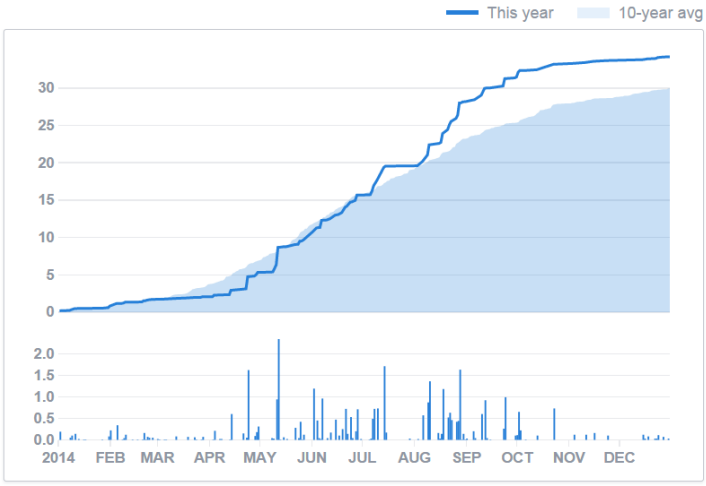
Nebraska On-Farm Research Network

TeraOne HYC Application on Soybeans

Study ID: 032035201404
County: Clay
Soil Type: Hastings silt loam
Planting Date: 5/2/2014
Harvest Date: 9/29/2014
Population: 150,000
Row Spacing: 30”
Hybrid: Mycogen 5N255R
Reps: 6
Soil Test Values: not available
Previous Crop: Corn
Tillage: Conventional Till
Herbicides:
Pre: Op Till PRO and 0.75 pt/ac Salvan on 4/10/14
Post: 32 oz/ac Roundup PowerMAX and 6 oz/ac Volunteer on 6/25/14
Insecticides/Fungicides: 1.6 oz/acre Mustang Maxx on 6/25/14
4 oz/ac Priaxor on 7/29/14
Other Applications: 1 qt/ac Sweet’n Eezy on 6/25/14
Fertilizer: 11-52-0 as variable rate in fall 2013, 6.29 lbs/ac UAN 32% on 4/10/14, 1 gal/ac XRN 28% (28-0-0) on 6/25/14, 1 qt/acre Brant Smart Trio (4-0-0, 3% S, 0.25% B, 3% Mn, 3% Zn) on 6/25/14, 1 qt/ac Manni-Plex foliar micronutrient on 7/29/14.
Irrigation: Pivot – amount unknown
Rainfall:



Introduction: In this study, the prodcers were looking at the effect of TerraOne HYC applied at planting to soybeans on yield and economics. The product is a combination of mycorrhizal fungi and microbes claimed to help make soil nutrients more available and aid in water and nutrient absorption. TeraOne HYC was applied at planting at 0.125 gal/ac. The TeraOne HYC treatment was compared to no starter fertilizer. Dectes (soybean) stem borer was observes before harvest (Figure 1 and 2) therefore stem borer

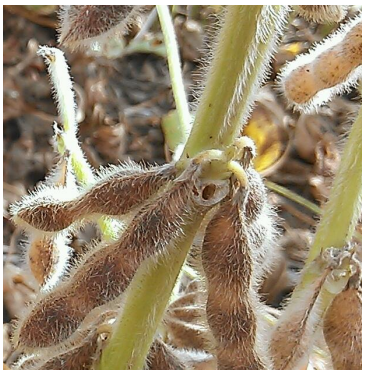


Figure 1: Hole from Dectes (soybean) stem borer observed before harvest where petiole

Figure 2: Slitting open the stem reveals the Dectes stem borer creating it’s winter home at the base of the plant.

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counts were also taken.

Results:

	Yield† (bu/acre)	Moisture (%)	Stem Borer (%)	Harvest Pop (plants/acre)	Net Return ‡
Check	80 A*	11.2% A	11.7% A	120,000 A	
TeraOne HYC	81 A	11.1% A	10.8% A	119,500 A	
P-Value	*0.5936*	*0.1747*	*0.6109*	*0.5177*	

†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/bu soybeans, and $14.50/ac for TeraOne HYC

Summary: Results showed no statistical difference between the untreated check and TeraOne HYC on yield, moisture, stand count, or amount of Dectes stem borer present in the field at harvest.

Sponsored by: University of Nebraska Lincoln

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