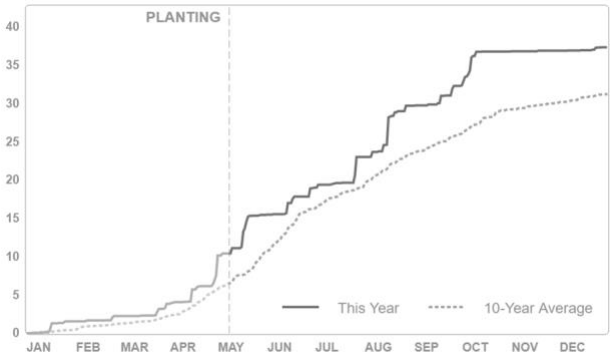
Ag Concepts® EnVigor on Irrigated Soybeans

Study ID: 085141201701
County: Platte
Soil Type: Inavale fine sandy loam; Boel fine sandy loam; Inavale loamy fine sand
Planting Date: 5/8/17
Harvest Date: 10/16/17
Population: 150,000
Row Spacing (in): 30
Variety: NK 34-P7
Reps: 4
Previous Crop: Corn
Tillage: No-Till
Herbicides: ***Pre:*** Afforia®, Enlite®, Roundup®, and 2,4-D on 4/11/17. ***Post:*** 1 qt/ac Roundup®, 3 pt/ac Warrant®, and 5 oz/ac Select® on 6/10/17; 1 qt/ac Roundup®, 24 oz/ac Avalanche®, and 1 pt/100 gal Preference® on 7/8/17.

Seed Treatment: Clariva™
Fertilizer: 100 lb/ac of 8-20-5-S5-Zn.5 product; foliar application of 1 pt/ac Kugler MicroMax on 6/10/17; 3 gal/ac Kugler 353 on 9/13/17.
Note: Severe hailstorm on 9/24/2017 resulted in 40-50 bushels shattered on ground
Irrigation: Pivot, Total: 10"
Rainfall (in):



Introduction: Ag Concepts® EnVigor is a foliar product for soybeans. The goal of EnVigor is to increase pod set and therefore yield. EnVigor contains nitrogen, potash, manganese, and zinc (product information is at right). EnVigor was applied on July 18, 2017, at the R2 growth stage. Two application rates were evaluated: a low rate of 1.5 qt/acre and a high rate of 2.0 qt/acre. Both rates were applied with 10 gal water/qt product. These two rates were compared with an untreated check.

Yield, moisture, and net return were measured. A severe hailstorm on September 24, 2017, resulted in 40-50 bu/ac yield loss as determined by beans shattered on the ground.

Guaranteed Analysis:
Total Nitrogen (N) 5.00%
4.90% Urea Nitrogen
0.10% Other Water Soluble Nitrogen
Soluble Potash (K_2O) 0.50%
Manganese (Mn)..... 0.10%
0.10% Chelated Manganese
Zinc (Zn) 0.10%
0.10% Chelated Zinc
Derived From:
Urea, Marine plant extract (Ascophyllum nodosum), Manganese Ethylenediaminetetraacetate, and Zinc (EDTA).
This product has no added microbes.
9.3 lbs/gal @ 68 Degrees F

Product information from: Ag Concepts®

Results:

	Moisture (%)	Yield (bu/acre)†	Marginal Net Return‡ ($/ac)
Check	11.6 A*	23 A	204.03 A
Ag Concepts® EnVigor Low Rate	11.8 A	21 A	161.71 A
Ag Concepts® EnVigor High Rate	11.6 A	23 A	173.90 A
P-Value	0.181	0.502	0.122

*Values with the same letter are not significantly different at a 90% confidence level.
†Bushels per acre corrected to 13% moisture.
‡Marginal net return based on $8.90/bu soybean, $9/qt EnVigor, and $8.13 product application cost.

Summary: There were no differences in moisture, yield, or net return between the low rate, high rate, and untreated check. The severe hail event made yield differences for the various treatments unlikely; therefore, this study needs to be repeated in future years.

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