

Effect of Gaucho (Imidacloprid) Seed Treatment on Corn Yield

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Objective

To evaluate the effect of Gaucho seed treatment on corn yield.

Background

Cooperator:	Tom Weiler	Fertilizer:	170 lb/A N, 27 lb/A
County:	Morrow		P ₂ O ₅ , 125 lb/ A K ₂ O
Nearest town:	Chesterville	Herbicide:	PRE: 1.5 pt/A Dual II
Drainage:	Naturally well-drained		Magnum, 2 lb/A Atrazine,
Soil type:	Chili loam		2 oz/A Balance Pro
Tillage:	Conventional		POST: 4 oz/A Distinct
Previous Crop:	Soybeans	Row Width:	30-inch
Variety:	See below	Planting Date:	May 16
Soil Test:	pH 6.3, P 36 ppm, K 159 ppm	Planting Rate:	30,100 seeds/A
		Harvest Date:	October 22

Methods

Gaucho treated seeds from each corn hybrid, Vigoro V5110 and Golden Harvest 8770, were compared with untreated seeds of the same hybrid. A split-planter design was used. Each treatment strip was six-rows wide and 500 feet long (0.17 A), replicated six times. The entire area was harvested and weighed with a weigh wagon.

Results

Table 1. Corn Yields With and Without Seed Treatment.^a

Treatment	Hybrid	Yield (bu/A)	Yield (bu/A)
Gaucho	Vigoro V5110	49.0 b	
No Gaucho	Vigoro V5110	53.2 a	
Gaucho	Golden Harvest 8770		62.0 b
No Gaucho	Golden Harvest 8770		75.8 a
	LSD (0.05)	3.8	11.5
	F-test	9.4	11.0

^a Means in same column followed by the same letter are not significantly different.

Summary

While monitoring the plots throughout the spring and summer, it was observed that the Gaucho-treated rows appeared greener and healthier compared to the untreated rows. When the plots were harvested on October 22, yields in the Gaucho-treated plots were significantly lower than the untreated plots (Table 1). Due to droughty conditions, the 2002 crop year may not have been a very good growing season to evaluate the use of seed treatments. We will try to evaluate the use of Gaucho-treated seed corn in the future when more normal growing conditions prevail.

Acknowledgment

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