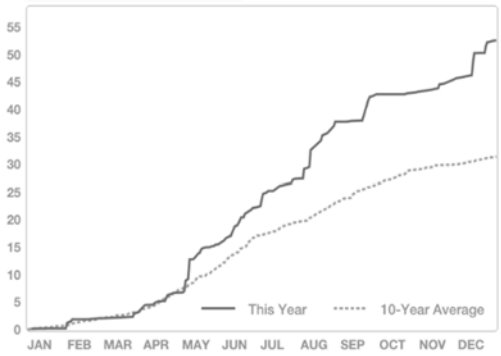
Nebraska On-Farm Research Network

Starter Fertilizer on Rainfed Corn

Study ID: 001155201501
County: Saunders
Soil Type: Yutan, eroded - Aksarben silty clay loam; Judson silt loam
Planting Date: 4/15/15
Harvest Date: 9/30/15
Population: 28,500
Row Spacing (in.) 30
Hybrid: LG 5622 VT2 RIB
Reps: 9
Previous Crop: Soybean
Tillage: No-Till
Herbicides: ***Pre:*** Corvus - behind planter ***Post:*** 1 qt/ac Roundup PowerMax
Seed Treatment: Poncho/Votivo
Foliar Insecticides: none
Foliar Fungicides: none

Fertilizer: 130 lbs/ac fall applied anhydrous, 10 gal/ac UAN 32%, and 2 gal/ac liquid thiosol

Irrigation: None, Total: N/A
Rainfall (in.):



Introduction: This study is a continuation of a similar effort conducted in 2013 and 2014, looking at different starter fertilizer products. The purpose of this study was to try to answer the question, "Does applying starter fertilizer at planting impact rainfed corn yields?" At planting 5 gal/acre of 6-24-6 was applied in-furrow, placed below the seed.

Results:	Yield (bu/ac)†	Moisture (%)	Harvest Stand Count	Marginal Net Return ($/ac)‡
Check	239 A*	21.4 A	27,233 A	$872.35
6-24-6 starter (5 gal/ac)	241 A	20.6 B	27,382 A	$861.15
P-Value	0.1377	<0.0001	0.6554	N/A

†Yield data from cleaned yield monitor data. Bushels per acre corrected to 15.5% moisture.
*Values with the same letter are not significantly different at a 90% confidence level.
‡Net return based on $3.65/bu corn and $3.70/gal starter fertilizer cost.

Summary: There was a visual difference between the check and starter treated corn early in the growing season (starter treated crop appeared darker green) as shown in Figure 1. The starter fertilizer application did not result in an increased yield. The check had higher grain moisture at harvest. There was no difference in stand counts at harvest. No soil tests were available for this field.

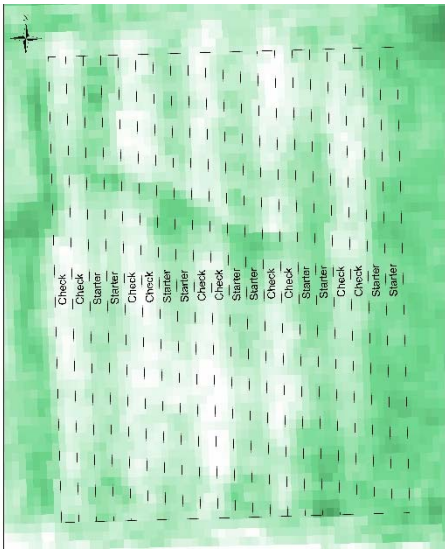
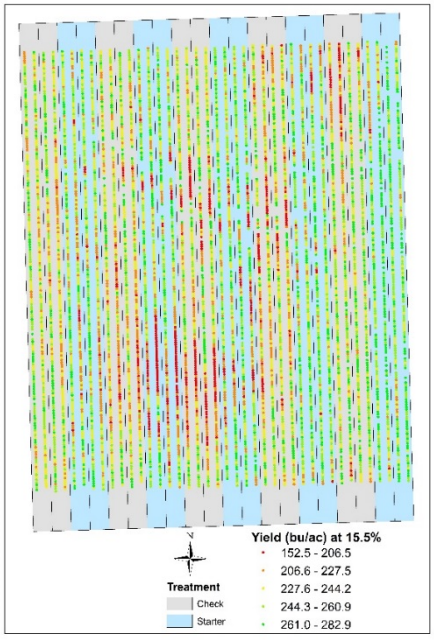


Figure 1: Satellite imagery from mid-June, 2015 from FarmLogs (http://farmlogs.com)



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