

**EVALUATION OF SOIL APPLIED AND SEED TREATMENT INSECTICIDES AND YIELDGARD®
CORN ROOTWORM TECHNOLOGY FOR CONTROL OF CUTWORM LARVAE, 2003.**

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Ten insecticide treatments and a YieldGard Rootworm hybrid (Asgrow RX708YGRW) were evaluated for their efficacy against cutworm larvae at the OARDC Western Branch Station near South Charleston, OH. The insecticides were applied at planting on 22 May to two rows (30 inch spacing) by 190 ft long plots arranged in a RCBD with four replicates per plot. All of the insecticide treatments were applied to the corn hybrid, Asgrow RX708, an isolate of Asgrow RX708YGRW. Five granular insecticides (Aztec 2.1G, Counter 20CR, Force 3G, Fortress 2.5G and Lorsban 15G) were applied either in-furrow (IF) or T-banded (TB) with a modified Noble applicator that was calibrated to deliver the desired rate. Two granular insecticides (Aztec 4.67G and Fortress 5G) were placed either in-furrow (IF) or T-banded (TB) with a SmartBox metering system calibrated to deliver the desired rate. The liquid insecticide Capture 2EC was applied as a T-band (TB) with a CO₂ calibrated sprayer using a TeeJet 650067 nozzle calibrated to deliver 3 gal/ace. The seed applied insecticides, Cruiser 5FS and Poncho 1250, were commercially applied to the seed before planting. Asgrow RX708YGRW was treated with the seed applied insecticide Gaucho at 0.16 mg ai/kernel. Counts of total stand in 100 row ft were taken on 25 June at the V6 stage of growth. Plots were machine harvested on 5 Nov.

Significant differences in total stand were observed among treatments. Significant differences in yield were not observed between the treatments and the untreated check.

Table 1. Stand counts, plants damage and yield observed in continuous corn trial.

Treatment	Application Rate	Appl.^a Method	Stand Count (Undamaged Plants/100 Row Feet)	Plants Damaged by Cutworm/100 Row Feet	Yield (bu/A)
Aztec 2.1G	6.7 oz/1000'	NB TB	153.00 ab	0.50 ab	189.8 a
Aztec 4.67G	3 oz/1000'	SB TB	133.75 c	2.75 bcd	179.2 a
Capture 2EC	0.37 fl oz/1000'	NZ TB	169.00 a	0.00 a	194.4 a
Counter 20CR	6 oz/1000'	NB TB	132.50 c	5.25 def	181.4 a
Cruiser 5FS	1.25 mg ai/kernel	ST	134.50 c	4.75 cdef	189.7 a
Force 3G	4 oz/1000'	NB TB	164.75 a	0.00 a	197.6 a
Fortress 2.5G	7.4 oz/1000'	NB IF	129.75 c	3.25 cde	168.1 a
Fortress 5G	3.7 oz/1000'	SB IF	124.50 c	7.25 f	172.3 a
Lorsban 15G	8 oz/1000'	NB TB	140.00 bc	3.75 cde	184.1 a
Poncho 1250	1.25 mg ai/kernel	ST	139.50 bc	5.00 cdef	186.2 a
YieldGard Rootworm ^b			132.25 c	2.75 bcd	180.4 a
Untreated			133.75 c	2.50 abc	176.8 a

Means in a column followed by the same letter are not significantly different (p=0.05)

^a NB TB = Noble T-band, SB IF = SmartBox In-furrow, NB IF = Noble In-Furrow, ST = Seed Treatment, NZ TB = Nozzle T-Band

^b YieldGard Rootworm hybrid treated with Gaucho at 0.16 mg ai/seed.