

White Grub Management in Field Corn Using Seed Treatments and Soil Insecticides, 2002: 'N58-D1' was planted on April 16 at the University of Delaware Research and Education Center located near Georgetown, DE at a rate of 24,000 plants per acre. Four-row 40 foot long plots on 30-inch centers were replicated 4 times in a RCB design. Seed-applied treatments were applied commercially by Gustafson and Syngenta Seeds. The liquid in-furrow treatments were applied in 5.5 gallons of water per acre. Force 3G and Counter CR granular treatments were placed in-furrow. Stand counts and wireworm damaged plants were evaluated on a 7-10 day basis from April 24 through May 29. Yields were taken from the center two rows of each plot on September 11. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

White grub pressure was moderate (2 per sq. foot before planting). No significant differences were observed between the stand counts and yield when compared to the untreated check. On May 7, all treatments provided significantly better grub control compared to the untreated check except Counter, the high rate of Warrior and Regent. On May 17, all treatments provided significantly better grub control compared to the untreated check except Gaucho, Prescribe, Mustang, Warrior and Regent. No phytotoxicity was observed.

I. Stand Count Data

Treatment	Rate	# Plants/100 ft				
		April 29	May 7	May 14	May 21	May 28
Gaucho 600	.161 mg ai/seed	120.25a	123.25a	124.00a	132.25a	149.00a
Gaucho 600 - Prescribe	1.34 mg ai/seed	117.25a	122.50a	128.00a	133.75a	134.50ab
Poncho (Clothianidin)	0.25 mg ai/seed	117.75a	120.50a	125.00a	126.75a	127.50b
L0263	0.125 mg ai/seed	116.00a	119.25a	120.75a	129.00a	125.75b
L0263	0.08 mg ai/seed	122.25a	127.50a	125.25a	131.00a	133.50ab
Cruiser	100 g ai/100 kg seed	116.00a	121.25a	122.00a	130.75a	130.25ab
Cruiser	500 g ai/100 kg seed	121.25a	126.00a	131.25a	136.00a	141.50ab
Force ST (Proshield)	527 g ai/100 kg seed	122.25a	120.50a	134.25a	131.25a	141.00ab
Force 3 G	5.5 lbs/acre	121.00a	124.25a	125.75a	133.75a	138.50ab
Counter 20CR	6.5 lbs/acre	119.25a	123.75a	128.50a	133.75a	136.00ab
Mustang 1.5 EW	4.2 oz/A	123.50a	126.00a	125.25a	135.25a	136.00ab
Warrior T	1.92 oz/acre (.11oz/1000 ft)	123.25a	122.25a	120.50a	120.00a	122.50ab
Warrior T	3.2 oz/acre (.18oz/1000ft)	114.00a	121.50a	124.50a	132.75a	130.75ab
Regent 4 SC	4.16 oz/A (.24 oz/1000ft)	122.00a	124.50a	121.25a	130.25a	132.25ab
Untreated	-----	116.50a	126.00a	123.75a	129.75a	141.50ab

Means within a column followed by the same letter are not significantly different (Ryans' q test; P = 0.05).

II. White Grub Damaged Plants and Yield

Treatment	Rate	Yield (BU/A)	% White Grub Damaged Plants			
			May 7	May 14	May 21	May 29
Gaucho 600	.161 mg ai/seed	183.06a	0.61bc	0.40abc	0.19a	1.17a
Gaucho 600 - Prescribe	1.34 mg ai/seed	180.22a	1.22bc	0.39abc	0.00a	1.67a
Poncho (Clothianidin)	0.25 mg ai/seed	187.78a	0.83bc	0.20bc	0.00a	1.18a
L0263	0.125 mg ai/seed	189.04a	1.47abc	0.00c	0.19a	1.59a
L0263	0.08 mg ai/seed	191.32a	0.39bc	0.00c	0.00a	0.94a
Cruiser	100 g ai/100 kg seed	160.41a	0.41bc	0.20bc	0.19a	2.30a
Cruiser	500 g ai/100 kg seed	202.12a	0.20c	0.19bc	0.00a	0.18a
Force ST (Proshield)	527 g ai/100 kg seed	204.17a	0.00c	0.00c	0.00a	0.71a
Force 3 G	5.5 lbs/acre	188.53a	0.40bc	0.20bc	0.19a	0.72a
Counter 20CR	6.5 lbs/acre	179.00a	1.41abc	0.00c	0.19a	1.10a
Mustang 1.5 EW	4.2 oz/A	186.13a	0.99bc	0.40abc	0.00a	0.55a
Warrior T	1.92 oz/acre (.11oz/1000 ft)	191.42a	0.61bc	1.45abc	0.00a	0.61a
Warrior T	3.2 oz/acre (.18oz/1000ft)	193.39a	1.65abc	1.61ab	0.19a	1.53a
Regent 4 SC	4.16 oz/A (.24 oz/1000ft)	189.29a	2.21ab	1.65ab	0.77a	1.70a
Untreated	-----	172.70a	2.98a	1.82a	0.19a	2.47a

Means within a column followed by the same letter are not significantly different (Ryans' q-test; P = 0.05).

White Grub Management in Field Corn Using Seed Treatments and Soil Insecticides #2, 2002: 'N58-D1' was planted on May 6 at the Wells Farm located near Milford, DE at a rate of 24,000 plants per acre. Four-row 40 foot long plots on 30-inch centers were replicated 4 times in a RCB design. Seed-applied treatments were applied commercially by Gustafson and Syngenta Seeds. The liquid in-furrow treatments were applied in 5.5 gallons of water per acre. Force 3G and Counter CR granular treatments were placed in-furrow. Stand counts and wireworm damaged plants were evaluated on a 7-10 day basis from May 17 through June 11. Yields were taken from the center two rows of each plot on October 2. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

White grub pressure was low (0.5 per sq. foot before planting). No significant differences were observed between treatments and the untreated control. No phytotoxicity was observed.

Treatment	Rate	Stand Count per 100 ft of row					Yield BU/A
		May 17	May 22	May 29	June 6	June 11	
GaUCHO 600	.161 mg ai/seed	147.50a	153.75a	129.50a	131.75a	136.00a	146.54a
GaUCHO 600	1.34 mg ai/seed	144.25a	156.00a	133.25a	142.75a	139.75a	153.02a
Poncho (Clothiandin)	0.25 mg ai/seed	147.50a	152.75a	136.00a	133.50a	139.50a	166.52a
L0263	0.125 mg ai/seed	148.25a	152.50a	121.00a	127.25a	129.75a	169.62a
L0263	0.08 mg ai/seed	149.00a	156.75a	138.75a	145.00a	141.00a	176.01a
Cruiser 5FS	100 g ai/100 kg seed	150.50a	156.75a	139.00a	144.25a	143.25a	132.14a
Force 3 G	5.5 lbs/acre	151.25a	153.50a	138.25a	136.75a	139.25a	189.17a
Counter 20CR	6.5 lbs/acre	138.75a	154.50a	136.50a	138.00a	139.25a	167.08a
Mustang 1.5 EW	4.2 oz/A	146.25a	154.75a	131.00a	132.25a	133.50a	155.81a
Warrior T	3.2 oz/acre	151.50a	159.75a	140.50a	141.75a	141.50a	137.72a
Regent 4 SC	4.16 oz/A	142.00a	152.25a	118.50a	126.50a	126.75a	165.29a
Untreated	-----	141.75a	157.25a	132.00a	127.25a	133.25a	138.29a

Means within a column followed by the same letter are not significantly different (Ryan's q-test; P=0.05).