

Black cutworm Control with seed treatment on Corn in Kansas – 2006 Greenhouse Trial

Planting date: May 10, 2006

Gerald Wilde, Kansas State University, Department of Entomology, Manhattan, KS Evaluation date: May 23, May 26, May 31, 2006

Pest: Black cutworm, Agrotis ipsilon

Crop: Corn, 33 treatments

Location: Manhattan, Kansas (Greenhouse)

Hybrids: Trt 1-13, N67-D6; Trt 14-21, TAX13676;

Trt 22-28, Pioneer 33R81; Trt 29-33, N67-D6

Planting Date: May 10, 2006 Soil Characteristics: To be obtained Plot Size: 6 inch pots

Experimental Design: Randomized Complete Block, 4 replications

Planting Information: Corn planted 1-2 inch depth; Soil in good moist condition at planting; 1

seed per pot.

Field History: None Phytotoxicity: None noted

Evaluation: Corn planted in 6 inch pots on 05/10/06 (1 seed per pot). Infested with

2 early second instar black cutworm larvae/pot on 05/20/06. Evaluated 05/23/06, 05/26/06 and 05/31/06. Damage rating using 0-10 scale where 0= no damage and 10= plant dead, cut, or entirely consumed.

Trt. No.	Treatment/ Product Name	Damage Rating (Mean ± SE)		
		May 23, 06	May 26, 06	May 31, 06
1	Untreated check	8.8 ± 1.3abc	$10.0 \pm 0.0a$	$10.0 \pm 0.0a$
2	Control Fungicide	$10.0 \pm 0.0a$	$10.0 \pm 0.0a$	$10.0 \pm 0.0a$
3	Cruiser 5 FS @ 0.25 MGA/seed	3.8 ± 2.4 cdef	5.5 ± 2.6 abcd	5.0 ± 2.9 abcd
4	Cruiser 5 FS @ 0.25 MGA/seed + Force 20 CS @ 5.0 GA/100 Kg seed	$3.0 \pm 0.7 def$	5.5 ± 2.6abcd	3.5 ± 2.2 bcd
5	Cruiser 5 FS @ 0.25 MGA/seed + Force 20 CS @ 10.0 GA/100 Kg seed	5.3 ± 2.0abcde	8.0 ± 2.0 ab	6.3 ± 2.4 abc
6	Cruiser 5 FS @ 0.25 MGA/seed + Force 20 CS @ 20.0 GA/100 Kg seed	6.8 ± 2.1abcd	10.0 ± 0.0 a	10.0 ± 0.0 a
7	Cruiser 5 FS @ 0.25 MGA/seed + Force 20 CS @ 40.0 GA/100 Kg seed	5.3 ± 1.8abcde	$8.8 \pm 1.3a$	$10.0 \pm 0.0a$
8	Cruiser 5 FS @ 0.25 MGA/seed + A13219 CS @ 5.0 GA/100 Kg seed	5.0 ± 2.6abcd	8.3 ± 1.8a	5.0 ± 2.9 abcd
9	Cruiser 5 FS @ 0.25 MGA/seed + A13219 CS @ 10.0 GA/100 Kg seed	9.0 ± 0.6ab	$8.8 \pm 1.3a$	8.0 ± 2.0 ab
10	Cruiser 5 FS @ 0.25 MGA/seed + A13219 CS @ 20.0 GA/100 Kg seed	6.5 ± 2.2abcd	$10.0 \pm 0.0a$	6.0 ± 2.4 abc
11	Cruiser 5 FS @ 0.25 MGA/seed + A13219 CS @ 40.0 GA/100 Kg seed	4.0 ± 2.3bcdef	5.5 ± 2.6abcd	2.5 ± 2.5bcd

12	Poncho 250 5 SC @ 0.25 MGA/seed	$0.0 \pm 0.0 f$	0.0 ± 0.0 d	0.0 ± 0.0 d
13	Force 3 G @ 1.12 GA/100 row meter	0.3 ± 0.3 ef	$8.8 \pm 1.3a$	5.0 ± 2.9 abcd
14	Untreated check	7.3 ± 1.6abcd	6.3 ± 1.7 abc	5.0 ± 2.0 abcd
15	Poncho 600 @ 0.25 MGA/seed	3.8 ± 1.7 cdef	2.5 ± 2.5 bcd	1.3 ± 1.3 dc
16	V-10170 2.32 SC @ 0.25 MGA/seed	$3.3 \pm 2.4 def$	5.0 ± 2.9 abcd	5.0 ± 2.9 abcd
17	V-10170 2.32 SC @ 0.35 MGA/seed	4.5 ± 2.6bcdef	5.0 ± 2.9 abcd	2.5 ± 2.5 bcd
18	V-10112 1.77 SC @ 0.25 MGA/seed	4.5 ± 1.5bcdef	6.0 ± 2.0 abc	6.5 ± 2.2 abc
19	V-10112 1.77 SC @ 0.35 MGA/seed	7.5 ± 2.5 abcd	$7.0 \pm 2.4ab$	5.0 ± 2.9 abcd
20	V-10194 EC @ 0.25 MGA/seed	4.5 ± 2.6bcdef	5.0 ± 2.9 abcd	4.5 ± 2.6abcd
21	V-10194 EC @ 0.30 MGA/seed	$2.5 \pm 2.5 def$	5.0 ± 2.9 abcd	2.5 ± 2.5 bcd
22	Untreated check	7.5 ± 2.5 abcd	$7.0 \pm 2.4ab$	6.3 ± 2.4 abc
23	Poncho FS @ 1.25 MGA/seed	$2.5 \pm 2.5 def$	5.0 ± 2.9 abcd	5.0 ± 2.9 abcd
24	Poncho FS @ 0.25 MGA/seed.	$0.0 \pm 0.0 f$	0.8 ± 0.8 dc	0.0 ± 0.0 d
25	Poncho FS @ 0.25 MGA/seed + Aztec 2.1G @ 172 GA/ha	$0.0 \pm 0.0 f$	0.0 ± 0.0 d	0.0 ± 0.0 d
26	Poncho FS @ 1.25 MGA/seed + Aztec 2.1G @ 172 GA/ha	$0.0 \pm 0.0 f$	$0.0\pm0.0d$	0.0 ± 0.0 d
27	Cruiser 5 FS @ 1.25 MGA/seed	3.0 ± 2.4 def	5.0 ± 2.9 abcd	5.0 ± 2.9 abcd
28	Cruiser 5 FS @ 0.25 MGA/seed	$10.0 \pm 0.0a$	$7.0 \pm 2.4ab$	$7.5 \pm 2.5 ab$
29	Control Fungicide	$10.0 \pm 0.0a$	6.0 ± 2.0 abc	$7.5 \pm 2.5 ab$
30	Cruiser 5 FS @ 0.25 MGA/seed	5.0 ± 2.9 abcdef	5.0 ± 2.9 abcd	5.0 ± 2.9 abcd
31	Cruiser 5 FS @ 0.125 MGA/seed	6.3 ± 2.4 abcd	4.5 ± 2.6abcd	5.0 ± 2.9 abcd
32	A14974 CS @ 1.12 GA/100 row meter	$2.5 \pm 2.5 def$	2.5 ± 2.5 bcd	$0.0 \pm 0.0 d$
33	Poncho 250 5 SC @ 0.25 MGA/seed	$10.0 \pm 0.0a$	$10.0 \pm 0.0a$	$10.0 \pm 0.0a$

Means within a column followed by the same letter are not significantly different (P > 0.05; PROC GLM; Mean comparison by LSD [SAS Institute 2003]).

Reference to specific products is provided solely for informational purposes. Experiments with pesticides on non-labeled crops or pests is part of the insecticide registration process, it does not imply endorsement or recommendation of non-labeled uses of pesticides by Kansas State University. All pesticide use must be consistent with current labels.

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