Demonstration Report

MONSANTO LEARNING CENTER AT MONMOUTH, IL

UTILIZING CLIMATE FIELDVIEW™ NITROGEN MONITORING TOOL

TRIAL OVERVIEW

- Nitrogen (N) is the most vital fertilizer that farmers have to manage in a corn crop.
- Previous crop, growing conditions, product genetics, commodity price, and N cost are factors to consider when determining the highest return for N investment.
- Weather plays an important role in determining how growers manage N. Programs like Climate FieldView™ nitrogen monitoring tool can help farmers in their N decision making process.

RESEARCH OBJECTIVE

Location	Soil	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield/Acre	Planting Rate/Acre
Monmouth, IL	Silt Loam	Corn	Conventional	05/06/2016	09/26/2016	-	36,000

SITE NOTES:

- A study was established to help understand how Climate FieldView nitrogen monitoring tool can help corn farmers make N decisions on their farm.
- Six different N application treatments were applied to corn products with two replications.
- -- Treatment 1: 200 lbs N/acre (32% UAN) applied preplant on May 6,2016.
- -- Treatment 2: 170 lbs N/acre (32% UAN) applied preplant on May 6, 2016 + 30 lbs N/acre applied pretassel to tassel on July 5, 2016.
- -- Treatment 3: 200 lbs N/acre (32% UAN) applied preplant on May 6,2016 + the Climate FieldView nitrogen monitoring tool recommended rate applied at pre-tassel to tassel (Climate FieldView showed a surplus of N at time of application so no additional N was applied)
- -- Treatment 4: 100 lbs N/acre (32% UAN) applied preplant + 100 lbs N/acre (32% UAN) sidedressed on June 14, 2016.
- -- Treatment 5: 100 lbs N/acre (32% UAN) applied preplant + 45 lbs N/acre (32% UAN) sidedressed on June 14, 2016 (Climate FieldView nitrogen monitoring tool sidedress recommended rate)
- -- Treatment 6: 170 lbs N/acre (32% UAN) applied preplant + Climate FieldView nitrogen monitoring tool recommended rate for sidedress or late application, no applications recommended.
- Cost and net profit is based on N cost of \$0.50/lb, sidedress cost of \$8/acre, corn price of \$3.20/bushel.

UNDERSTANDING THE RESULTS

- The highest yielding treatment was not a recommendation from Climate FieldView nitrogen monitoring tool. However, the most profitable N treatment was from a Climate FieldView insight.
- The most profitable application did not require N to be applied during the growing season, saving time and input cost by using Climate FieldView nitrogen monitoring tool.
- Two of the three nitrogen treatments that were Climate FieldView insights still reached a high yield and had the most profitability.

WHAT DOES THIS MEAN FOR YOUR FARM?

- · Climate FieldView nitrogen monitoring tool provided the most profitable treatment in this trial.
- Climate FieldView nitrogen monitoring tool will continue to be analyzed to see how the program can benefit farmers with preplant and in-season N application decisions.

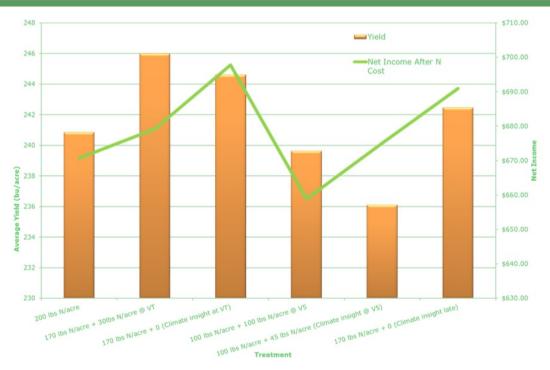


Figure 1. Average yield and net income of different nitrogen treatments.