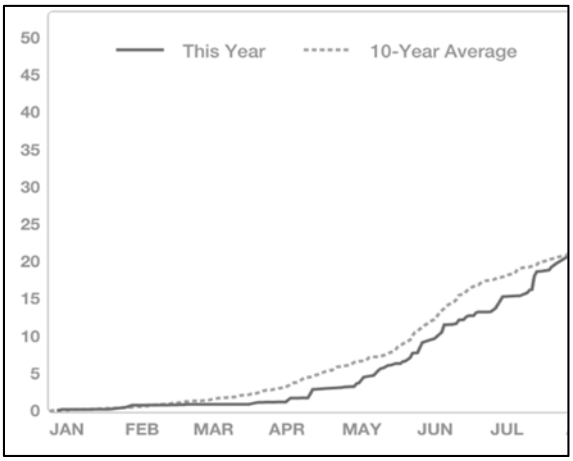
Nebraska On-Farm Research Network

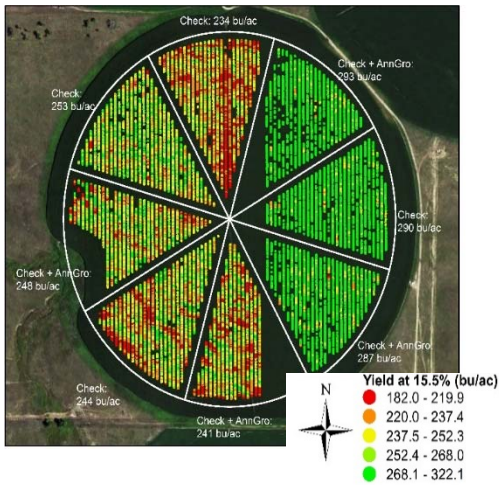
AnnGro Additive with UAN through Pivot

Study ID: 005015201501
County: Boyd
Soil Type: Simeon loamy sand; Simeon-Valentine loamy sand; Dunday loamy fine sand;
Planting Date: 4/29/2015
Harvest Date: 10/10/15 and 11/12/15
Population: 35,000
Row Spacing (in.) 30
Hybrid: DKC 62-97VT3P
Reps: 4
Previous Crop: Corn
Tillage: Strip-till
Herbicides: ***Pre:*** unknown ***Post:*** 2.5 qts/ac Fultime, 32 oz/ac Durango
Seed Treatment: Acceleron and Poncho 250
Foliar Insecticides: Sniper 3 oz/ac on 7/30
Foliar Fungicides: none
Fertilizer: DAP, Potash VRA on 4/10/15. 15gal/ac 22-5-0-8, 3.5 gal/ac 7-22-6-0-2.5-1(Zn) on 4/29. 25 lbs/ac N and 6 lbs/ac S through pivot on 6/6, 6/15, 6/28, 7/1, 7/6, and 7/20. 30 lbs/ac N on 7/30.

Irrigation: Pivot, Total: unknown
Rainfall (in.): Note: Rainfall data only available through July at this location.



Introduction: AnnGro® -EW Fertilizer Additive (ANNGRO USA) is a bio-based product which claims enhancement in uptake and transport of plant nutrients. The objective of this study is to evaluate the effects of AnnGro® -EW Fertilizer Additive applied with UAN and Thiosulfate fertilizer versus UAN and Thiosulfate fertilizer with no AnnGro® -EW Fertilizer Additive. UAN was applied through a center pivot at a rate of 7 gpa. AnnGro® -EW was applied at 1 L per ton of UAN and was applied through the pivot on 7/6/15 and 7/20/15 to the selected pie sections.



Note: At this location, part of the field was inadvertently harvested earlier (10/10/15) as wet corn (east part of field), while the remainder was harvested on 11/12/15 as dry corn. For analysis, yield data was removed so that only yield data from the harvest date that comprised the greatest area in each pie wedge remained in each treatment area. The statistical analysis then used a nested replication term to account for the harvest dates. Data was analyzed using the GLIMMIX procedure in SAS 9.4 (SAS Institute Inc., Cary, NC). This product is not commercially available, therefore marginal net return is not included in the results.

Results:	Yield (bu/ac)†	Moisture (%)	Harvest Stand Count
Check - UAN 32% and Thiosulfate	269 A*	21.4 A	30,284 A
AnnGro in Solution with UAN 32% and Thiosulfate	265 B	21.4 A	29,808 B
P-Value	0.0331	0.8378	0.0540

†Bushels per acre corrected to 15.5% moisture.
*Values with the same letter are not significantly different at a 90% confidence level.

Summary: The addition of AnnGro® -EW did not increase corn yields, grain moisture, or harvest stand counts when compared to the check treatment (UAN and thiosulfate).

This study was sponsored in part by: AnnGro USA, LLC

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