

2016 Sugarcane Aphid Efficacy Trial – Saline Co., KS.

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Pest: Sugarcane aphid, Melanaphis sacchari

Crop: Sorghum, Sorghum bicolor

Variety: Pioneer 84G62

Planting Date: 22 May, 2016

Location: Saline Co., KS

Plot Size: 10 ft. x 30 ft.

Experimental Design: Randomized Complete Block; 4 Replications

Information: Sprayed by hand sprayer delivering 20 gal/acre at ca.30 psi on 3

Sept. Plants were milk to soft dough development stage at time of treatment. Plots were treated for headworms on 11 August

with Lambda-cyhalthrin @ 3.84 oz/a and 2 gal/acre.

Phytotoxicity: None noted

Evaluation: Counted aphids on 10 randomly selected flag leaves/ plot on 7

Sept. (4 DAT), 10 Sept. (7 DAT), 15 Sept. (12 DAT), and 23 Sept. (20

DAT). Pretreatment counts averaged 312 aphids per leaf.

DAT = Days After Treatment

Weather at Time

of Treatment: 78°F with winds 0-8 SSE

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Treatment Date: 3 September 2016

Treatment	Avg. # SCA	Avg. # SCA on	Avg. # SCA on	Avg. # SCA on
	on flag leaf 7	flag leaf	flag leaf	flag leaf
	Sept. (4DAT)	10 Sept.	15 Sept.	23 Sept.
		(7DAT)	(12DAT)	(20DAT)
Untreated	526.6 ± 82.3a	956.0 ± 92.7a	1671.6 ± 130.7a	259.8 ± 63.5a
		Beneficials numerous	Beneficials numerous	Beneficials numerous
Carbine @ 2.8 oz/a	50.2 ± 13.3cd	67.1 ± 10.6def	165.0 ± 27.2cde	168.9 ± 19.8b
Carbine @ 4.28 oz/a	28.0 ± 5.5cd	40.8 ± 3.7ef	169.5 ± 31.1cde	256.9 ± 24.1a
Carbine @ 2.8 oz/a +	49.6 ± 6.6cd	126.5 ± 17.6cde	263.8 ± 39.6cd	164.7 ± 22.2b
Dimethoate @16 oz/a				
Lorsban 4E @ 16 oz/a +	98.6 ± 17.2c	163.6 ± 24.3bc	695.3 ± 78.3b	160.7 ± 21.6b
Dimethoate @ 16 oz/a	70.0 = 17.20	103.0 ± 21.300	073.3 = 70.30	100.7 ± 21.00
Sivanto @ 4 oz/a	10.8 ± 2.3d	15.7 ± 3.5f	34.1 ± 4.8e	37.7 ± 8.1d
	Mostly winged aphids	Mostly winged aphids	Mostly winged aphids	Mostly winged aphids
Transform @ 1 oz/a	79.5 ± 17.9cd	75.3 ± 14.0def	190.3 ± 35.0cd	171.5 ± 16.9b
Exirel @ 6.5 oz/a+	201.8 ± 26.9b	214.4 ± 17.0b	299.4 ± 37.5c	73.1 ± 10.4cd
MSO (0.25% v/v)	201.0 ± 20.70	214.4 ± 17.00	277.4 ± 37.30	73.1 ± 10.4cu
Exirel @ 13.5 oz/a+	243.8 ± 41.7b	146.2 ± 15.7bcd	228.9 ± 31.5cd	65.6 ± 11.0cd
MSO (0.25% v/v)				
Centric @ 2 oz/a	28.9 ± 4.2cd	59.3 ± 6.3ef	197.9 ± 38.8cd	250.2 ± 27.5a
	Mostly winged aphids	Mostly winged aphids	157.5 = 55.500	
Centric @ 2.5 oz/a	37.3 ± 7.8 cd	110.5 ±18.2cde	137.8 ± 32.7de	131.7 ± 15.6bc
	Mostly winged aphids	Mostly winged aphids	=57.5 = 52.7 de	101.7 2 10.000

Means within a column followed by the same letter are not significantly different (*P*>0.05; PROC ANOVA; 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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