

University of Tennessee

Evaluation of Foliar Applications for Tarnished Plant Bugs - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: PHY 330 W3FE (planted: 5-8-18)

Application: Appl A 7-6-18; Appl B 7-13-18; High clearance sprayer (9.4 GPA, 40 PSI, 8001FF)

Rating: 2 drop cloths per plot (10 row ft)

Plots: 4 Rows x 40 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

TPB= Tarnished Plant Bug; Total PB = Tarnished + Clouded; Total SB = Green + Brown Stink Bugs;

Description				TPB	Total PB	Total SB	TPB	Total PB	Total SB	TPB	Total PB	Total SB	
Pest Stage Majority				Immature	Adult + Imm.	Adult + Imm.	Immature	Adult + Imm.	Adult + Imm.	Immature	Adult + Imm.	Adult + Imm.	
Rating Date				7/10/2018	7/10/2018	7/10/2018	7/13/2018	7/13/2018	7/13/2018	7/18/2018	7/18/2018	7/18/2018	
Trt-Eval Interval				4 DA-A	4 DA-A	4 DA-A	7 DA-A	7 DA-A	7 DA-A	5 DA-B	5 DA-B	5 DA-B	
Treatment	Formulation	Rate	Appl										
1	Untreated			13.25 a	15.50 a	0.75 a	31.75 a	32.75 a	0.25 a	50.50 a	52.25 a	0.75 a	
2	Bidrin	8 lba/gal	8 oz/a	AB	6.25 a	7.25 bc	0.25 a	23.00 abc	23.25 abc	0.25 a	6.25 bc	6.75 bc	0.00 b
3	Diamond	0.83 lba/gal	6 oz/a	A	5.75 a	7.00 bc	0.50 a	24.75 ab	25.00 ab	0.50 a	8.00 bc	8.00 bc	0.25 b
	Bidrin	8 lba/gal	6.4 oz/a	B									
	Discipline	2 lba/gal	6.4 fl oz/a	B									
4	Diamond	0.83 lba/gal	6 oz/a	A	6.25 a	6.75 bc	0.00 a	13.50 c	14.25 c	0.50 a	6.00 bc	6.25 bc	0.00 b
	Bidrin	8 lba/gal	6.4 oz/a	AB									
	Discipline	2 lba/gal	6.4 fl oz/a	B									
5	Diamond	0.83 lba/gal	6 oz/a	A	6.75 a	6.75 bc	0.00 a	14.75 c	15.25 bc	0.00 a	5.75 bc	5.75 bc	0.00 b
	Bidrin	8 lba/gal	6.4 oz/a	A									
	Bidrin	8 lba/gal	8 oz/a	B									
	Transform	50 %	0.75 oz wt/a	B									
6	Diamond	0.83 lba/gal	6 oz/a	A	3.75 a	4.50 c	0.50 a	15.25 bc	16.50 bc	0.00 a	8.00 bc	8.00 bc	0.00 b
	Transform	50 %	0.75 oz wt/a	A									
	Bidrin	8 lba/gal	8 oz/a	B									
7	Diamond	0.83 lba/gal	6 oz/a	A	8.00 a	8.25 bc	0.75 a	18.50 bc	18.50 bc	0.75 a	7.00 bc	7.25 bc	0.00 b
	Transform	50 %	0.75 oz wt/a	AB									
	Bidrin	8 lba/gal	8 oz/a	B									
8	Transform	50 %	1.5 oz wt/a	AB	9.25 a	9.75 bc	0.00 a	17.75 bc	18.00 bc	0.75 a	4.00 c	4.75 c	0.00 b
9	Orthene	97 %w/w	16 oz wt/a	AB	9.50 a	10.25 ab	0.25 a	22.25 abc	22.75 bc	0.75 a	10.00 b	10.25 b	0.25 b
Treatment Prob(F)				0.07	0.02	0.34	0.02	0.02	0.71	0.00	0.00	0.02	

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TPB= Tarnished Plant Bug; Total PB = Tarnished + Clouded; Total SB = Green + Brown Stink Bugs;

Description				TPB	Total PB	Total SB	TPB	Total PB	Total SB	Yield	
Pest Stage Majority				Immature	Adult + Imm.	Adult + Imm.	Immature	Adult + Imm.	Adult + Imm.	Seed Cotton	
Rating Date				7/20/2018	7/20/2018	7/20/2018	7/24/2018	7/24/2018	7/24/2018	10/4/2018	
Trt-Eval Interval				7 DA-B	7 DA-B	7 DA-B	11 DA-B	11 DA-B	11 DA-B	(lbs/acre)	
Treatment	Formulation	Rate	Appl								
1	Untreated			69.50 a	71.50 a	1.00 a	67.50 a	71.25 a	0.25 a	2739 c	
2	Bidrin	8 lba/gal	8 oz/a	AB	10.50 bcd	10.75 bcd	0.25 a	28.25 b	28.75 b	0.00 a	3760 ab
3	Diamond	0.83 lba/gal	6 oz/a	A	17.25 b	17.75 b	0.75 a	24.50 b	25.00 b	0.25 a	3682 ab
	Bidrin	8 lba/gal	6.4 oz/a	B							
	Discipline	2 lba/gal	6.4 fl oz/a	B							
4	Diamond	0.83 lba/gal	6 oz/a	A	10.25 bcd	10.50 bcd	0.25 a	16.25 bcd	16.25 b	0.25 a	4059 a
	Bidrin	8 lba/gal	6.4 oz/a	AB							
	Discipline	2 lba/gal	6.4 fl oz/a	B							
5	Diamond	0.83 lba/gal	6 oz/a	A	7.75 cd	7.75 cd	0.00 a	14.75 cd	15.50 b	0.00 a	3956 ab
	Bidrin	8 lba/gal	6.4 oz/a	A							
	Bidrin	8 lba/gal	8 oz/a	B							
	Transform	50 %	0.75 oz wt/a	B							
6	Diamond	0.83 lba/gal	6 oz/a	A	11.50 bcd	11.50 bcd	0.50 a	21.00 bc	22.25 b	0.75 a	3676 ab
	Transform	50 %	0.75 oz wt/a	A							
	Bidrin	8 lba/gal	8 oz/a	B							
7	Diamond	0.83 lba/gal	6 oz/a	A	7.00 d	7.00 d	0.00 a	20.00 bcd	20.00 b	0.25 a	3785 ab
	Transform	50 %	0.75 oz wt/a	AB							
	Bidrin	8 lba/gal	8 oz/a	B							
8	Transform	50 %	1.5 oz wt/a	AB	7.25 cd	8.50 cd	0.50 a	11.75 d	14.00 b	0.75 a	3540 b
9	Orthene	97 %w/w	16 oz wt/a	AB	15.00 bc	15.25 bc	0.25 a	18.50 bcd	19.25 b	0.25 a	3653 ab
Treatment Prob(F)				0.00	0.00	0.29	0.00	0.00	0.37	0.00	

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