

Corn Rootworm Control in Field Corn with planting time treatments. Soil Insecticide Test # 3, 2005

Gerald Wilde, Department of Entomology, Kansas State University

Pest: Western Corn Rootworm, Diabrotica virgifera virgifera

Crop: Corn, Zea mays L. 26 treatments

Location: Manhattan, Kansas

Planting Date: April 29, 2005

Plot Size: 1 rows, 25 ft

Experimental Design: Randomized Complete Block; 4 Replications

Planting Information: Granules applied with v-belt seeder. Corn planted 1-2 inch

depth. Soil in good moist condition at planting, 30 inch rows, disc 2 inch just before planting. Infurrow treatments

applied with seed..

Field History: Corn 2004

Phytotoxicity: none noted

Evaluation: Evaluated on July 01, 2005; Evaluated 4 plants/replication,

total 16 plants/treatment; Damage rating using 0-3 scale

where 0 = no damage and 3 = 3 nodes destroyed

Soil Insecticide – Test 3 (North Farm, Manhattan)

Corn Rootworm – Corn (2005) Planting date: April 29, 2005 Evaluation date: July 01, 2005

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Trt. No.	Treatment/ Product Name	Application	Root Rating (Mean ± SE)
1	Untreated Check		$0.82 \pm 0.19ab$
2	Force 3G @ 4 OzPr/1000 row ft.	Band	$0.16 \pm 0.06 def$
3	Force 3G @ 4 OzPr/1000 row ft.	IF	$0.07\pm0.03f$
4	A14776 @ 0.09 OzA/1000 row ft.	Band	0.39 ± 0.14 cd
5	A14776 @ 0.12 OzA/1000 row ft.	Band	0.37 ± 0.14 cde
6	A14776 @ 0.15 OzA/1000 row ft.	Band	$0.11 \pm 0.04ef$
7	A14776 @ 0.09 OzA/1000 row ft.	IF	$0.58 \pm 0.24 bc$
8	A14776 @ 0.12 OzA/1000 row ft.	IF	$0.10 \pm 0.04 f$
9	A14776 @ 0.15 OzA/1000 row ft.	IF	$0.12 \pm 0.05ef$
10	Capture 2EC @ 0.33 OzA/1000 row ft.	Band	$0.07 \pm 0.02 f$
11	Capture 2EC @ 0.33 OzA/1000 row ft.	IF	$0.20 \pm 0.08 def$
12	Aztec 2.1G @ 6.7 OzPr/1000 row ft.	Band	$0.01 \pm 0.01f$
13	Aztec 2.1G @ 6.7 OzPr/1000 row ft.	IF	$0.03 \pm 0.01f$
14	Lorsban 15G @ 8 OzPr/1000 row ft.	Band	$0.05\pm0.02f$
15	Lorsban 15G @ 8 OzPr/1000 row ft.	IF	$0.06 \pm 0.03 f$
16	Poncho 1250 ST @ 1.25 mg/kernal	ST	$0.04 \pm 0.02 f$
17	Cruiser 5FS @1.125 gm/100 kg seed	ST	$1.05\pm0.22a$
18	YieldGard + Poncho 250 @ 0.25 MgA/seed		0.01 ± 0.01 f
19	A14115 FS @ 0.138 GA/100 kg seed Cruiser 5FS @ 1.125 GA/100 kg seed	ST	$0.08 \pm 0.03 f$
20	STP15199 @ 5 MgA/seed + STP15201 @ 1.25 MgA/seed	ST	0.02 ± 0.01 f
21	Force ST @ 1 MgA/seed	ST	$0.26 \pm 0.13 \text{def}$
22	A13219 ST @ 1 MgA/seed	ST	$0.24 \pm 0.12 def$

23	Cruiser 5FS @1 MgA/seed Force ST @ 1 MgA/seed	ST	$0.21 \pm 0.05 def$
24	Cruiser 5FS @1 MgA/seed A13219 ST @ 1 MgA/seed	ST	$0.09 \pm 0.03 f$
25	Regent 4 SC @ .24 fl. oz./1000 ft	IF	$0.02 \pm 0.01 f$
26	Regent 4SC @ .24 fl. oz./1000 ft + liquid fertilizer	IF	$0.03 \pm 0.03 f$

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]).

Soil Insecticide – Test 3 (Yield Data)

Corn Rootworm – Corn (2005) Planting date: April 29, 2005 Harvest date: September 13, 2005

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Trt. No.	Treatment/ Product Name	Application	Yield (bu/acre) Mean ± SE
1	Untreated Check		98.44 ± 3.93 abcd
2	Force 3G @ 4 OzPr/1000 row ft.	Band	108.75 ± 12.55 abc
3	Force 3G @ 4 OzPr/1000 row ft.	IF	107.95 ± 8.75 abcd
4	A14776 @ 0.09 OzA/1000 row ft.	Band	83.85 ± 1.31 cde
5	A14776 @ 0.12 OzA/1000 row ft.	Band	$95.83 \pm 7.22 abcde$
6	A14776 @ 0.15 OzA/1000 row ft.	Band	$92.50 \pm 5.38 abcde$
7	A14776 @ 0.09 OzA/1000 row ft.	IF	96.99 ± 7.58abcde
8	A14776 @ 0.12 OzA/1000 row ft.	IF	91.67 ± 13.09abcde
9	A14776 @ 0.15 OzA/1000 row ft.	IF	$114.36 \pm 12.36a$
10	Capture 2EC @ 0.33 OzA/1000 row ft.	Band	90.54 ± 4.70abcde
11	Capture 2EC @ 0.33 OzA/1000 row ft.	IF	87.81 ± 4.63bcde
12	Aztec 2.1G @ 6.7 OzPr/1000 row ft.	Band	95.64 ± 7.58abcde
13	Aztec 2.1G @ 6.7 OzPr/1000 row ft.	IF	105.68 ± 7.55 abcd
14	Lorsban 15G @ 8 OzPr/1000 row ft.	Band	78.13 ± 10.67 de
15	Lorsban 15G @ 8 OzPr/1000 row ft.	IF	109.69 ± 8.11 ab
16	Poncho 1250 ST @ 1.25 mg/kernal	ST	$83.04 \pm 8.43e$
17	Cruiser 5FS @1.125 gm/100 kg seed	ST	95.83 ± 18.16abcde
18	YieldGard + Poncho 250 @ 0.25 MgA/seed		92.95 ± 8.22abcde
19	A14115 FS @ 0.138 GA/100 kg seed Cruiser 5FS @1.125 GA/100 kg seed	ST	94.69 ± 16.44abcde
20	STP15199 @ 5 MgA/seed + STP15201 @ 1.25 MgA/seed	ST	85.31 ± 5.46bcde
21	Force ST @ 1 MgA/seed	ST	98.96 ± 9.68abcde
22	A13219 ST @ 1 MgA/seed	ST	95.73 ± 9.95 abcde

23	Cruiser 5FS @1 MgA/seed Force ST @ 1 MgA/seed	ST	96.25 ± 2.39abcde
24	Cruiser 5FS @1 MgA/seed A13219 ST @ 1 MgA/seed	ST	86.25 ± 1.85bcde
25	Regent 4 SC @ .24 fl. oz./1000 ft	IF	103.13 ± 1.99abcde
26	Regent 4SC @ .24 fl. oz./1000 ft + liquid fertilizer	IF	100.21 ± 11.46abcde

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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