



# Nebraska On-Farm Research Network

## Foliar Micronutrient Application to Soybean

**Study ID:** 013073201401

**County:** Gosper

**Soil Type:** Holdrege Silt Loam

**Planting Date:** Unknown

**Harvest Date:** Unknown

**Population:** Unknown

**Row Spacing:** Unknown

**Hybrid:** Golden Harvest 28U7

**Soil Test Values:** Not available

**Irrigation:** Pivot – Amounts unknown.

**Reps:** 4

**Previous Crop:** Corn

**Tillage:** No-till

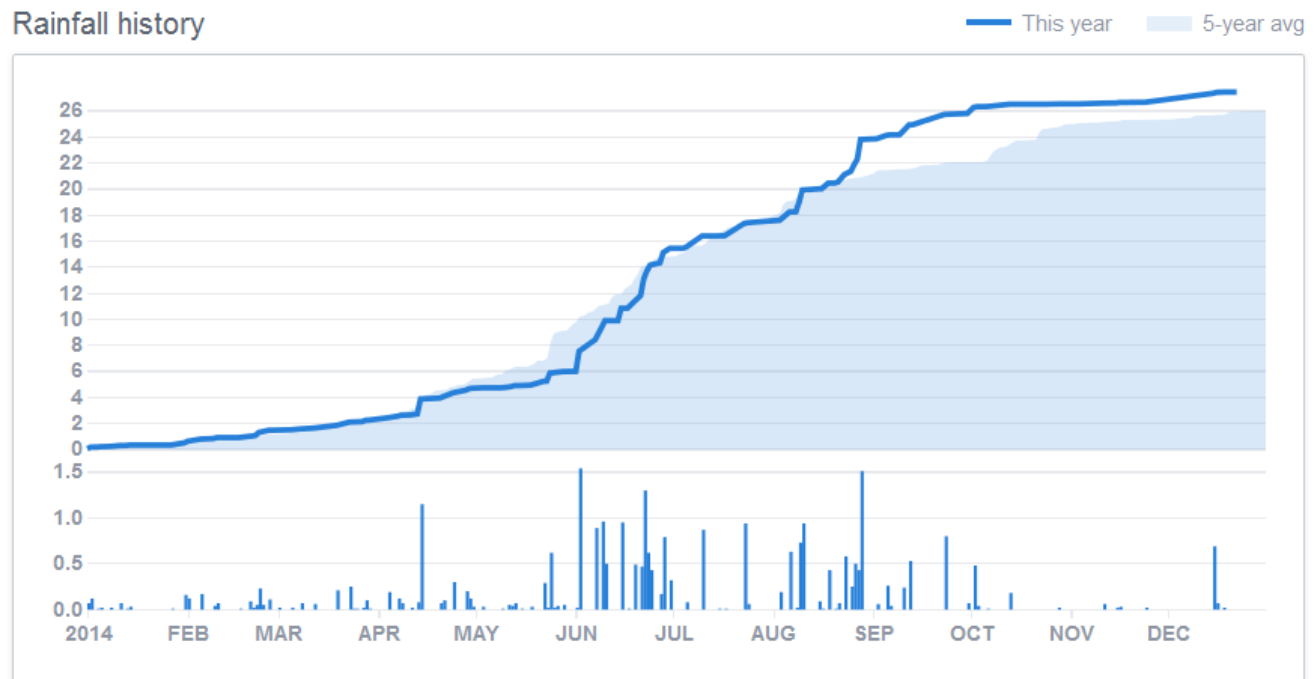
**Herbicides: Pre:** 3 oz/ac Zidua broadcast

**Insecticides/Fungicides:** Poncho/VOTIVO and

CruiserMaxx Plus seed treatments

**Fertilizer:** MAP Variable Rate in January

Rainfall history



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**Introduction:** This study is looking at the effects of foliar fertilizers on soybean yield and concentrations of nutrients in leaf tissue samples. Two foliar fertilizers were used in this study. Product 1 was applied at a rate of 1 qt/ac and Product 2 was applied at a rate of 1 pt/ac. Application was at R1 on July 2nd with a high clearance applicator. Leaf samples were collected from treated and untreated strips approximately 1 month after application and analyzed for nutrient concentrations. Yields were harvested from treated and untreated strips and collected from yield monitor data.

## Product 1:

### Guaranteed Analysis

Total Nitrogen.....8.00%  
Sulfur.....3.00%  
Iron (Fe).....1.0%  
Manganese (Mn).....2.0%  
Zinc (Zn).....3.0%

## Product 2:

### Guaranteed Analysis

Boron (B) .....8%

## Results:

	Yield†	Plant Tissue Samples								Net Return‡
		N	P	K	S	Fe	Mn	B	Zn	
	(bu/ac)	------(%)-----				------(ppm)-----				
<b>Check</b>	72 A*	6.21 A	0.37 A	2.11 A	0.36 A	134.9 A	144.1 A	49.1 A	32.9 A	\$720.00
<b>Foliar Treatment</b>	74 A	6.10 A	0.37 A	2.17 A	0.36 A	133.5 A	148.0 A	49.3 A	33.4 A	\$721.89
<b>P-Value</b>	0.1496	0.3589	0.6952	0.5591	0.8952	0.8482	0.6654	0.9601	0.6725	--

†Bushels per acre corrected to 13% moisture.

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

‡Net return based on \$10.00/bu soybeans, \$24/gal product 1, \$31.93/gal product 2, and \$8.12 ground applicator cost.

**Summary:** At this location, the foliar micronutrient treatments were not significantly different in yield when compared to the non-treated areas. We looked at the tissue sample values for the nutrients applied in the foliar treatment (N, S, Fe, Mn, Zn, and B). There was no difference between the foliar applied treatment and the check for any of these nutrients.

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