

## CORN VARIABLE RATE SEEDING USING CLIMATE FIELDVIEW™ ADVANCED SEED SCRIPTING

### TRIAL OVERVIEW

- Choosing the optimum planting population for a respective field environment/hybrid combination is a crucial decision when trying to optimize resources in each environment.
- The Climate FieldView™ advanced seed scripting tool allows growers to manage their planting populations across multiple environments within a given boundary.

### RESEARCH OBJECTIVE

To evaluate how the Climate FieldView advanced seed scripting tool can assist growers in managing their planting populations within multiple field environments when compared to a blanket rate local grower standard.

Location	Soil	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield/Acre	Planting Rate/Acre
Exira, IA	Multiple	Soybean	No-Till	5/6/2017	11/10/2017	240 bu/acre	Variable

### SITE NOTES:

- A 114RM VT Double PRO® RIB Complete® brand blend product was chosen for this farm.
- The trial was carried out in 20-inch row spacing.
- 190lbs of nitrogen (N) was applied in the spring along with a one-pass herbicide program.
- A fungicide and 12lbs foliar nitrogen were aerially applied at the VT stage.
- A yield goal of 240bu/acre, \$3.30 cash price of corn, and \$270 per bag of seed were the input factors used in the Climate FieldView advanced seed scripting model (Fig. 1).  
2 years of prior yield data was utilized to build the variable rate prescription.

Treatments	Description
Grower Standard	Blanket 38,000 seeds/acre planting population
Advanced Seed Scripting	Climate FieldView™ advanced seed scripting tool – (Variable Rate)

Table 1. Planting Rate treatments used in trial.

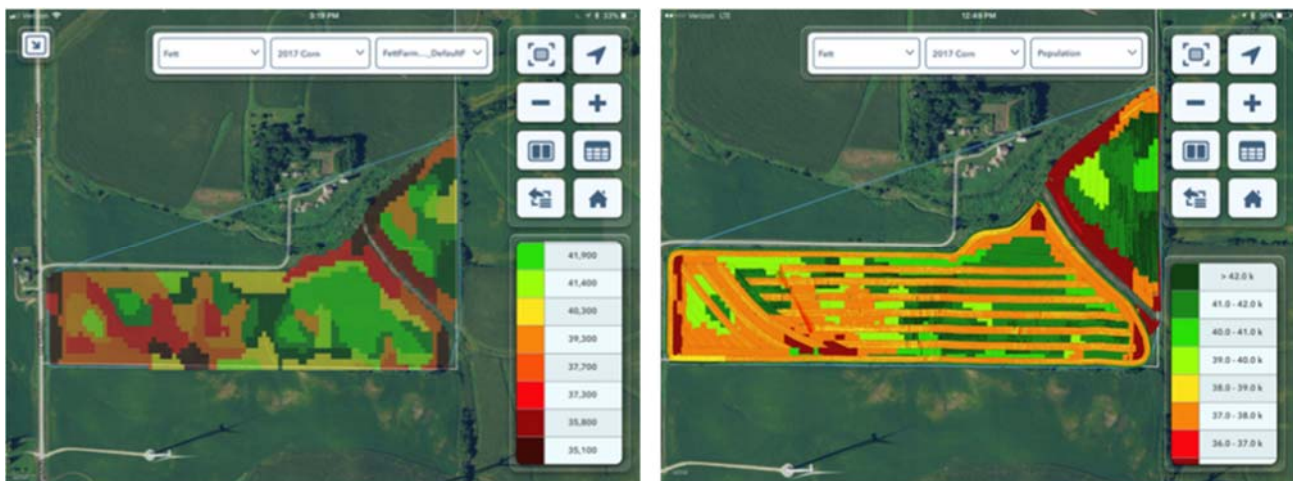


Figure 1. (Left) Screenshot of Climate FieldView advanced seed scripting map utilized to plant the variable rate portion of the field trial. (Right) Screenshot of Climate FieldView planting population map after the side by side comparisons were executed for the field trial.

## UNDERSTANDING THE RESULTS

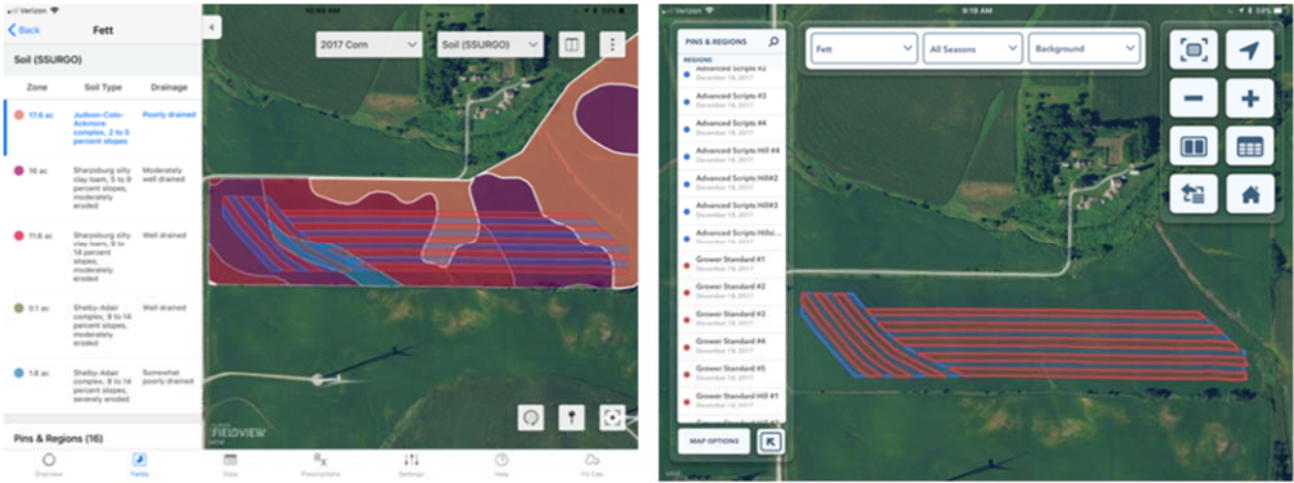


Figure 2. (Left) Screenshot of Climate FieldView Soil SSURGO map with the polygon regions used to analyze the yield results. (Right) screenshot of Climate FieldView polygon regions used to analyzed the yield data. Red regions align with the grower standard and blue regions matchup with the advanced planting prescription planting rates.

Advanced Seed Scripting (Variable Rate)				Grower Standard 38,000 seeds/acre			
Regions	Acres	Avg. Yield	Total Bushels	Regions	Acres	Avg. Yield	Total Bushels
7	8.1	290.3 bu/acre	2351.4	7	7.8	287.5 bu/acre	2242.5

Table 2. Region yield analysis by planting system.

- The Climate FieldView advanced seed scripting tool recommended planting rates from 35,100 to 42,000 seeds/acre with a field average 39,300 seeds/acre (Fig. 1).
- Three different soil types were tested in the analysis with slopes ranging from 2% -14% (Fig. 2).
- The Climate FieldView advanced seed scripting system provided a 2.8bu/acre advantage when compared to the grower standard (Table 2).
- In a high yield/low stress year, variable rate results may vary depending on how aggressive your standard planting rate is.

## WHAT DOES THIS MEAN FOR YOUR FARM?

- Technologies such as Climate FieldView advanced seed scripting allow a grower to easily access multiple years of local product population data.
- Climate FieldView advanced seed scripting allows a grower to minimize their risk in tougher environments that may be over planted by a blanket grower standard rate. Standard rates also put a ceiling on yield potential in high yield environments.
- Growers are encouraged to try tools like this to help with choosing the optimum planting rates for their field environments.



# DEMONSTRATION REPORT

MONSANTO LEARNING CENTER AT HUXLEY, IA

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**IMPORTANT IRM INFORMATION: RIB Complete®** corn blend products do not require the planting of a structured refuge **except** in the Cotton-Growing Area where corn earworm is a significant pest. SmartStax® RIB Complete® corn blend is not allowed to be sold for planting in the Cotton-Growing Area. **See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.**

**Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.**

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