

**White Grub Management in Field Corn Using Seed Treatments and Soil Insecticides, 2003:** 'N70-D5' was planted on April 17 at Uniatowski Farms located near Townsend, DE at a rate of 26,000 plants per acre. Four-row 30 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. Stand counts and wireworm damaged plants were evaluated on a 7-10 day basis from May 5 through May 21. Yields were taken from the center two rows of each plot on September 29. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

White grub pressure was moderate (4 per sq. foot before planting). No significant difference was observed between the stand counts and yield when compared to the untreated check. On May 5, Cruiser and Warrior provided significantly better grub control compared to the untreated check. On May 12, all treatments provided significantly better grub control compared to the untreated check except Gaucho alone, Gaucho plus Kernel Guard and Gaucho plus Warrior. On May 21, all treatments provided significantly better grub control compared to the untreated check. No phytotoxicity was observed.

### ***I. Insect Damage Data***

Treatment	Rate	% White Grub Damaged Plants		
		May 5	May 12	May 21
Poncho	.25 mg ai/seed	0.80ab	0.77c	1.10b
Gaucho	.161 mg ai/seed	0.90ab	1.67bc	0.84b
Gaucho + Kernel Guard	.161 mg ai/seed + 3.57 oz/cwt	2.34ab	3.30abc	0.82b
Gaucho + Warrior	.161 mg ai/seed + 3.84 oz/A	1.07ab	4.18ab	1.84b
Cruiser 5F	.125 mg ai/seed	0.33b	1.43bc	1.39b
Cruiser 5F + Kernel Guard	.125 mg ai/seed+ 3.57 oz/cwt	1.44ab	2.00bc	0.47b
Cruiser 5F + Warrior	.125 mg ai/seed + 3.84 oz/A	2.85ab	2.76bc	0.37b
Kernel Guard	3.57 oz/cwt	1.26ab	2.98abc	0.57b
Warrior	3.84 oz/A	0.28b	1.31bc	1.58b
Untreated	-----	3.23a	5.90a	5.31a

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

## ***II. Stand Count and Yield Data***

Treatment	Yield Data BU/A	Plant Count per 60 ft of row		
		May 5	May 12	May 21
Poncho	145.95a	91.75a	92.25a	91.75a
Gaicho	137.80a	85.25a	92.25a	92.50a
Gaicho + Kernel Guard	135.31a	86.75a	91.00a	92.75a
Gaicho + Warrior	149.22a	91.75a	94.75a	95.00a
Cruiser 5F	135.14a	86.25a	88.50a	89.25a
Cruiser 5F + Kernel Guard	151.46a	95.75a	98.75a	99.00a
Cruiser 5F + Warrior	110.31a	93.00a	96.00a	95.00a
Kernel Guard	127.84a	92.50a	93.00a	93.50a
Warrior	147.38a	91.75a	97.75a	96.25a
Untreated	133.63a	84.25a	88.00a	90.00a

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