

University of Tennessee

Effect of Insecticide Seed Treatment in Soybean Following a Cover Crop - Madison Co.

Location: West TN Research and Education Center (Jackson)

Cover crop: Wheat (60 lbs/acre) + Hairy vetch (20 lbs/acres) (drilled 10-17-17)

Variety: Asgrow 46X7 Xtend (planted 5-16-2018)

Plots: 16 Rows x 35 ft (Split Plot in RCBD, 4 Reps)

Application: Fall burndown (no cover)(10-26-17, 3-23-18, 5-3-18, 5-16-18 (at-plant));

Early burndown (5-3-18, burndown, and 5-16-18 (at-plant)); Late burndown (5-16-18, at-plant)

Tractor mounted sprayer (11 GPA, 40 PSI, 80015AI)

Investigators: Stewart, S. Steckel, Williams

Defol = Defoliation; TCAH = Three cornered alfalfa hopper

Description			Slugs	Thrips Injury	Vigor	Defol	Stand Counts	Defol	Vigor	Stand Counts	TCAH	Yield
Rating Unit			Total	0-5 scale	0-5 scale	%	Total	%	0-5 scale	Total	Girdled plants	Bu/acre
Rating Date			5/23/2018	5/25/2018	5/25/2018	5/25/2018	5/29/2018	6/4/2018	6/4/2018	6/14/2018	7/10/2018	10/8/2018
Sample Size, Unit			1 ft2	1 Plot	1 Plot	1 Plot	20 Row ft	1 Plot	1 Plot	20 Row ft	2 m row	
Treatment	Formulation	Rate										
1 Fall burndown Gaucho 600 FS	5 lb/gal	2 fl oz/cwt	0.00 a	0.20 b	4.80 a	0.75 c	129.25 a	2.50 d	4.55 a	140.75 a	1.25 a	53.5 a
2 Fall burndown Not treated			0.00 a	0.70 a	4.55 a	5.25 b	122.00 ab	8.00 c	4.33 a	130.00 ab	0.50 a	48.2 a
3 Early burndown Gaucho 600 FS	5 lb/gal	2 fl oz/cwt	0.50 a	0.25 b	3.85 ab	2.75 bc	95.75 b	6.50 c	4.38 a	105.25 c	2.50 a	53.4 a
4 Early burndown Not treated			1.50 a	0.68 a	2.68 bc	16.75 a	101.25 b	18.75 b	3.58 b	102.50 c	1.00 a	52.0 a
5 Late burndown Gaucho 600 FS	5 lb/gal	2 fl oz/cwt	1.50 a	0.23 b	4.15 a	2.00 bc	118.75 ab	8.75 c	4.43 a	116.25 bc	1.50 a	48.7 a
6 Late burndown Not treated			0.50 a	0.68 a	2.03 c	20.75 a	47.25 c	43.50 a	1.58 c	34.00 d	3.00 a	34.5 b
Treatment Prob(F)			0.4157	0.0002	0.0032	0.0007	0.0009	0.0001	0.0001	0.0001	0.1584	0.0026

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

Yield (bu/acre)

