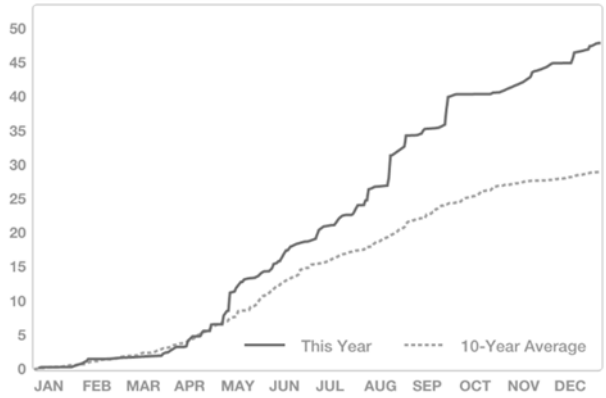
Nebraska On-Farm Research Network

Torque® on Corn

Study ID: 007155201501
County: Saunders
Soil Type: Yutan silty clay loam; Aksarben silty clay loam;
Planting Date: 5/22/15
Harvest Date: 11/1/15
Population: 28,000
Row Spacing (in.) 15
Hybrid: Channel 211-33VT2/Channel 213-26VT2
Reps: 8
Previous Crop: Soybean
Tillage: No-Till
Herbicides: ***Pre:*** Corvus, Atrazine, and Agrotain on 5/23/15 ***Post:*** Laudis, Roundup, and AMS
Seed Treatment: Acceleron 250
Foliar Insecticides: unknown
Foliar Fungicides: unknown

Fertilizer: 120 lb/ac UAN 32% on 5/23/15
10 gal/ac 10-34-0 and 1pt/ac chelated zinc on 5/22/15
Irrigation: None
Rainfall (in.):



MINIMUM GUARANTEE

ACTIVE: 2 x 10^{-7}% lipo-chitooligosaccharide (LCO) formulated for corn applications

OTHER INGREDIENTS: Aqueous carrier > 99%

Product information from:
http://www.monsanto.com/products/pages/torque-us.aspx

Introduction: The purpose of this study was to determine if the product Torque® improved corn yields. The product was applied at a rate of 1 pt/ac with starter fertilizer. Product ingredients at right. Two different hybrids were used in this study in a split-plot design (main-plot factor was Torque® vs no-Torque®, subplot factor was hybrid).

Results:

Effect	Yield Pr>F	Moisture Pr>F
Torque® Treatment	0.1486	0.0452
Hybrid	0.0005	0
Torque® Treatment * Hybrid	0.7408	0.2381

Because there was no interaction between Torque® treatment and the hybrid, the means of these are reported individually below.

Hybrid	Yield (bu/ac)†	Moisture (%)	Marginal Net Return ($/ac)‡
Channel 211-33VT2	212 B*	14.1 B	773.80
Channel 213-26VT2	217 A	15.1 A	792.05
P-Value	0.0005	0	N/A
Torque	**Yield (bu/ac)†**	**Moisture (%)**	**Marginal Net Return ($/ac)‡**
Check (10-34-0)	213 A	14.58 B	777.45
Torque (w/ 10-34-0)	215 A	14.64 A	775.73
P-Value	0.1486	0.0452	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/bu corn and $9.02/acre Torque® cost. There was no price difference between the two hybrids used.

Summary: The Torque® treatment did not result in a significant yield increase. There was a yield difference between the two hybrids, with Channel 213-26VT2 having a higher yield. Grain moisture at havest was significantly higher for the Torque® treatment and for the hybrid Channel 213-26VT2.

In Partnership with: