

## Corn Fertilizer Placement Methods (14-704)

#### **Experiment Info:**

Planted:

Harvest:

Variety:

Population:

Row Width:

Prev. Crop:

Plot Size:

Liquid BC:

Sidedress:

Replications: 4

Yield Goal:

5/25/2014

10/30/2014

DKC 49-29 RIB

175 bu/A

29,500

Soybeans

15 x 265

5/26/2014

6/23/2014

Soil Test Values (ppm):

30'

Target Fert .: 193-60-87

### **Objective:**

To compare fertilizer placement methods and potassium products for corn.

Is it possible to broadcast or sidedress the recommended rates of phosphorus and potassium for a corn crop? Generally an in-furrow application with nutrients being placed near the seed provides the greatest advantage.

Soil test recommendations for fertilizer for this experiment were 5 gal/A Pro-Germinator + 5 gal/A Sure-K or Kalibrate + 2 gt/A Micro 500. The first two treatments compare a typical in-furrow planter application with High NRG-N sidedressed to a complete recommendation being sidedressed applied. The two following experiments were applied the same but with Kalibrate being used as a potassium source. The final treatment was broadcast applied one day after planting also using Kalibrate as the potassium source. Yields for the comparisons appear in the chart below.



#### LSD(0.05) 8.6, CV: 8.6%

#### Conclusions:

- · No significant yield advantage was seen between planter applied or sidedress applications. There was also no significant difference between Sure-K and Kalibrate.
- The broadcast treatment yielded significantly lower than the other band applied treatments.
- In-furrow applications yielded higher than sidedress, showing the importance of placing nutrients close to the seed where they are available at very early plant stages.
- Corn yields were lower than expected due to the late planting date caused by spring rain events.

# 6.3 pH: CEC: 14.9

%OM:	2.2
Bray P1:	16
Bicarb P:	-
K:	101
S:	11
%K:	1.7
%Mg:	16.9
%Ca:	70.2
%H:	10.8
Zn:	1.2
Mn:	6
B:	0.6