PLACEMENT OF NITROGEN DURING SIDEDRESSING

TRIAL OVERVIEW

- Farmers are interested in the question of nitrogen placement and if it has an effect on nitrogen uptake and yield.
- Nitrogen is a significant cost in corn production. Knowing where to place the sidedressed nitrogen can help a grower decide what method is best for their operation.

RESEARCH OBJECTIVE

- To see if there is an advantage to placing nitrogen right at the base of the plants vs down the center of the row.

Location	Soil	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield/Acre	Planting Rate/Acre
Monmouth, IL	Silt Loam	Corn	Conventional	04/26/2016	09/20/2016	240 bu/acre	36,000 seeds/acre

SITE NOTES:

- A 114 RM corn product was planted conventionally planted on April 26, 2016 and harvested on September 20, 2016.
- Eighty pounds of 32% UAN (32-0-0) was applied and incorporated before planting.
- Sidedress nitrogen (32% UAN) was applied at a rate of 100 lbs/acre at growth stage V6 on June 14, 2016.
- Sidedressing was applied with a rolling coulter in the center of the row on half of the trial.
- Sidedressing was applied with Y-Drop® applicators on the other half of the trial.
- There were 4 replications in this trial.

UNDERSTANDING THE RESULTS

Figure 1. Rolling coulter

Figure 2. Y-Drop® applicator

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WHAT DOES THIS MEAN FOR YOUR FARM?

- Average yield for the coulter-applied sidedressing was 252.55 bu/acre.
- Average yield for the Y-Drop® sidedressing was 248.07 bu/acre.
- Application of sidedressed nitrogen at V6 shows no clear advantage to either method.
- Timing of application with the rolling coulter was limited due to the height of the corn.
- The Y-Drop applicator allows a wider application window and is not limited to early season sidedressing.
- The ideal placement of sidedressed nitrogen could change from year to year due to weather and environment.
- Individual corn products may respond differently to timing of sidedressed nitrogen application.
- Farmers should consult their local DSM or Technical Agronomist for recommendations.

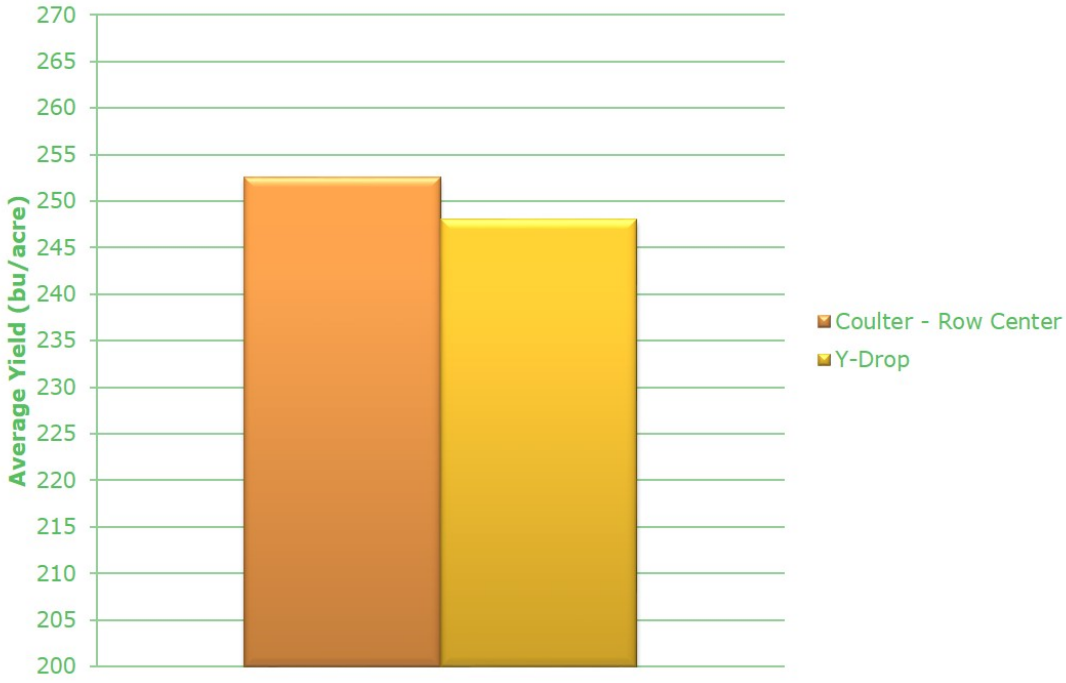

Figure 3. The effect of two methods of sidedress nitrogen application (Coulter – Row Center and Y-Drop®) on corn yield.

- Yield increases may not be economically feasible when all costs are considered.
- Consider all local costs when making nitrogen management decisions.