

The University of Tennessee

Foliar Products for Thrips Control in Cotton - Madison County

Location: West TN Research and Education Center - Jackson

Variety: PHY 350 W3FE (planted 5-7-19)

All seed treated with the same fungicide seed treatment

Appl A (at plant) In-furrow granular; Appl B 5-24-19 2 row hand boom; Appl C 5-30-19 2 row hand boom (10.2 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

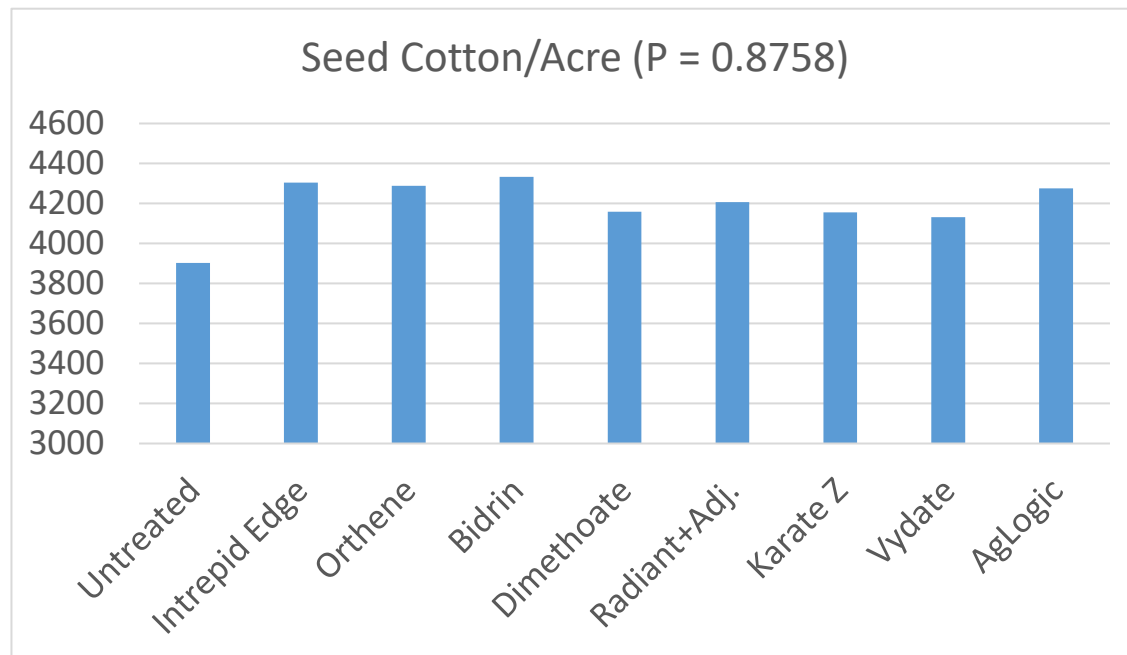
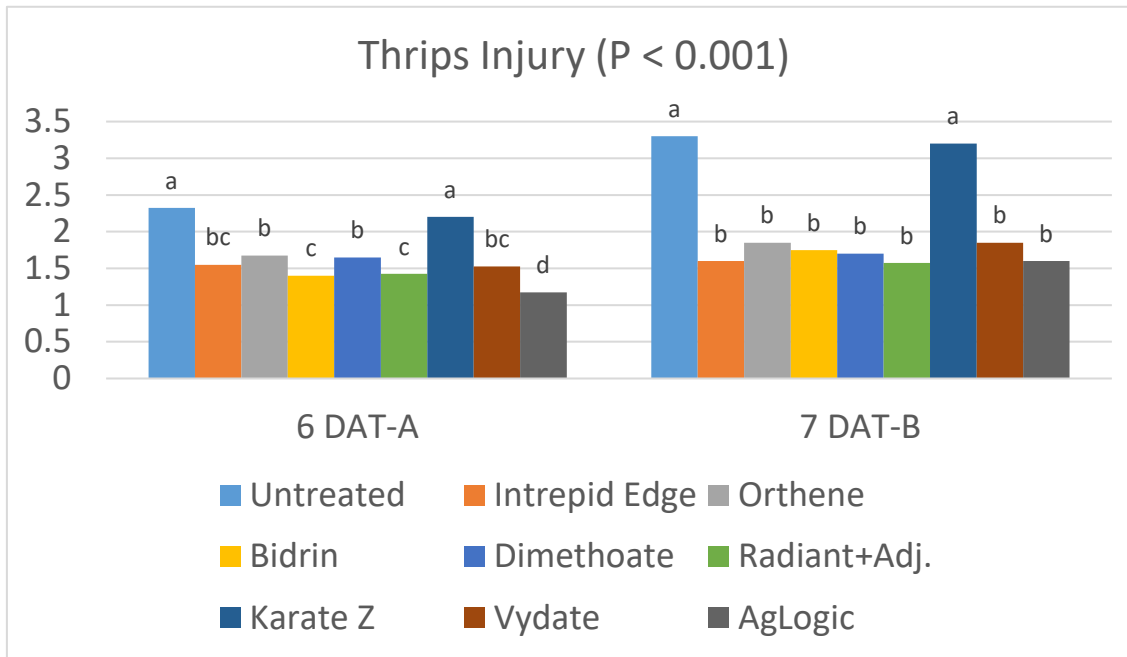
Adults + Imm. = Adults + Immature

Description				Thrips Counts	Thrips Counts	Thrips Injury	Thrips Injury	Thrips Injury	Thrips Counts	Thrips Counts	Seed cotton
Pest Stage Majority				Immature	Adult + Imm.	0-5 Scale	0-5 Scale	0-5 Scale	Immature	Adult + Imm.	lb/acre
Rating Date				5/28/2019	5/28/2019	5/30/2019	6/3/2019	6/6/2019	6/6/2019	6/6/2019	9/30/2019
Sample Size				5 Plants	5 Plants	1 Plot	1 Plot	1 Plot	5 Plants	5 Plants	
Trt-Eval Interval				4 DA-B	4 DA-B	6 DA-B	4 DA-C	7 DA-C	7 DA-C	7 DA-C	
Treatment	Formulation	Rate	Appl								
1 Untreated				47.50 a	49.75 a	2.33 a	2.53 a	3.30 a	41.75 a	51.50 a	3902.80 a
2 Intrepid Edge	3 lb/gal	3 fl oz/a	BC	16.25 b	16.50 b	1.55 bc	1.50 cde	1.60 b	8.00 c	13.50 cd	4304.90 a
3 Orthene	97 %	0.21 lb/a	BC	24.75 b	25.50 b	1.68 b	1.83 b	1.85 b	10.50 bc	20.50 bc	4288.20 a
4 Bidrin	8 lb/gal	3.2 fl oz/a	BC	16.25 b	17.50 b	1.40 c	1.43 de	1.75 b	7.00 c	11.50 de	4333.40 a
5 Dimethoate	4 lb/gal	6.4 fl oz/a	BC	15.75 b	17.00 b	1.65 b	1.75 bc	1.70 b	16.00 b	23.25 b	4159.40 a
6 Radiant+Adj. Dyne-Amic	1 lb/gal 100 %	1.5 fl oz/a 0.5 % v/v	BC BC	11.00 b	11.25 b	1.43 c	1.45 de	1.58 b	1.25 d	7.50 e	4206.60 a
7 Karate Z	2.08 lb/gal	1.28 fl oz/a	BC	50.50 a	52.25 a	2.20 a	2.53 a	3.20 a	59.00 a	70.75 a	4155.50 a
8 Vydate	3.77 lb/gal	8.5 fl oz/a	BC	25.00 b	25.75 b	1.53 bc	1.65 bcd	1.85 b	8.75 bc	15.75 bcd	4130.90 a
9 AgLogic	15 %	3.5 lb/a	A	6.00 b	6.75 b	1.18 d	1.33 e	1.60 b	15.00 b	24.00 b	4275.40 a
Treatment Prob(F)				0.0012	0.0007	0.0001	0.0001	0.0001	0.0001	0.0001	0.8758

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

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University of Tennessee

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

Location: West TN Research and Education Center (Jackson)

Variety: PHY 350 W3FE (planted: 5-8-19)

Application: Appl A 7-19-19; Appl B 8-2-19; High clearance sprayer (9.3 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 + Brown Marmorated 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				7/23/2019	7/23/2019	7/23/2019	7/26/2019	7/26/2019	7/26/2019	7/29/2019	7/29/2019	7/29/2019	
Trt-Eval Interval				4 DA-A	4 DA-A	4 DA-A	7 DA-A	7 DA-A	7 DA-A	10 DA-A	10 DA-A	10 DA-A	
Treatment	Formulation	Rate	Appl										
1	Untreated			9.0 a	10.5 a	1.5 a	27.8 a	28.3 a	1.0 a	35.8 a	38.0 a	1.3 a	
2	Bidrin	8 lba/gal	4.0 floz/a	AB	4.0 bc	5.8 b	0.0 b	13.3 b	13.8 b	0.3 a	24.5 bc	24.5 bc	0.3 a
3	Bidrin	8 lba/gal	6.0 floz/a	AB	1.8 c	2.0 cd	0.3 b	13.0 bc	14.3 b	0.0 a	15.5 cd	15.5 cd	0.0 a
4	Bidrin	8 lba/gal	8.0 floz/a	AB	1.5 c	1.8 d	0.0 b	9.3 bc	9.3 bc	0.0 a	14.8 cd	15.0 cd	0.3 a
5	Discipline	2 lba/gal	6.4 floz/a	AB	5.3 b	5.5 bc	0.0 b	12.8 bc	13.8 b	0.3 a	28.3 ab	28.3 ab	5.0 a
6	Bidrin	8 lba/gal	4.0 floz/a	AB	2.0 bc	2.5 bcd	0.0 b	12.3 bc	12.3 bc	0.0 a	13.8 cd	13.8 cd	0.0 a
	Discipline	2 lba/gal	6.4 floz/a	AB									
7	Bidrin	8 lba/gal	6.0 floz/a	AB	2.8 bc	3.0 bcd	0.0 b	9.3 bc	9.5 bc	0.0 a	10.5 d	10.5 d	0.0 a
	Discipline	2 lba/gal	6.4 floz/a	AB									
8	Bidrin	8 lba/gal	8.0 floz/a	AB	0.8 c	1.8 d	0.3 b	7.8 bc	7.8 bc	0.0 a	8.8 d	8.8 d	0.3 a
	Discipline	2 lba/gal	6.4 floz/a	AB									
9	Orthene	97 %	12.4 oz wt/a	AB	1.8 c	1.8 d	0.0 b	5.3 c	5.3 c	0.0 a	10.0 d	10.0 d	0.0 a
	Discipline	2 lba/gal	6.4 floz/a	AB									
10	Transform	50 %aw/w	1.5 oz/a	AB	2.0 bc	3.0 bcd	0.5 b	6.0 bc	6.3 bc	0.0 a	17.0 cd	18.0 bcd	0.3 a
Treatment Prob(F)				0.0008	0.0003	0.0487	0.0002	0.0002	0.1410	0.0003	0.0001	0.3139	

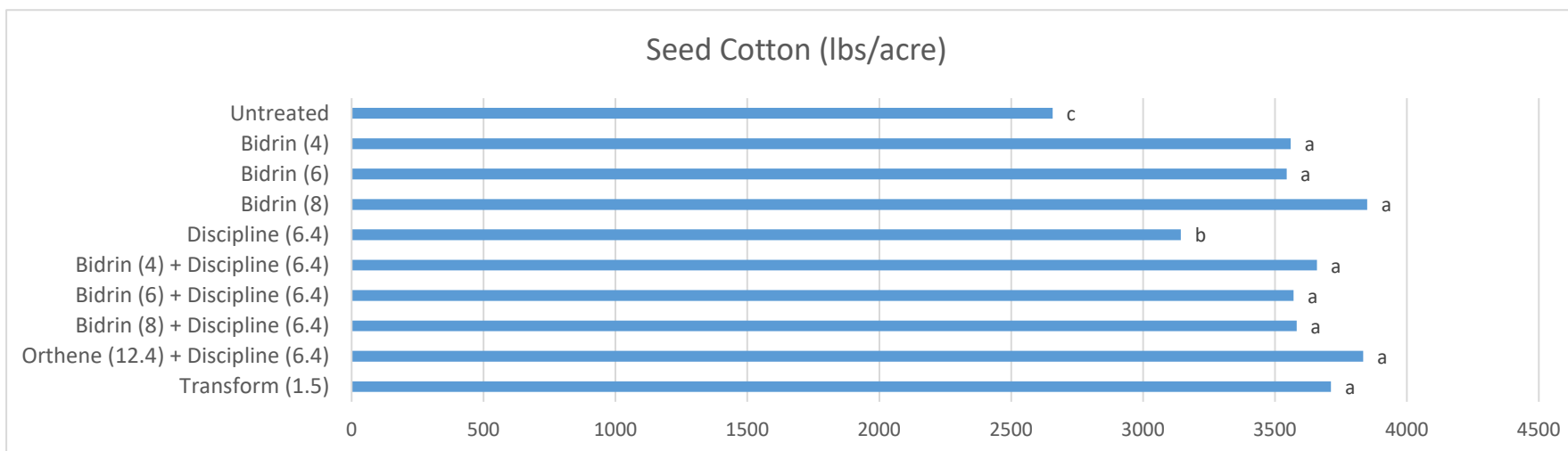
Means followed by same letter or symbol do not significantly differ (P=.05, LSD).

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

Description					TPB	Total PB	Total SB	Seed cotton
Pest Stage Majority					Immature	Adult + Imm.	Immature	lbs/acre
Rating Date					8/7/2019	8/7/2019	8/7/2019	10/10/2019
Trt-Eval Interval					5 DA-B	5 DA-B	5 DA-B	
Treatment	Formulation	Rate	Appl					
1 Untreated					31.0 a	32.5 a	1.5 a	2657 c
2 Bidrin	8 lba/gal	4.0 floz/a	AB		16.3 bc	17.5 bc	0.0 b	3559 a
3 Bidrin	8 lba/gal	6.0 floz/a	AB		14.3 bc	15.3 bc	0.5 ab	3544 a
4 Bidrin	8 lba/gal	8.0 floz/a	AB		10.5 cde	10.5 cde	0.3 b	3850 a
5 Discipline	2 lba/gal	6.4 floz/a	AB		22.5 ab	23.5 ab	0.5 ab	3143 b
6 Bidrin	8 lba/gal	4.0 floz/a	AB		13.8 bcd	14.0 bcd	0.0 b	3659 a
Discipline	2 lba/gal	6.4 floz/a	AB					
7 Bidrin	8 lba/gal	6.0 floz/a	AB		7.5 de	7.8 de	0.0 b	3571 a
Discipline	2 lba/gal	6.4 floz/a	AB					
8 Bidrin	8 lba/gal	8.0 floz/a	AB		8.3 e	8.3 e	0.3 b	3582 a
Discipline	2 lba/gal	6.4 floz/a	AB					
9 Orthene	97 %	12.4 oz wt/a	AB		3.0 f	3.0 f	0.0 b	3835 a
Discipline	2 lba/gal	6.4 floz/a	AB					
10 Transform	50 %aw/w	1.5 oz/a	AB		4.3 f	4.3 f	1.5 a	3712 a
Treatment Prob(F)					0.0001	0.0001	0.0328	0.0001



University of Tennessee

Novaluron + Clofentezine in cotton for plant bug and residual mite control - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: PHY 350 W3FE (planted: 5-14-19)

Application: 7-19-19; High clearance sprayer (9.3 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 30 ft (RCBD, 4 Reps)

Investigators: Stewart, S. Steckel, Williams

TSSM = Twospotted spider mite; TPB = Tarnished plant bug; Total PB = Tarnished + clouded, adults + immatures;

Total SB = Green + Brown + Brown marmorated, adults + immatures; GSB = green stink bug

Description			TSSM	TPB	Total PB	Total SB	TSSM	TPB	Total PB	Total SB	TPB	Total PB	GSB	Total SB												
Pest Stage Majority			Total	Immature	Ad + Imm	Ad + Imm	Total	Immature	Ad + Imm	Total	Immature	Ad + Imm	Adult	Ad + Imm												
Rating Date			7/23/2019	7/23/2019	7/23/2019	7/23/2019	7/26/2019	7/26/2019	7/26/2019	7/26/2019	7/30/2019	7/30/2019	7/30/2019	7/30/2019												
Sample Size			10 inch ²	10 rowft	10 rowft	10 rowft	10 inch ²	10 rowft	10 rowft	10 rowft	10 rowft	10 rowft	10 rowft	10 rowft												
Trt-Eval Interval			4 DA-A	4 DA-A	4 DA-A	4 DA-A	7 DA-A	7 DA-A	7 DA-A	7 DA-A	11 DA-A	11 DA-A	11 DA-A	11 DA-A												
Treatment	Formulation	Rate																								
1 Untreated			71.0	a	10.3	a	10.3	a	0.3	a	34.3	a	20.0	a	22.0	a	0.3	a	22.3	a	23.5	a	0.8	a	1.0	a
2 Diamond	0.83 lb/gal	6 fl oz/a	28.0	b	4.5	a	5.0	a	0.0	a	8.8	b	7.3	a	7.3	a	0.8	a	11.0	b	11.5	c	0.3	a	0.3	a
Apollo	4 lb/gal	2 fl oz/a																								
3 Diamond	0.83 lb/gal	6 fl oz/a	22.3	b	8.3	a	8.5	a	0.5	a	12.3	b	8.5	a	8.5	a	0.8	a	18.0	ab	19.8	ab	1.3	a	1.3	a
Apollo	4 lb/gal	4 fl oz/a																								
4 Diamond	0.83 lb/gal	6 fl oz/a	21.3	b	3.3	a	4.3	a	0.3	a	10.0	b	13.3	a	13.3	a	0.8	a	12.3	b	12.3	bc	0.0	a	0.0	a
Apollo	4 lb/gal	6 fl oz/a																								
Treatment Prob(F)			0.0036		0.0628		0.0915		0.6915		0.0433		0.1573		0.1151		0.8314		0.0412		0.0174		0.1066		0.0877	

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

University of Tennessee

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

Location: West TN Research and Education Center (Jackson)

Variety: PHY 425 RF (planted: 6-4-19)

Application: 8-8-19; High clearance sprayer (9.3 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

TPB= Tarnished Plant Bug; Total PB = Tarnished + Clouded, adults + immatures; Total SB = Green + Brown, adults + immatures

Description			Spider mites	TPB	Total PB	Total SB				
Rating Date			Total	Immature	Ad + Imm	Ad + Imm				
Sample Size			8/13/2019	8/13/2019	8/13/2019	8/13/2019				
Trt-Eval Interval			10 inch ²	10 rowft	10 rowft	10 rowft				
			5 DA-A	5 DA-A	5 DA-A	5 DA-A				
Treatment	Formulation	Rate								
1 Diamond	0.83 lb/gal	6 fl oz/a	1.5	b	3.8	b	3.8	b	0.0	a
Apollo	4 lb/gal	4 fl oz/a								
2 Diamond	0.83 lb/gal	6 fl oz/a	7.3	b	4.0	b	4.0	b	0.0	a
Apollo	4 lb/gal	6 fl oz/a								
3 Experimental			3.3	b	3.3	b	3.3	b	0.0	a
4 Untreated			48.8	a	17.0	a	17.0	a	0.5	a
Treatment Prob(F)			0.0001		0.0001		0.0001		0.0877	

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

University of Tennessee

Impact of Selected Insecticides on Bt Traits in Cotton - Sprayed vs Unsprayed - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: see below (planted: 6-4-18)

Appl A 6-4-19 (at planting); Appl B 7-29-18; Appl C 8-15-19; High clearance sprayer (9.3 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

Dam Sq= Damaged Squares; Dam Bolls = Damaged bolls; Dam flow = Damaged flowers; CEW = bollworm larvae

Description				Dam Sq		Dam bolls		Total CEW		Dam Sq		Dam bolls		Total CEW		Dam Sq		Dam bolls		Total CEW		
Pest Stage Majority				Total		Total		Sm + Lg		Total		Total		Sm + Lg		Total		Total		Sm + Lg		
Rating Date				8/13/2019		8/13/2019		8/13/2019		8/21/2019		8/21/2019		8/21/2019		8/27/2019		8/27/2019		8/27/2019		
Sample Size				25 Square		25 Boll		75 Fruit		25 Square		25 Boll		75 Fruit		25 Square		25 Boll		50 Fruit		
Trt-Eval Interval				15 DA-B		15 DA-B		15 DA-B		6 DA-C		6 DA-C		6 DA-C		12 DA-C		12 DA-C		12 DA-C		
Treatment	Formulation	Rate	Appl																			
1	Prevathon	0.43 lb/gal	20 fl oz/a	B	0.0	b	0.0	a	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
	Intrepid Edge	3 lb/gal	8 fl oz/a	C																		
	PHY 330 W3FE			A																		
2	Prevathon	0.43 lb/gal	20 fl oz/a	B	0.0	b	0.0	a	0.0	b	0.0	b	0.3	b	0.3	b	0.5	b	0.0	b	0.0	b
	Intrepid Edge	3 lb/gal	8 fl oz/a	C																		
	PHY 425 RF			A																		
3	Prevathon	0.43 lb/gal	20 fl oz/a	B	0.0	b	0.0	a	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
	Intrepid Edge	3 lb/gal	8 fl oz/a	C																		
	DP 1646 B2XF			A																		
4	Untreated				0.0	b	0.0	a	0.0	b	0.0	b	0.0	b	0.0	b	0.5	b	0.0	b	0.0	b
	PHY 330 W3FE			A																		
5	Untreated				2.0	a	0.5	a	0.8	a	4.3	a	4.5	a	3.3	a	5.3	a	3.3	a	1.3	a
	PHY 425 RF			A																		
6	Untreated				0.0	b	0.0	a	0.0	b	0.5	b	0.0	b	0.0	b	0.5	b	0.0	b	0.0	b
	DP 1646 B2XF			A																		
Treatment Prob(F)				0.0122		0.0552		0.0009		0.0001		0.0034		0.0009		0.0001		0.0012		0.0239		

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

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Dam Sq= Damaged Squares; Dam Bolls = Damaged bolls; Dam flow = Damaged flowers; CEW = bollworm larvae

Description				Dam bolls	Total CEW	CEW	Dam Sq	Dam Flow	Dam Boll	Total Damage	Seed cotton
Pest Stage Majority				Total	Sm + Lg	Total	Total	Total	Total	Sq+Flow+Boll	lbs/acre
Rating Date				9/3/2019	9/3/2019	Cumulative	Cumulative	Cumulative	Cumulative	Cumulative	10/14/2019
Sample Size				50 Boll	50 Boll	125 Fruit	75 Fruit	75 Fruit	125 Fruit	275 Fruit	
Trt-Eval Interval				19 DA-C	19 DA-C						
Treatment	Formulation	Rate	Appl								
1	Prevathon Intrepid Edge PHY 330 W3FE	0.43 lb/gal 3 lb/gal 20 fl oz/a 8 fl oz/a	B C A	0.0 b	0.0 a	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b	3386.7 a
2	Prevathon Intrepid Edge PHY 425 RF	0.43 lb/gal 3 lb/gal 20 fl oz/a 8 fl oz/a	B C A	0.5 b	0.0 a	0.3 b	0.5 b	0.0 b	0.8 b	1.3 b	3504.7 a
3	Prevathon Intrepid Edge DP 1646 B2XF	0.43 lb/gal 3 lb/gal 20 fl oz/a 8 fl oz/a	B C A	0.0 b	0.3 a	0.3 b	0.0 b	0.0 b	0.0 b	0.0 b	3037.7 a
4	Untreated PHY 330 W3FE		A	0.0 b	0.0 a	0.0 b	0.5 b	0.0 b	0.0 b	0.5 b	3140.9 a
5	Untreated PHY 425 RF		A	6.8 a	0.8 a	6.0 a	11.5 a	1.5 a	15.0 a	28.0 a	3140.9 a
6	Untreated DP 1646 B2XF		A	1.3 b	0.0 a	0.0 b	1.0 b	0.0 b	1.3 b	2.3 b	3037.7 a
Treatment Prob(F)				0.0001	0.1707	0.0001	0.0001	0.0001	0.0001	0.0001	0.1504

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

University of Tennessee

Evaluation of Foliar Applications for Tarnished Plant Bugs and Caterpillar Pests in Cotton - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: PHY 425 RF (planted: 6-4-19)

Application: Appl A 8-14-19; High clearance sprayer (9.3 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

Dam. Sq.= Damaged Squares; Dam. Bolls = Damaged bolls; CEW = bollworm larvae

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

Description	Dam. Sq.	Dam. Bolls	CEW	TPB	Total PB	Total SB	Dam. Sq.	Dam. Bolls	CEW			
Pest Stage Majority	Total	Total	Total	Immature	Adult + Imm.	Adult + Imm.	Total	Total	Total			
Rating Date	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/20/2019	8/26/2019	8/26/2019	8/26/2019			
Sample Size	25 Square	25 Boll	50 Fruit	10 Rowft	10 Rowft	10 Rowft	25 Square	25 Boll	50 Fruit			
Trt-Eval Interval	6 DA-A	6 DA-A	6 DA-A	6 DA-A	6 DA-A	6 DA-A	12 DA-A	12 DA-A	12 DA-A			
Trt Treatment	Formulation	Rate	Appl									
1 Untreated Check			A	3.25 a	3.00 a	0.50 a	27.00 a	27.50 a	0.00 a	2.25 a	3.25 a	1.00 a
2 Diamond	0.83 lba/gal	6 fl oz/a	A	0.50 b	0.25 a	0.00 a	10.00 b	10.00 b	0.25 a	1.00 ab	0.75 b	0.25 a
3 Transform	50 %aw/w	1.5 oz wt/a	A	1.50 b	1.00 a	0.50 a	7.50 bc	7.50 bc	0.25 a	2.25 a	2.25 ab	0.50 a
4 Diamond	0.83 lba/gal	6 fl oz/a	A	1.00 b	1.50 a	0.25 a	6.25 bc	6.25 bc	0.00 a	1.75 a	2.50 a	0.75 a
Transform	50 %aw/w	1.5 oz wt/a	A									
5 Acephate 97	97 %aw/w	0.75 lb/a	A	1.50 b	1.00 a	0.50 a	4.00 c	4.00 c	0.00 a	0.00 b	0.75 b	0.00 a
Fanfare	2 lba/gal	6.4 fl oz/a	A									
Treatment Prob(F)				0.0136	0.0919	0.8050	0.0001	0.0001	0.6114	0.0363	0.0198	0.3924

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

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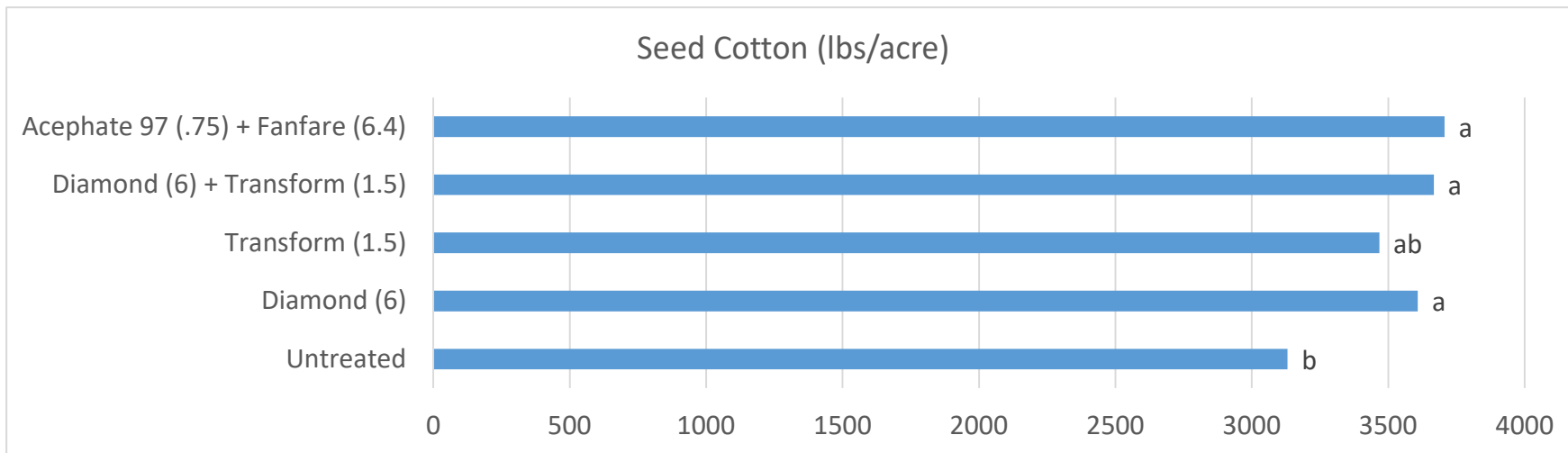
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Dam. Sq.= Damaged Squares; Dam. Bolls = Damaged bolls; CEW = bollworm larvae

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

Description					TPB	Total PB	Total SB	Dam. Bolls	CEW	Seed cotton
Pest Stage Majority					Immature	Adult + Imm.	Adult + Imm.	Total	Total	lb/acre
Rating Date					8/28/2019	8/28/2019	8/28/2019	9/5/2019	9/5/2019	10/14/2019
Sample Size					10 Rowft	10 Rowft	10 Rowft	50 Boll	50 Boll	
Trt-Eval Interval					14 DA-A	14 DA-A	14 DA-A	22 DA-A	22 DA-A	
Trt	Treatment	Formulation	Rate	Appl						
1	Untreated Check			A	35.25 a	36.25 a	0.75 a	3.25 a	0.50 a	3131 b
2	Diamond	0.83 lba/gal	6 fl oz/a	A	10.25 b	10.50 b	0.50 a	1.25 a	0.25 a	3608 a
3	Transform	50 %aw/w	1.5 oz wt/a	A	11.75 b	11.75 b	0.25 a	1.75 a	0.75 a	3467 ab
4	Diamond	0.83 lba/gal	6 fl oz/a	A	8.25 b	8.50 b	0.75 a	1.50 a	0.25 a	3667 a
	Transform	50 %aw/w	1.5 oz wt/a	A						
5	Acephate 97	97 %aw/w	0.75 lb/a	A	12.50 b	12.50 b	0.00 a	0.75 a	0.25 a	3706 a
	Fanfare	2 lba/gal	6.4 fl oz/a	A						
Treatment Prob(F)					0.0001	0.0001	0.5426	0.1897	0.5767	0.0346

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



University of Tennessee

Selected Foliar Insecticides for Control of Caterpillar Pests in Cotton - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: FM 2322 non-Bt (planted: 6-4-19)

Appl A 8-15-19; High clearance sprayer (9.3 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

Dam. Sq.= Damaged Squares; Dam. Bolls = Damaged bolls; CEW = bollworm larvae

Description				Dam. Sq.	Dam. Bolls	CEW	Dam. Sq.	Dam. Bolls	CEW	Dam. Bolls	CEW	Dam. Bolls	CEW	Seed cotton	
Pest Stage Majority				Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	lbs/acre	
Rating Date				8/21/2019	8/21/2019	8/21/2019	8/26/2019	8/26/2019	8/26/2019	9/6/2019	9/6/2019	9/6/2019	9/6/2019	10/14/2019	
Sample Size				25 Square	25 Boll	50 Fruit	25 Square	25 Boll	50 Fruit	50 Boll	50 Boll	50 Boll	50 Boll		
Trt-Eval Interval				6 DA-A	6 DA-A	6 DA-A	11 DA-A	11 DA-A	11 DA-A	22 DA-A	22 DA-A	22 DA-A	22 DA-A		
Treatment	Formulation	Rate	Appl												
1	Untreated Check		A	2.000 a	3.250 a	1.500 a	2.000 a	5.250 a	1.500 a	6.000 a	0.500 a			2009.4 a	
2	Prevathon	0.43 lba/gal	20 fl oz/a	A	0.000 a	1.500 a	1.000 a	0.000 a	0.750 bc	0.250 c	0.500 d	0.000 a		2196.1 a	
3	Diamond	0.83 lba/gal	6 fl oz/a	A	0.250 a	0.500 a	0.500 a	1.000 a	2.250 bc	1.250 ab	5.750 ab	1.750 a		2220.7 a	
4	Diamond	0.83 lba/gal	9 fl oz/a	A	0.500 a	0.750 a	0.500 a	0.500 a	1.000 bc	0.250 c	6.500 a	2.250 a		1999.6 a	
5	Diamond	0.83 lba/gal	6 fl oz/a	A	0.750 a	1.000 a	0.250 a	0.500 a	0.000 c	0.000 c	4.250 abc	2.000 a		2161.7 a	
	Acephate 97	97 %aw/w	0.75 lb/a	A											
6	Diamond	0.83 lba/gal	6 fl oz/a	A	1.000 a	0.750 a	0.500 a	0.750 a	1.250 bc	0.250 c	2.500 c	1.250 a		2166.7 a	
	Fanfare	2 lba/gal	6.4 fl oz/a	A											
7	Diamond	0.83 lba/gal	6 fl oz/a	A	0.000 a	1.250 a	0.500 a	1.000 a	3.000 ab	0.000 c	3.250 abc	1.250 a		1989.8 a	
	Fanfare	2 lba/gal	6.4 fl oz/a	A											
	Acephate 97	97 %aw/w	0.75 lb/a	A											
8	Acephate 97	97 %aw/w	0.75 lb/a	A	0.750 a	0.500 a	0.250 a	0.250 a	0.750 bc	0.000 c	2.750 bc	1.750 a		2058.6 a	
	Fanfare	2 lba/gal	6.4 fl oz/a	A											
9	Intrepid Edge	3 lba/gal	8 fl oz/a	A	1.000 a	1.000 a	0.500 a	0.500 a	0.500 c	0.500 bc	1.750 c	0.500 a		2112.6 a	
10	Diamond	0.83 lba/gal	6 fl oz/a	A	0.250 a	0.750 a	0.250 a	0.250 a	0.250 c	0.250 c	0.500 d	0.000 a		2097.9 a	
	Prevathon	0.43 lba/gal	14 fl oz/a	A											
Treatment Prob(F)				0.4222	0.0715	0.3134	0.3714	0.0053	0.0096	0.0005	0.1282	0.5123			

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

University of Tennessee

Selected Foliar Insecticides for Control of Caterpillar Pests in Cotton - Madison Co. (LOW PEST PRESSURE)

Location: West TN Research and Education Center (Jackson)

Variety: FM 2322 non-Bt (planted: 6-4-19)

Appl A 8-15-19; Appl B 8-19-19; High clearance sprayer (9.3 GPA, 40 PSI, 8001FF)

Plots: 4 Rows x 35 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

Dam. Sq.= Damaged Squares; Dam. Bolls = Damaged bolls; CEW = bollworm larvae

Description				Dam Sq.	Dam Bolls	CEW	Dam Sq.	Dam Bolls	CEW	Dam Bolls	CEW
Pest Stage Majority				Total	Total	Total	Total	Total	Total	Total	Total
Rating Date				8/22/2019	8/22/2019	8/22/2019	8/27/2019	8/27/2019	8/27/2019	9/5/2019	9/5/2019
Sample Size, Unit				25 Square	25 Boll	50 Fruit	25 Square	25 Boll	50 Fruit	50 Boll	50 Boll
Trt-Eval Interval				3 DA-B	3 DA-B	3 DA-B	8 DA-B	8 DA-B	8 DA-B	17 DA-B	17 DA-B
Treatment	Formulation	Rate	Appl								
1 Heligen	100 %	1.6 fl oz/a	AB	2.250 a	2.250 a	1.250 a	0.500 a	1.500 a	0.750 a	2.250 a	0.500 a
2 Heligen	100 %	1.6 fl oz/a	AB	0.750 a	1.250 a	0.750 a	0.500 a	1.000 a	0.250 a	0.500 b	0.000 a
Brigade	2 lb/gal	6 fl oz/a	AB								
3 Besiege	1.252 lb/gal	8 fl oz/a	A	0.000 a	0.250 a	0.000 a	0.250 a	0.000 a	0.000 a	0.000 b	0.000 a
4 Untreated Check				2.250 a	2.500 a	1.750 a	1.250 a	2.000 a	0.250 a	3.750 a	1.250 a
Treatment Prob(F)				0.1315	0.2198	0.0919	0.4547	0.4439	0.2603	0.0040	0.0884

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