

University of Tennessee

Evaluation of Potential Safening Effect of Insecticide Seed Treatments on Pre-emergent Herbicides in Soybean, Test 1 - Madison Co.

Location: West TN Research and Education Center - Jackson

Variety: Schillenger 495.RC (planted 4-25-16)

Application: at-plant 4-25-16; Backpack sprayer (15 GPA, 48 PSI, Wilger DR)

Plot: 2 rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S. Steckel, Williams

BLB = Bean Leaf Beetle; % Defol = % Defoliation

Description				Vigor		BLB		Stand Count		Vigor	
Rating Date				0 - 5 scale		% Defol		5/13/2016		0 - 5 scale	
Sample Size, Unit				5/11/2016		5/11/2016		5/19/2016		5/19/2016	
Plant-Eval Interval				1 Plot		1 Plot		20 Rowft		1 Plot	
				16 DP-1		16 DP-1		18 DP-1		24 DP-1	
Treatment	Formulation	Rate									
1 Cruiser LeadOff	5 Lb/gal 33.3 %	1.28 fl oz/cwt 1.5 oz wt/a	3.2	bc	0.8	cd	112.0	abc	2.6	b	
2 Cruiser Fierce	5 Lb/gal 76 %	1.28 fl oz/cwt 3.75 oz/a	2.4	d	0.5	d	90.0	b-e	2.3	bc	
3 Cruiser Clarity	5 Lb/gal 4 Lbae/gal	1.28 fl oz/cwt 8 fl oz/a	1.5	e	0.3	d	77.0	e	1.7	cde	
4 Cruiser Untreated	5 Lb/gal	1.28 fl oz/cwt	4.4	a	1.0	bcd	112.3	ab	4.0	a	
5 Gaucho LeadOff	5 Lb/gal 33.3 %	2 fl oz/cwt 1.5 oz wt/a	3.4	b	1.0	bcd	122.3	a	2.6	b	
6 Gaucho Fierce	5 Lb/gal 76 %	2 fl oz/cwt 3.75 oz/a	2.3	d	1.0	d	82.5	e	2.2	bcd	
7 Gaucho Clarity	5 Lb/gal 4 Lbae/gal	2 fl oz/cwt 8 fl oz/a	1.3	e	0.3	d	88.3	b-e	1.5	e	
8 Gaucho Untreated	5 Lb/gal	2 fl oz/cwt	4.5	a	2.8	b	121.0	a	4.1	a	
9 Untreated LeadOff	33.3 %	1.5 oz wt/a	3.2	bc	6.0	a	110.3	a-d	2.4	bc	
10 Untreated Fierce	76 %	3.75 oz/a	2.7	cd	6.3	b	88.0	cde	2.4	bc	
11 Untreated Clarity	4 Lbae/gal	8 fl oz/a	1.6	e	3.3	bcd	86.5	de	1.6	de	
12 Untreated Untreated			4.2	a	9.8	a	110.3	a-d	3.7	a	

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

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Description				Vigor	Stand Count	Vigor	Yield
Rating Date				0 - 5 scale		0 - 5 scale	Bu/A
Sample Size, Unit				5/23/2016	5/23/2016	6/2/2016	9/28/2016
Plant-Eval Interval				1 Plot	20 Rowft	1 Plot	
				28 DP-1	28 DP-1	38 DP-1	
Treatment	Formulation	Rate					
1 Cruiser LeadOff	5 Lb/gal 33.3 %	1.28 fl oz/cwt 1.5 oz wt/a	2.2 de	107.0 a	2.6 cd	53.1 c-f	
2 Cruiser Fierce	5 Lb/gal 76 %	1.28 fl oz/cwt 3.75 oz/a	2.6 cd	79.8 bc	3.2 b	57.7 b-e	
3 Cruiser Clarity	5 Lb/gal 4 Lbae/gal	1.28 fl oz/cwt 8 fl oz/a	1.8 e	79.5 bc	2.2 e	50.1 def	
4 Cruiser Untreated	5 Lb/gal	1.28 fl oz/cwt	4.3 a	121.0 a	4.6 a	62.1 abc	
5 Gaucho LeadOff	5 Lb/gal 33.3 %	2 fl oz/cwt 1.5 oz wt/a	2.6 cd	103.3 a	2.3 de	46.7 f	
6 Gaucho Fierce	5 Lb/gal 76 %	2 fl oz/cwt 3.75 oz/a	2.9 c	80.0 bc	3.2 b	55.7 c-f	
7 Gaucho Clarity	5 Lb/gal 4 Lbae/gal	2 fl oz/cwt 8 fl oz/a	1.7 e	75.3 c	2.3 de	59.9 a-d	
8 Gaucho Untreated	5 Lb/gal	2 fl oz/cwt	4.1 ab	116.3 a	4.4 a	67.4 ab	
9 Untreated LeadOff	33.3 %	1.5 oz wt/a	2.0 e	110.3 a	2.1 e	48.2 ef	
10 Untreated Fierce	76 %	3.75 oz/a	2.6 cd	80.3 bc	2.9 bc	63.0 abc	
11 Untreated Clarity	4 Lbae/gal	8 fl oz/a	1.8 e	78.5 bc	2.2 e	51.1 def	
12 Untreated Untreated			3.6 b	100.8 ab	4.4 a	69.4 a	

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)