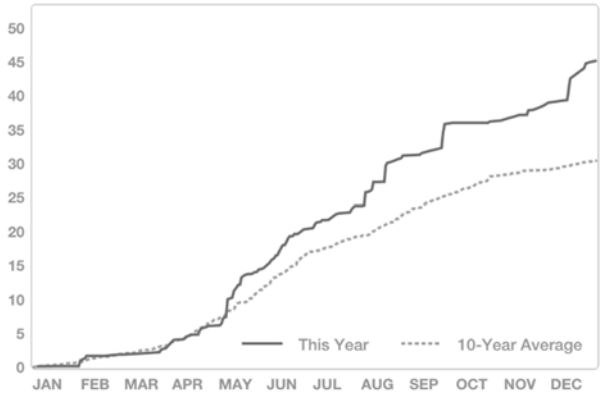
Nebraska On-Farm Research Network

Evaluating the Yield Response of Insect Control Traits in Rainfed Corn: VT2 vs VT3 Hybrid

Study ID: 030109201501
County: Lancaster
Soil Type: Wymore silty clay loam; Yutan silty clay loam; Aksarben silty clay loam;
Planting Date: 4/29/15
Harvest Date: 11/5/15
Population: 30,000
Row Spacing (in.) 30
Hybrid: DKC 62-97 VT3 and DKC 62-98 VT2
Reps: 8
Previous Crop: Soybean
Tillage: No-Till
Herbicides: ***Pre:*** 2.1 qt/acre Bicep ***Post:*** 1.8 oz/acre Callisto and 1 qt/acre Roundup
Seed Treatment: unknown
Foliar Insecticides: None
Foliar Fungicides: None

Fertilizer: 160 lbs/ac actual N as anhydrous ammonia, fall 2014

Irrigation: None
Rainfall (in.):



Introduction: Corn hybrids today can be purchased with and without pest management traits. The purpose of this study was to evaluate the performance of two hybrids genetically the same except for the addition of the corn rootworm trait. This field is in a corn/soybean rotation. This is a continuation of a similar effort in previous years.

Results:

	Yield (bu/ac)†	Moisture (%)	Marginal Net Return ($/ac)‡
VT2	203 B*	14.7 A	$740.95
VT3	206 A	14.7 A	$745.51
P-Value	0.0296	0.4512	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 and $6.39/acre marginal additional cost for VT3 trait over VT2.

Summary: There was no grain moisture difference between the VT2 and VT3 hybrids. Yield was higher for the VT3 hybrid. The additional 3 bu/ac for the VT3 hybrid was enough to cover the marginal additional cost of the VT3 trait. These results are different than results of this study in 2014. The two Lancaster county sites in 2014 had no yield increase for using the VT3 hybrid in a corn/soybean rotation.

In Partnership with: