



360 Yield Center BANDIT Corn (18-703)

Experiment Info:

Planted:	5/2/2018
Harvest:	9/28/2018
Yield Goal:	175 bu/A
Target Fert.:	194-80-105
Variety:	DKC 49-72 RIB
Population:	33,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 265
Replications:	4

Soil Test Values (ppm):

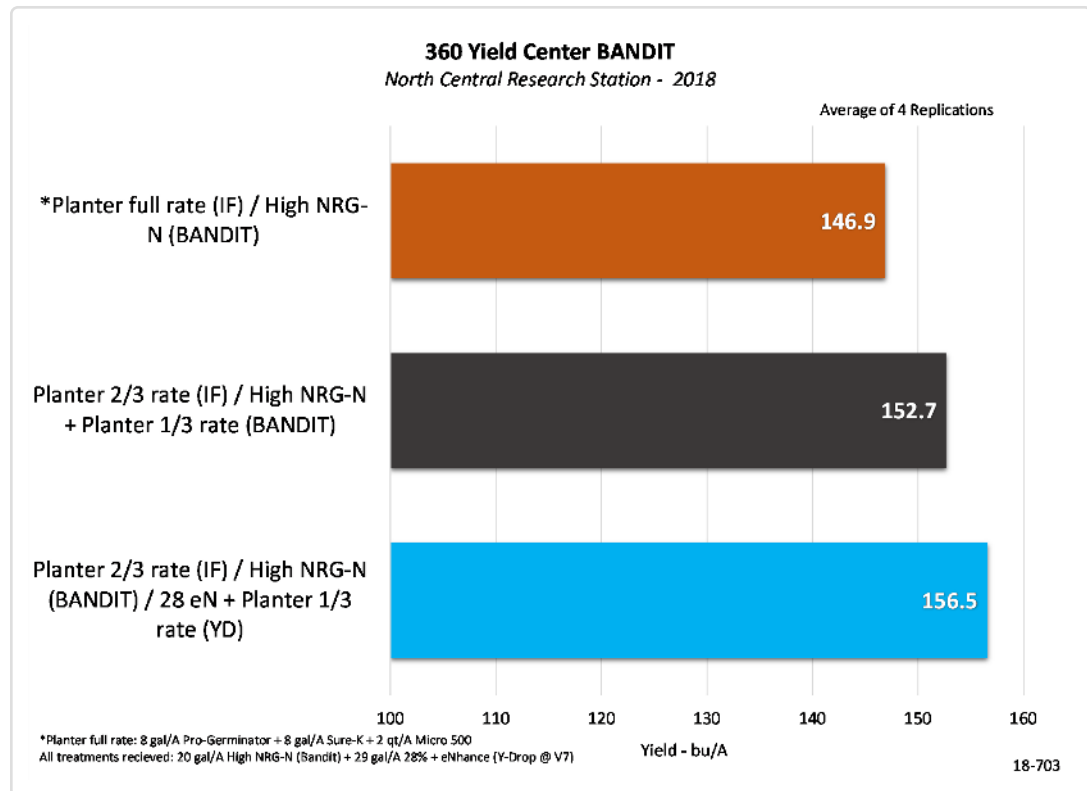
pH:	6.3
CEC:	10.6
%OM:	2.6
Bray P1:	7
Bicarb P:	
K:	79
S:	17
%K:	1.9
%Mg:	16.4
%Ca:	70.8
%H:	10
Zn:	.8
Mn:	4
B:	4

Objective:

To evaluate new planter placement opportunities for nutrients, offered by 360 Yield Center.

The 360 Yield Center Bandit is designed to place a band of fertilizer 1" in the soil at a distance of 3" away and on both sides of the seed furrow. This dual placement opportunity fits well for adding planter applied liquid nitrogen fertilizer, additional nutrients that should be placed away from the seed or amounts that are higher than recommended in the seed furrow.

Based on the low soil test P and K values, this experiment used a fertilizer recommended rate of 8 gal/A of Pro-Germinator + 8 gal/A of Sure-K + 2 qt/A of Micro 500. Amounts of the full program are higher than AgroLiquid recommendations for in-furrow placement, which meets the experiment objectives. The planter full-rate program of Pro-Germinator and Sure-K was then split into thirds with 2/3 (full in-furrow rate) applied in-furrow and 1/3 applied either with the High NRG-N nitrogen using the 360 Yield Bandit on the planter; or with the 28% + eNhanse (28 eN) using the 360 Y-Drop at V7 sidedress. All micronutrients were applied in-furrow with the planter at planting.



LSD(0.2): 9.7, CV:8.7%

Conclusions:

- Dry summer conditions reduced yield in this experiment by approximately 20% from target level.
- The results of this experiment show a non statistically significant 5.8 bu/A yield advantage to placing needed phosphorus and potassium next to seed furrow. The capability of placing 3 bands of fertilizer under the corn root system should enable the corn roots greater access to these needed nutrients.
- A larger, however still non-significant, 9.6 bu/A yield advantage resulted from adding the extra planter nutrients to the sidedress application. The placement method utilizing the 360 Y-Drop still allowed nutrients to be safely placed on each side of the row and over top of the root system.