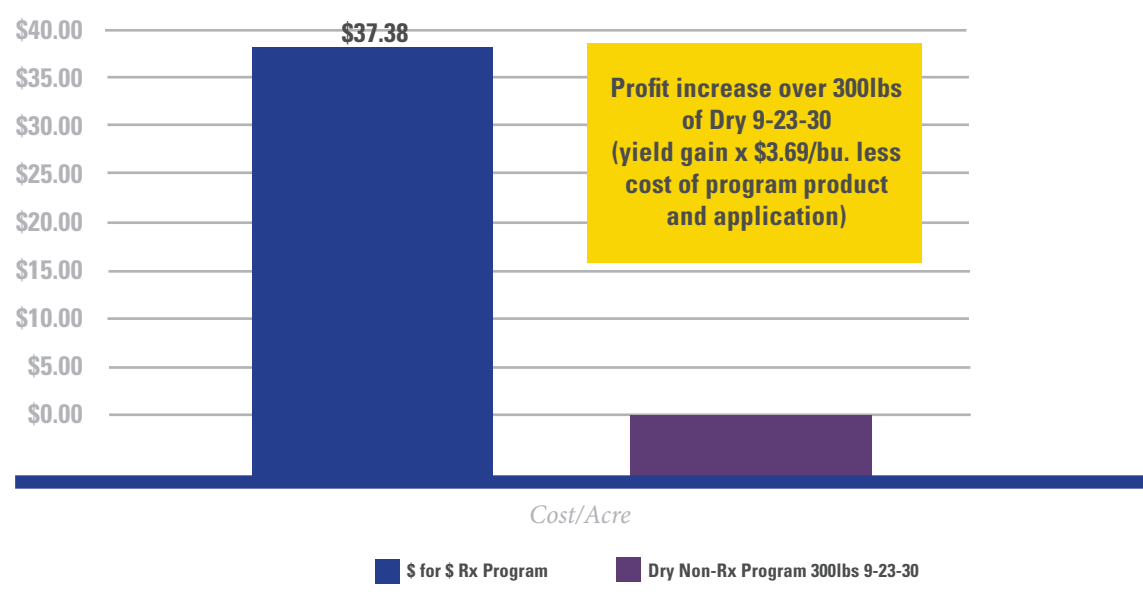
The point of our \$ for \$ program is to spend about the same amount as a standard dry program. We spend the same amount of money but we spend it smarter, managing your limiting factors and addressing specific issues.



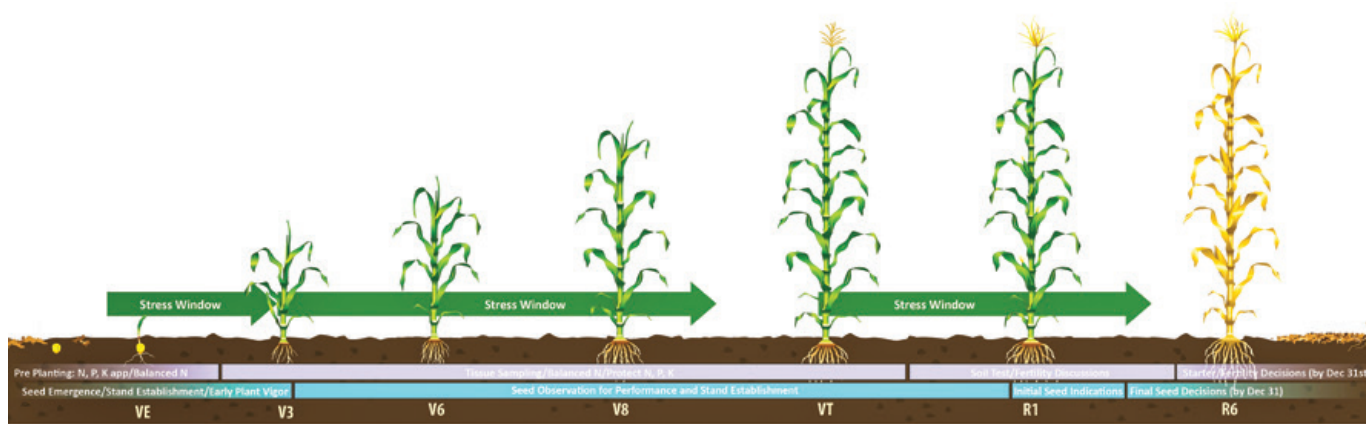


Profit per Acre

2018 Fertility Study Profit/Acre | (Average of 5 Locations) (Cost of Nitrogen Not Included)

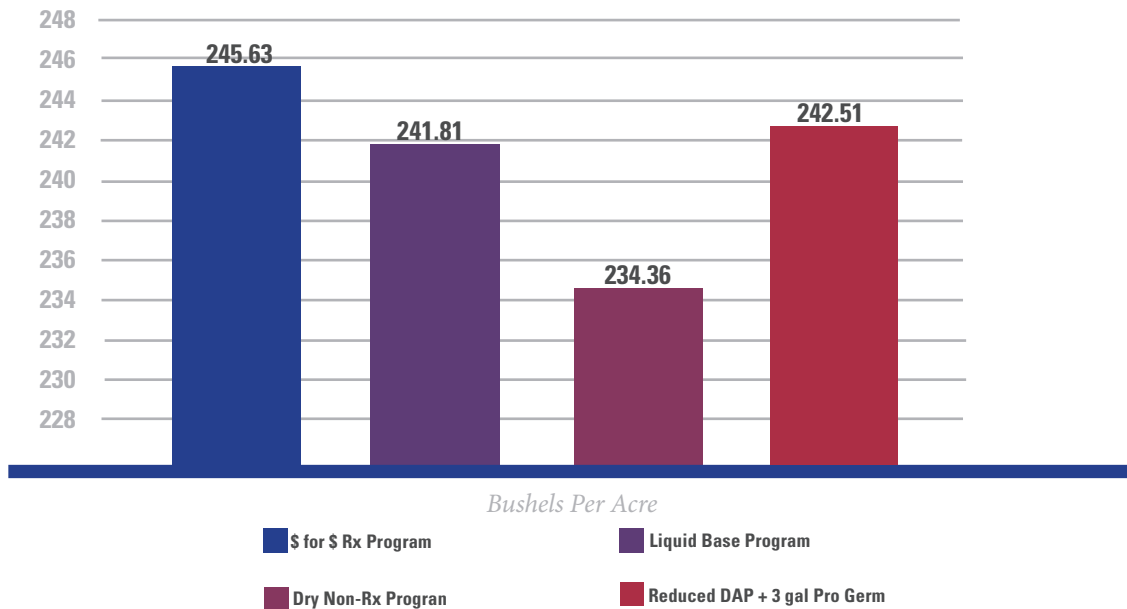


What we're showing here is that our \$ for \$ program returns \$37.38 more per acre above the same cost per acre spent on a standard dry program. This is an average across multiple locations with different environments and test conditions. By addressing limiting factors we are able to get better results than just playing the game of averages.



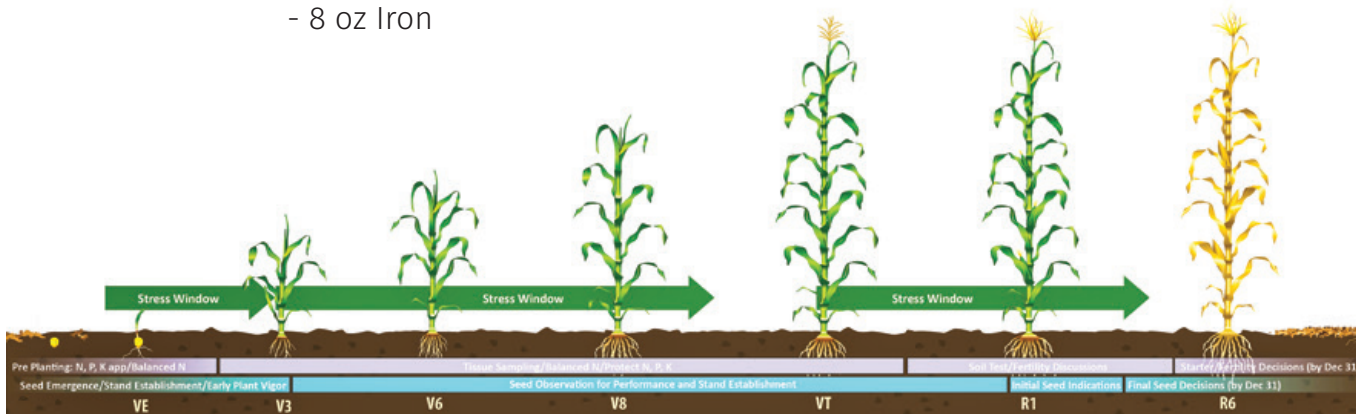
Hopkinsville, KY

2018 Fertility Study on Corn | (Hopkinsville, KY)



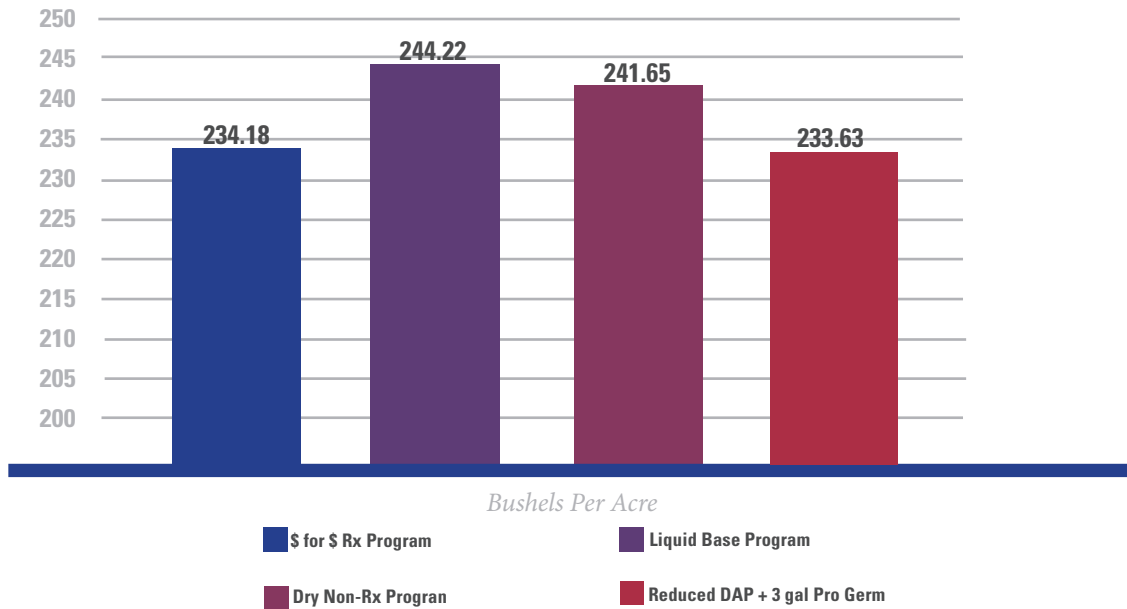
Security Seed Dollar-for-Dollar Rx Total Fertility Cost / Acre Excluding Nitrogen: \$58.02

- 100# DAP 18-46-0 Dry Broadcast
- 50# MOP 0-0-60 Dry Broadcast
- 3 gal ProGerm In-Furrow
- 1 gal Kalibrate In-Furrow
- 1 pt Micro 500 In-Furrow
- 1 pt Magnesium In-Furrow
- 8 oz Iron



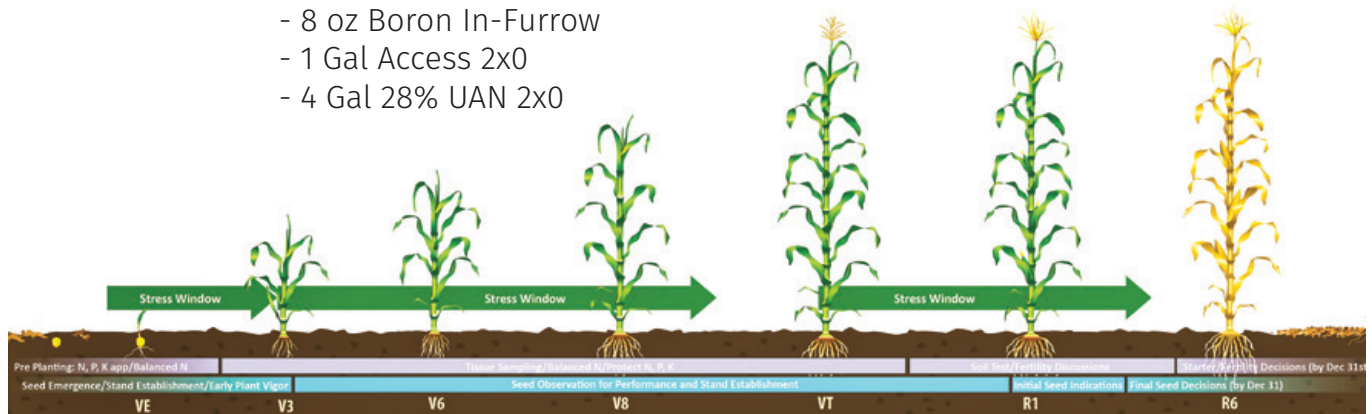


2018 Fertility Study on Corn | (Princeton, IN)



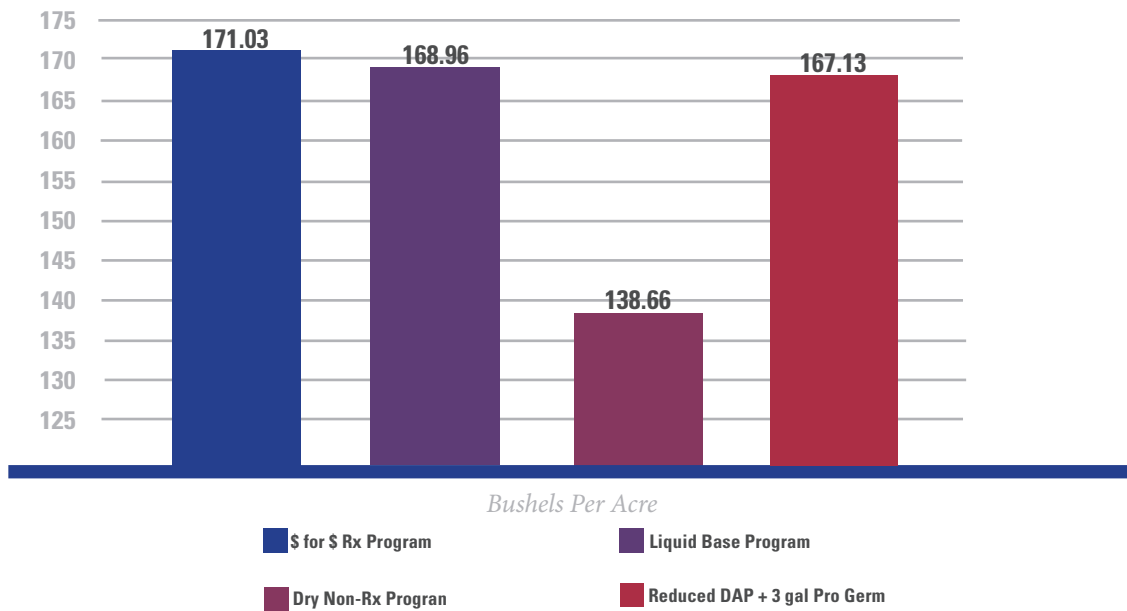
Security Seed Dollar-for-Dollar Rx
Total Fertility Cost / Acre Excluding Nitrogen: \$54.98

- 3 gal ProGerm In-Furrow
- 2 gal Kalibrate In-Furrow
- 1 qt Micro 500 In-Furrow
- 1 qt Enhance In-Furrow
- 1 qt Magnesium In-Furrow
- 1 pt Iron In-Furrow
- 8 oz Boron In-Furrow
- 1 Gal Access 2x0
- 4 Gal 28% UAN 2x0



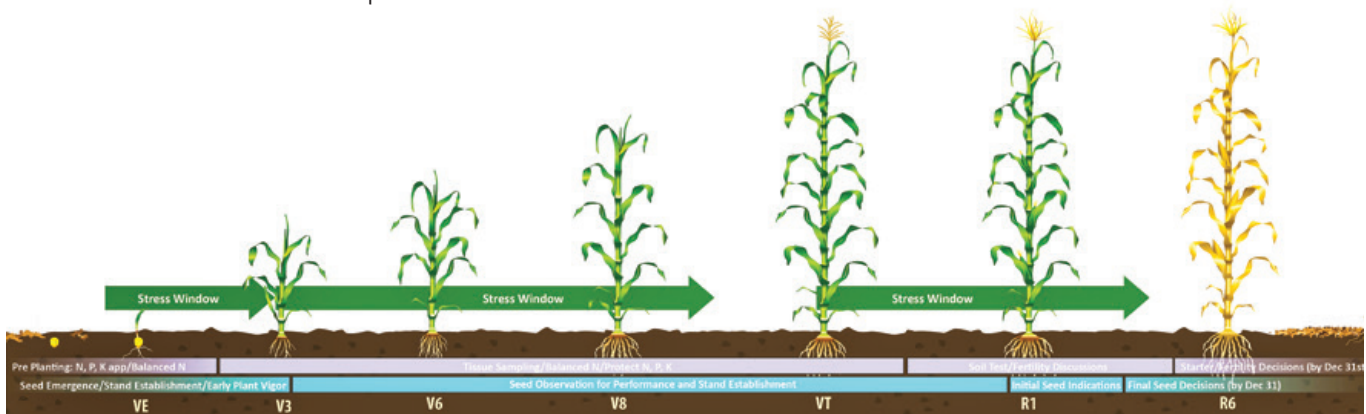
Belle Rive, IL

2018 Fertility Study on Corn | (Belle Rive, IL)



Security Seed Dollar-for-Dollar Rx
 Total Fertility Cost / Acre Excluding Nitrogen: \$56.54

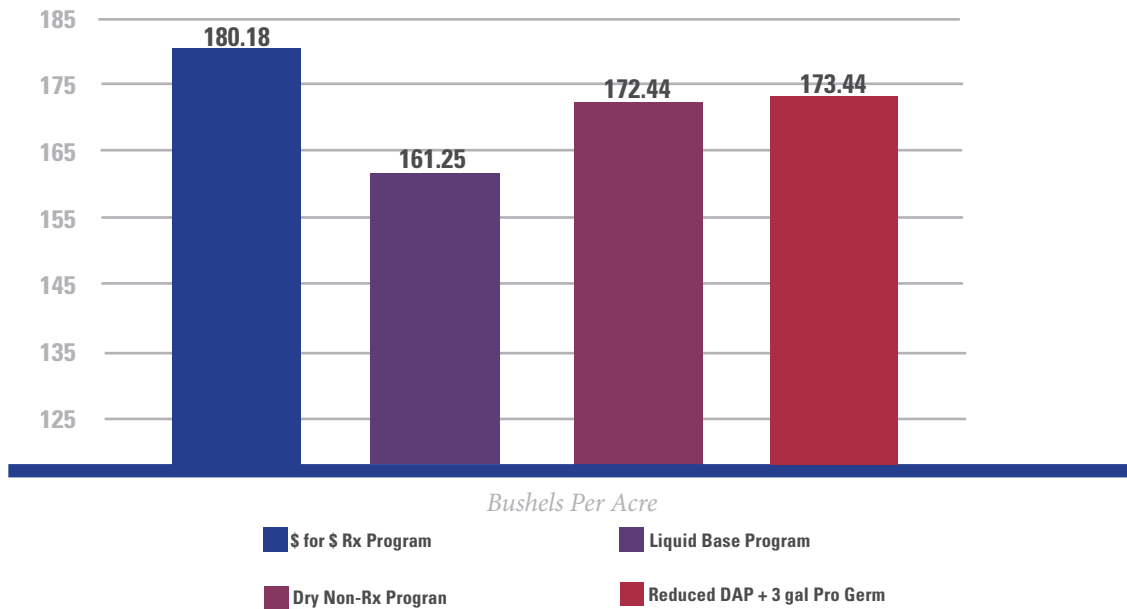
- 5.5 gal ProGerm In-Furrow
- 1 gal Kalibrate In-Furrow
- 2 qt Micro 500 In-Furrow
- 1 qt Enhance In-Furrow





Washington, IN

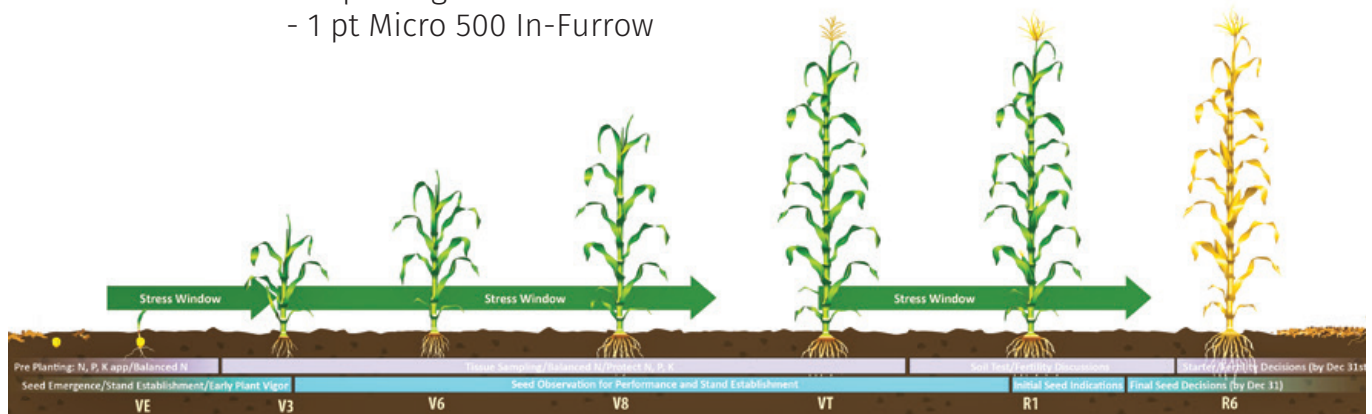
2018 Fertility Study on Corn | (Washington, IN)



Security Seed Dollar-for-Dollar Rx

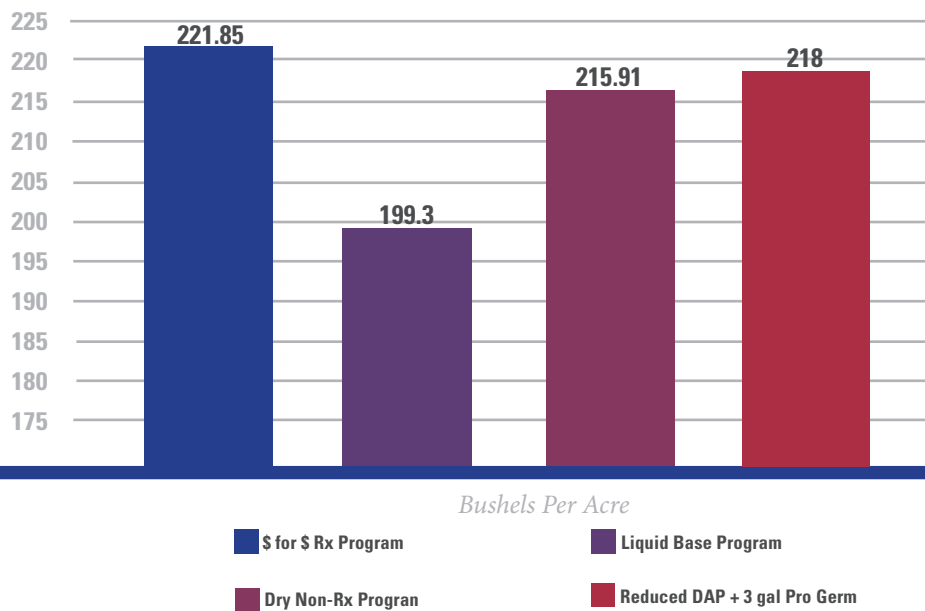
Total Fertility Cost / Acre Excluding Nitrogen: \$56.19

- 2 gal ProGerm In-Furrow
- 1 gal Kalibrate In-Furrow
- 2 qt Enhance In-Furrow
- 2 qt Manganese In-Furrow
- 1 pt Micro 500 In-Furrow



Manchester, TN

2018 Fertility Study on Corn | (Manchester, TN)



Security Seed Dollar-for-Dollar Rx
Total Fertility Cost / Acre Excluding Nitrogen: \$57.05

- 6 gal ProGerm In-Furrow
- 1 gal Kalibrate In-Furrow
- 1 qt Micro 500 In-Furrow
- 1 pt Enhance In-Furrow
- 1 pt Stoller Mg In-Furrow
- 1 pt Iron In-Furrow

