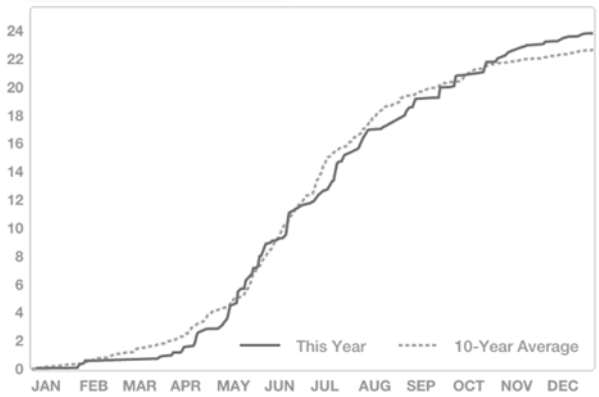
Nebraska On-Farm Research Network

Aegis® ESR on Irrigated Corn at VT

Study ID: 183135201501
County: Perkins
Soil Type: Valent loamy sand; Woodly loamy fine sand; Ascalon fine sandy loam;
Planting Date: 5/21/15
Harvest Date: 10/16/15
Population: 34,000
Row Spacing (in.) 30
Hybrid: DeKalb 5438
Reps: 7
Previous Crop: Unknown
Tillage: Strip-till
Herbicides: ***Pre:*** unknown ***Post:*** 30 oz/ac Buccaneer (glyphosate) and 2 oz/ac Status on 6/1/15;
30 oz/ac Buccaneer (glyphosate) and 15 oz/ac Dual (generic - Parallel) on 6/18/15.
Seed Treatment: none
Foliar Insecticides: None
Foliar Fungicides: 50 oz/ac Clorox on 8/7/15, 8/14/15 and 8/24/15

Fertilizer: 100 lb/ac 11-52-0, 100lb/ac 0-0-60, and 100 lb/ac 46-0-0 on 3/25/15;
5 gal/ac 6-21-6 on 5/21/15 (pop up w/ Seed);
40 gal/ac 28-0-5 sidedress on 6/18/15

Irrigation: Pivot, Total: 13"
Rainfall (in.):



Introduction: The purpose of this study was to determine if an application of Aegis® ESR plant growth stimulator would increase yield and profitability on irrigated corn. Aegis® ESR was applied with an aerial application at a rate of 5 oz/acre at the VT growth stage. Yields were harvested from treated and untreated strips and collected from yield monitor data. Product active ingredients are below.

Aegis® ESR

- PLANT GROWTH STIMULATOR
- PROTEIN ENHANCER

- AEGIS® ESR INCREASES THE INTAKE OF NUTRIENTS THAT ARE NECESSARY FOR PLANT GROWTH RESULTING IN IMPROVED YIELD
- AEGIS® ESR PROTEIN ENHANCER INCREASES THE UTILIZATION OF PROTEINS THAT ARE NECESSARY FOR PLANT GROWTH
- AEGIS® ESR PROTEIN ENHANCER INCREASES THE SYNTHESIS OF PROTEINS THAT ARE NECESSARY FOR PLANT GROWTH RESULTING IN IMPROVED YIELD

ACTIVE INGREDIENTS:	
Sodium p-nitrophenolate	0.30%
Sodium o-nitrophenolate	0.20%
Sodium 5-nitroguaiacolate	0.10%
OTHER INGREDIENTS:	99.40%
TOTAL:	100.00%

This product contains 0.03 lbs. of sodium p-nitrophenolate, 0.02 lbs. of sodium o-nitrophenolate, and 0.01 lb. of sodium 5-nitroguaiacolate per gallon.

Product information from:
http://www.kellysolutions.com/ok/showproductinfo.asp?Product Name=Aegis+ESR+Plant+Growth+Stimulator&EPA Id=64922-1-90441

Results:	Yield (bu/ac)†	Moisture (%)	Marginal Net Return ($/ac)‡
Check	207 A*	31.2 A	755.55
Aegis® ESR	208 A	31.1 A	745.70
P-Value	0.742	0.6498	N/A

†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 corn, $4/acre Aegis® ESR cost, and $9.50/ac aerial application cost.

Summary: There was no significant yield difference between the Aegis® ESR treatment and the check. Marginal net return was lower for the Aegis® ESR treatment due to the increased cost of production which was not recovered.

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In Partnership with: