

2016 Sugarcane Aphid Efficacy Trial #2 – Dickinson Co., KS.

Jeff Whitworth, Holly Schwarting, JR Ewing - Department of Entomology, Kansas State University

Pest: Sugarcane aphid, Melanaphis sacchari

Crop: Sorghum, Sorghum bicolor

Variety: Dekalb 2805

Planting Date: 1 July

Location: Dickinson Co., KS

Plot Size: 10 ft. x 20 ft.

Experimental Design: Randomized Complete Block; 4 Replications

Information: Sprayed by hand sprayer delivering 20 gal/acre at ca.30 psi on 19

Sept. Plants were flowering at time of treatment.

Yield – All heads excised from 2 center rows and weighed @ 12%

moisture. No phytotoxicity noted.

Pre-Treatment Counts: 18 Sept. Pretreatment counts avg. 269 aphids/flag leaf and 149

aphids/bottom leaf. Pretreatment counts of sorghum headworm

averaged 1/head.

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

randomly selected bottom-most green leaves/plot on 22 Sept. (3 DAT), 26 Sept. (7 DAT), 3 Oct. (14 DAT), 11 Oct. (22 DAT) and 17

Oct. (28 DAT).

DAT = Days After Treatment

Weather at Time

of Treatment: 76°F with winds 6 mph S

2016 Sugarcane Aphid Insecticide Efficacy Trial #2 – Dickinson Co., KS.

Jeff Whitworth, Holly Schwarting, JR Ewing - Department of Entomology Kansas State University

Treatment Date: 19 September 2016

No	Treatment	Avg. # SCA 22 Sept.		Avg. # SCA 26 Sept.		Avg. # SCA 3 Oct.		Avg. # SCA		Avg. # SCA 17		Yield Avg.
		(3DAT)		(7DAT)		(14DAT)		11 Oct. (22DAT)		Oct. (28DAT)		lbs/2 ctr.
												rows
		Flag leaf	Bottom leaf	Flag	Bottom	Flag	Bottom	Flag	Bottom	Flag	Bottom	
1	Untreated	452.2a	211.2a	265.8a	219.6a	210.0b	96.9c	18.1c	19.4b	7.3b	3.9c	7.2bc
2	Lorsban @ 2 pt/a	29.7d	14.8c	57.5c	33.8c	133.5c	62.4d	133.8a	104.9a	52.3a	62.5a	9.7ab
3	Fastac SC @ 3.8 oz/a	136.8c	75.9b	197.4b	149.1b	190.3b	119.8b	114.6b	92.5a	54.5a	35.7b	8.4abc
4	Sivanto @ 4 oz/a	12.1d	20.6c	4.2d	0.5c	15.6d	7.2e	8.1c	2.5c	1.9b	0.5c	8.1abc
5	Warrior II @ 1.6 oz/a	218.1b	181.6a	243.7a	219.4a	261.2a	159.0a	132.7ab	105.4a	43.2a	44.5ab	6.5c
6	Lorsban @ 2 pt/a + Sivanto @ 4 oz/a	8.4d	6.1c	4.3d	2.6c	19.8d	5.1e	5.1c	0.6c	1.3b	0.0c	10.7a
7	Fastac @ 3.8 oz/a + Sivanto @ 4 oz/a	10.4d	15.1c	5.4d	1.7c	9.8d	6.2e	6.3c	5.6bc	1.7b	0.3c	7.0bc
8	Warrior II @ 1.6 oz/a + Sivanto @ 4 oz/a	10.5d	18.1c	6.7d	8.9c	20.1d	10.7e	10.0c	8.3bc	3.8b	1.4c	6.2c

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.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, John Floros, Director.