

Performance of Stacked Corn Hybrids without the Presence of Rootworm.

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Objective

To determine what effect the inclusion of Bt rootworm resistance has on corn yield.

Background

Crop Year:	2010	Soil Test:	pH 6, P 60 ppm, K 140 ppm
Location:	County Home Farm		CEC = 9.9
County/Town:	Morrow/Mt. Gilead	Planting Date:	May 10
Soil Type:	Centerburg Silt Loam	Nitrogen:	150 lb./ac
Drainage:	Moderately Drained	Seeding Rate:	27,000 seeds/A
Previous Crop:	Soybeans	Row Width:	30 inches
Hybrid:	Seed Consultants SC 1119 & SCS 11HQ19 TM	Herbicide:	Lexar
Tillage:	One pass	Harvest Date:	November 2

Methods

The study consisted of four replications in a randomized complete block experimental design. Two corn hybrids SC 1119 (non transgenic) and its Hxx counterpart, SCS 11HQ19TM, with Bt resistance to rootworm and corn borer (stacked) were used. The treatments were 6 rows 340 feet in length. All replications received 150 lb N/A as Environmentally Sensitive Nitrogen (ESN) and 300 lb of 0-14-42 and incorporated with a one pass finishing tool on May 7. Each plot was harvested and weighed with a weigh wagon. Yields were adjusted to 15% grain moisture content.

Results

Corn Yield (bu/ac)	
Hybrid	Yield (bu/A)
SC 1119	163.09
SCS 11HQ19	162.53
LSD (0.05)	10.46

Summary

No significant difference in yields existed between the hybrids. There were no differences in final stands, stalk lodging or grain moisture. Results suggest that in absence of rootworm pressure hybrids with and without Bt RW resistance produce similar yields

Acknowledgement

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