INTEGRATED FARMING SYSTEMS℠ PLATFORM  
PRECISION AGRICULTURE DEMONSTRATION

Monsanto’s Integrated Farming Systems℠ (IFS) will pilot the company’s first product, FieldScripts℠, during the 2013 planting season in Monsanto’s Ground Breakers℠ trials. FieldScripts℠ products combine two ideas: more yield through genetics and machinery by matching the best hybrid with a variable rate planting recommendation for each individual field. FieldScripts℠ products are a convergence of equipment, computer technology, and Monsanto science that can help growers maximize yield potential and provide a potential reduction in risk. This is accomplished by matching hybrids with variable rate populations appropriate for yield environments in each field. In anticipation of the FieldScripts℠ products launch, a demonstration trial was conducted at the Monsanto Learning Center at Scott, MS to showcase the advancements in precision agriculture technology.

FieldScripts℠ Products and Technology

The IFS Certified Seed Dealer will work with customers to select desired fields to enroll in FieldScripts℠. To develop a unique FieldScripts℠ product to work with a grower’s variable rate planter technology, the grower will need to provide information, such as: field boundaries, two years of geospatially referenced yield data, and soil test results to their IFS Certified Seed Dealer. Using Monsanto’s extensive seed-by-environment databases, the company will deliver a best hybrid match for each field, along with a variable rate seeding prescription by FieldScripts℠ Management Zone for that hybrid, specific to that single field. The prescription will be provided through Precision Planting’s FieldView™ app for the iPad® handheld device to the farmer’s tractor cab. The prescription will then be automatically executed as the field is planted.

Ground Breakers℠ Trials

Monsanto uses the Ground Breakers℠ program to gain feedback from growers on product introductions ahead of commercialization. Next year FieldScripts℠ products will be piloted in Ground Breakers℠ trials. Monsanto anticipates FieldScripts℠ will be launched in 2014.

Scott Demonstration Trial

In anticipation of the FieldScripts℠ products, the Monsanto Learning Center at Scott, MS wanted to demonstrate the advances in precision farming technology to growers. After much discussion and planning, a demonstration of the capabilities of the Monsanto Learning Center planting systems was implemented. This demonstration focused on educating growers on the process of obtaining a field prescription and implementing a variable rate precision planting as well as the accuracy of today’s precision technology.

SST Software, an Oklahoma company, assisted in formulating a prescription for the application of the demonstration inputs. Two crops were chosen: one that required a nitrogen (N) application (sunflowers) and one that did not
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(rye). Upon receiving the prescription, the software was downloaded into the applicator/planter control system on each tractor utilized in the demo. The first application was a 28% N solution applied only in the areas of the demo where the sunflowers were to be planted. Following the application of N, the crops were planted at the appropriate planting rates. The sunflowers were planted at 28,000 seeds per acre with a single row 38 inch planting system. The last application consisted of twin row 38 inch soybeans planted at 140,000 seeds per acre. The result is shown in Figure 1.

The agronomists at the Monsanto Learning Center at Scott, MS have demonstrated the ability to precisely prescribe inputs and apply them in a designated management zone. With the anticipated launch of FieldScriptsSM in 2014, the agronomists at Monsanto Learning Center at Scott, MS will continue to work on innovative ways to demonstrate the practicality of precision technology.

The information discussed in this report is from a single site, non-replicated, one-year demonstration. This informational piece is designed to report the results of this demonstration and is not intended to infer any confirmed trends. Please use this information accordingly.

Figure 1. Aerial photo of soybean and sunflower precision agriculture demonstration plot.

**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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