

High NRG-N Methods of Application Options on Corn (15-1102)

Experiment Info:

5/20/2015 Planted: Harvest: 10/26/2015 150 bu/A Yield Goal: Target Fert .: 165-81-50 P0094AMX Variety: 31,800 Population: Row Width: 30' Prev. Crop: Corn Plot Size: 15 x 1200 Replications: 4 LBC (PRE) 5/20/2015 SD (V5) 6/9/2015 FOL (VT) 6/18/2015

Soil Test Values (ppm):	
pH:	7.2
CEC:	8.6
%OM:	1.6
Bray P1:	10
Bicarb P:	5
K:	104
S:	9
%K:	3.1
%Mg:	16.7
%Ca:	79.9
%H:	0
Zn:	1.1
Mn:	5
В:	0.4

Objective:

To compare different methods of application options when using High NRG-N on corn.

The slow release technology within High NRG-N raised question on release time when used with application new technology that delays application to late season. This experiment evaluated a total application rate of High NRG-N applied in different methods throughout the season. Corn was planted later than normal and received above average rainfall.

Application methods included: broadcast after planting, sidedress at V5, split applied either broadcast/sidedress or broadcast/Y-DROP with the second application at V5 or a three-way split broadcast/surface dribble/surface dribble, broadcast/sidedress/sidedress or broadcast/Y-DROP/Y-DROP with the second application at V5 and third at VT.

Dribble applications were applied in a band on the surface near the center of the 30" row, sidedress was coulter injected down the center of the rows and Y-DROP was with new technology from 360-Yield Center that places a band a fertilizer to each side of the corn row.



LSD(0.05) 11, LSD(0.1) 9.1, CV: 6.7%

Conclusions:

- Excess rain after planting, likely leached some of the broadcast nitrogen. This combined with the late planting data, lowered overall yield.
- Highest yield was achieved with the split application placing 10 gal of High NRG-N broadcast after planting and the remainder at V5 with the Y-DROP technology. This was nearly 13 bu/A better than the same split only using the coulter injected sidedress technology.
- It appears that the splitting the nitrogen into three applications, may have not given the crop enough time to fully utilize High NRG-N in this experiment. Within this comparison, the Y-DROPS yielded the best followed by the coulter injected sidedress.