

Evaluation of Effect of Insecticide Application on Soybean Yields

Chris Bruynis, Ph.D., Ohio State University Extension Educator, Erie Basin EERA & Wyandot County

Objective

To determine if there is a yield response in soybeans treated with Asana XL.

Background

Crop Year:	2010	Tillage:	conventional tillage
Location:	Upper Sandusky, OH	Planting Date:	5/9/2010
County/Town:	Wyandot County	Variety:	Pioneer 93Y20
Soil Type:	Blount Silt Loam	Seeding Rate:	200,000 seed per acre in 7.5
Drainage:	Subsurface Drainage 40 ft		inch row spacing
	spacing	Harvest Date:	10/11/2010
Previous Crop:	Corn		

Methods

The study was designed with one treatment and control replicated two times in two locations in a randomized complete block design. The plot size at location one was 60 feet wide by 500 feet long and location two was 90 feet wide by 350 feet long. Application was made with a 120 foot boom sprayer.

Treatment of 9.6 ounces of Asana XL was applied on July 6, 2010 with flat fan nozzles with 20 gallons of water. No other products were applied in conjunction with the insecticide. At time of application there was slight insect defoliation noted but damage was not at threshold levels. There were no visible weeds at time of treatment or at harvest in the plot areas.

Harvesting was completed with a John Deere combine equipped with a calibrated yield monitor. A full swath width of 34 feet was harvested from the center of each plot to determine yield.

Results

Soybean Yield (bu/ac) Response to Insecticide Treatment	
Treatment	Yield (lbs/A)
Insecticide Applied	45.2
No Insecticide Applied	39.7
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LSD (0.05)	2.12

Summary

Based on this research, the application of Asana XL resulted in a significant ($p > .05$) increase in yield. The average increase was 5.4 bushels per acre. With the current soybean price of \$12.00 this potentially could result in increased revenue (\$64.80) less the cost of material (\$9.75) and application (\$7.50) for a net gain of \$47.55 per acre. This was one comparison and other plots may not provide the same response.

Acknowledgement

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For more information, contact:

Chris Bruynis
OSU Extension, Wyandot County
109 S Sandusky Ave, Rm 16
Upper Sandusky, OH 43351
bruynis.1@osu.edu

