

## EVALUATION OF INSECTICIDES TO REDUCE STAND LOSS BY SEEDCORN MAGGOT ON FIELD CORN, 2003.

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Two trials were established at the OARDC Western Branch Station near South Charleston, OH to evaluate seed applied insecticides, granular insecticides and hopper-box insecticide treatments for seedcorn maggot control in corn. Alfalfa was disked under in early May and the ground allowed to lay fallow for 2 weeks.

Trial 1: Two seed applied insecticides, Cruiser and Gaucho, were planted on 14 May in four-row plots (30 inch spacing) by 60 ft long in a RCBD with four replicates per treatment. Cruiser was applied to the seed at three rates (0.125, 0.25 and 0.50 mg ai/kernel) and Gaucho at one rate (0.16 mg ai/kernel). Stand count was made on 10 June by counting the number of plants in 50 ft of the 2 center rows. Corn was in the V4 leaf stage of development. Plots were machine harvested on 31 Oct.

Significant differences in stand and yield were observed among treatments.

Table 1: Stand counts and yield observed in corn infested with seedcorn maggot.

Treatment	Rate mg ai/kernel	Stand/100 row feet	Yield (bu/A)
Cruiser 5FS	0.125	151.00 a	165.0 a
Cruiser 5FS	0.250	152.75 a	171.8 a
Cruiser 5FS	0.500	158.75 a	171.0 a
Gaucho	0.160	125.00 b	142.4 b
Untreated Check		84.00 c	118.0 c

Means in a column followed by the same letter are not significantly different @ P = 0.05.

Trial 2: Two seed applied insecticides, Gaucho and Poncho 250, a granular insecticide (Aztec 2.1G) and a hopper-box applied insecticide (Agrox Premiere) were planted on 14 May in four-row plots (30 inch spacing) by 60 ft long in a RCBD with four replicates per treatment. The granular and hopper-box treatments were applied at the time of planting. Stand count was made on 10 June by counting the number of plants in 50 ft of the 2 center rows. Corn was in the V4 leaf stage of development. Plots were machine harvested on 31 Oct.

Significant differences in stand were observed among treatments. The hopper-box treatment Agrox Premiere and the seed applied insecticide Poncho 250 provided the best stand protection. Significant differences in yield were observed between the treatments and untreated check.

Table 2: Stand and yield observed in field corn infested with seedcorn maggot.

Treatment	Rate	Application	Stand/100 row feet	Yield (bu/A)
Agrox Premiere	1.5 oz/42# Seed	Hopper-box	161.50 a	161.3 a
Aztec 2.1G	6.7 oz/1000'	T-Band	139.75 bc	153.4 a
Aztec 2.1G	5 oz/1000'	In-furrow	137.50 bc	149.9 a
Gaucho	0.16 mg ai/seed	Seed Applied	135.50 c	161.6 a
Poncho 250	0.25 mg ai/seed	Seed Applied	156.50 ab	164.9 a
Untreated Check			93.00 d	122.6 b

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