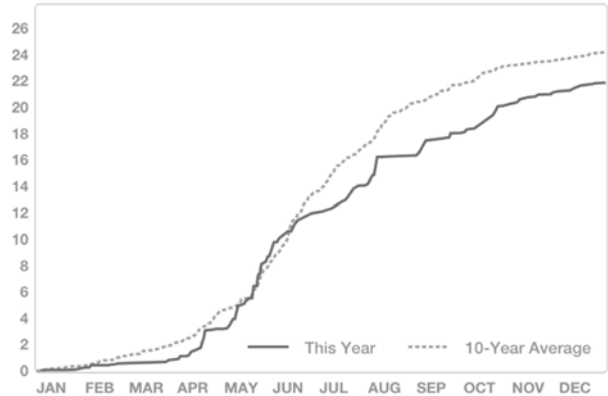


Nebraska On-Farm Research Network

Aegis® ESR on Irrigated Popcorn at VT

Study ID: 190029201501
County: Chase
Soil Type: Valent loamy sand; Jayem loamy fine sand; Haxtun fine sandy loam;
Planting Date: 5/4/15
Harvest Date:
Population: 29,000
Row Spacing (in.) 15
Hybrid: 427
Reps: 8
Previous Crop: Wheat
Tillage: No-Till
Herbicides: Pre: Lumax at label rate on 5/6/15
Post: 4 oz/ac Status on 6/18/15
Seed Treatment: Cruiser 250
Foliar Insecticides: Unknown
Foliar Fungicides: Quilt on 7/23/15

Fertilizer: 40 lb/ac 32-0-0 on 5/6/15
 29 lb/ac 32-0-0 on 6/13/15, 6/29/15, 7/1/15, 7/8/15, and 7/22/15
Irrigation: Pivot, Total: Unknown
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 popcorn. 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:	Popcorn Yield (lb/ac)†	Marginal Net Return (\$/ac)‡
Check	5,803 A*	1102.57
Aegis ESR	5,624 A	1055.06
P-Value	0.6932	N/A

†lbs/acre corrected to 15.5% moisture.

*Values with the same letter are not significantly different at a 90% confidence level.

‡Net Return based on \$0.19 corn, \$4/acre Aegis ESR cost, and \$9.50/ac 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.

This study was sponsored in part by: LTA Resource Management.



In Partnership with:

