



Nebraska On-Farm Research Network

Pentilex™ AQUA Seed Germination Aid Treatment on Corn

Study ID: 039155201410

County: Saunders

Soil Type: Yutan silty clay loam

Planting Date: 4/22/2014

Harvest Date: 10/27/2014

Population: 37,000 seeds/ac

Row Spacing: 30"

Hybrid: DKC 62-97

Reps: 20

Soil Test Values:

Previous Crop: Soybeans

Tillage: No-till

Herbicides: Pre: 13 oz/ac Verdict and 22 oz/ac Roundup PowerMAX on 5/3/14.

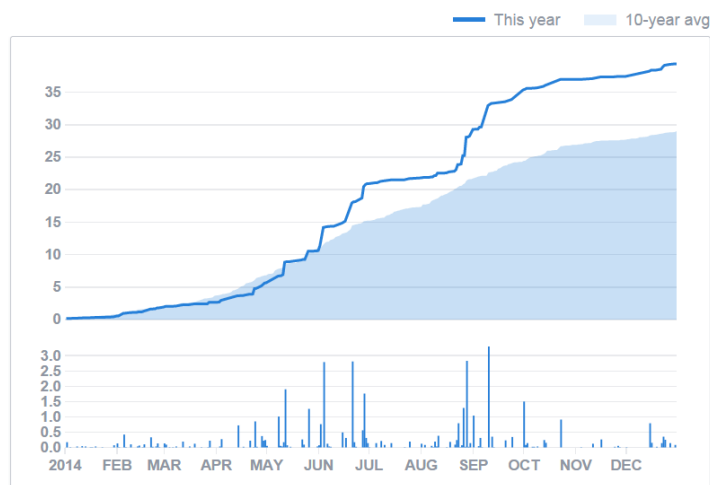
Post: 0.6 oz/ac Armezon and 22 oz/ac Roundup PowerMAX on 6/11/14.

Insecticides/Fungicides: A250 seed treatment. 2 oz/ac Baythroid XL and 4 oz/ac Priaxor on 6/28/14. 10 oz/ac Headline AMP on 8/1/14.

Fertilizer: 160# N/ac as Anhydrous ammonia in Nov. 2013 and 6 gal/ac 10-34-0 in furrow at planting on 4/22/14

Irrigation: Pivot irrigated, amount unknown

Rainfall:



Introduction: The purpose of this study was to evaluate the performance of a germination aid product which is suggested to increase the seeds' high internal energy components. This improves germination potential and seedling vigor, resulting in uniform plant emergence. The grower was interested to see if it increased corn yield. The product Pentilex™ AQUA was applied to the seed before planting. The product label and guaranteed analysis is shown at right.

**Pentilex™ AQUA**
Seed Germination Aid

0-37-37

Pentilex™ Aqua is a germination aid developed to increase your seeds' high internal energy components. This improves germination potential and seedling vigor, resulting in uniform plant emergence.

GUARANTEED ANALYSIS	
Total Nitrogen (N)	0.0%
Available Phosphate (P ₂ O ₅)	37.0%
Potassium (K ₂ O)	37.0%
Net Weight: 0.50 lbs. (0.23 kg)	

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Results:

	Yield† (bu/acre)	Moisture (%)	Net Return ‡
Check	266 A	17.5 A	\$931.00
Pentilex™ AQUA	264 A	17.6 A	\$917.50
<i>P-Value</i>	0.3060	0.6051	--

†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 \$3.50/bu corn and \$6.50/acre for Pentilex™ AQUA.

Summary: The application of the germination aid did not result in an increase in corn yield. The increased cost of production was not recovered resulting in lower net returns for the Petalix™ AQUA treatment.

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