

**EVALUATION OF PLANTING TIME, PRE-EMERGENCE AND POST EMERGENEC TREATMENTS
TO REDUCE STAND LOSS BY CUTWORM ON FIELD CORN, 2002.**

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One granular soil insecticide treatment applied at planting and three liquid broadcast treatments applied as pre-emerge and post-emerge were evaluated for reduction of stand loss of corn due to cutworm at the OARDC Western Branch Station near South Charleston, OH. The granular treatment was applied 23 May at the time of planting four-row plots (30 inch spacing) by 60 ft long in a RCBD with four replicates per treatment. Pre-emergence broadcast treatments were applied 28 May with a sprayer having a boom length of 10 ft and TeeJet® 8002 nozzles spaced at 15 inch intervals. The system was calibrated to apply 26.5 gpa at 35 psi at a tractor speed of 3 mph. Post-emergence broadcast treatments were applied 10 June when plant cutting by cutworm was observed. Stand counts were made on 10 June before the post-emergence treatment and on 21 June when corn was in the V5 leaf stage of development. Plots were machine harvested on 14 Oct.

Significant differences in stand (undamaged plants) were observed among treatments at both stand counts. The granular and pre-emergence broadcast treatments provided the best stand protection. Significant differences in yield were not observed between treatments and untreated check.

Table 1. Stand counts and yields of insecticide treated corn plots.

Treatment/ Formulation	Rate of Application	Application timing	Stand Count/100 row ft (undamaged plants)		Yield Bushels/Acre
			June 10	June 21	
Force 3G	4 oz/1000'	Planting	71.00 a	70.50 ab	165.3 a
Asana XL	6 fl oz/A	Pre-emerge	66.00 a	66.00 bc	146.3 a
Mustang	3.2 fl oz/A	Pre-emerge	68.00 a	66.25 bc	152.9 a
Warrior 1CS	2.56 fl oz/A	Pre-emerge	72.00 a	73.00 a	153.0 a
Asana XL	6 fl oz/A	Post-emerge	53.25 b	55.25 e	140.7 a
Mustang	3.2 fl oz/A	Post-emerge	56.75 b	63.00 cd	150.4 a
Warrior 1CS	2.56 fl oz/A	Post-emerge	51.75 b	53.25 e	139.7 a
Untreated			58.00 b	58.00 de	145.8 a

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

Table 2. Stand counts and yield per strategy in first year corn trial.

Treatment Strategy	Stand per 100 Row Ft.		Yield Bushels/Acre
	June 10	June 21	
Granule at Planting	71.00	70.50	165.3
Average Pre-emergence	68.67	68.40	150.7
Average Post-emergence	53.90	57.17	143.6
Untreated	58.00	58.00	145.8