

# University of Tennessee

## Regional Bt Cotton Traits - Preventative Spray vs. Unsprayed - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: (planted: 6-6-17)

Appl A 6-6-17 (at planting); Appl B 8-3-17; Appl C 8-29-17; High clearance sprayer (9.2 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. Flo. = Damaged Flowers; Total Dam. = Total Damage; CEW = bollworm larvae

Description				Dam. Sq.		Dam. Bolls		Total Dam.		CEW		Dam. Sq.		Dam. Bolls		Total Dam.		CEW		Dam. Sq.		Dam. Bolls	
Pest Stage Majority				Total		Total		Total		Total		Total		Total		Total		Total		Total		Total	
Rating Date				8/10/2017		8/10/2017		8/10/2017		8/10/2017		8/16/2017		8/16/2017		8/16/2017		8/16/2017		8/21/2017		8/21/2017	
Sample Size, Unit				25 Square		25 Boll		50 Fruit		50 Fruit		25 Square		25 Boll		50 Fruit		50 Fruit		25 Square		25 Boll	
Trt-Eval Interval				7 DA-B		7 DA-B		7 DA-B		7 DA-B		13 DA-B		13 DA-B		13 DA-B		13 DA-B		18 DA-B		18 DA-B	
Treatment	Formulation	Rate	App																				
1	Non-Bt DP1441RF		A	5.5	a	1.8	a	7.3	a	2.5	a	14.0	a	5.3	a	19.3	a	3.8	a	4.8	a	5.0	a
2	Non-Bt DP1441RF		A	0.0	b	0.0	b	0.0	b	0.0	c	0.8	c	0.0	c	0.8	d	0.0	c	0.0	b	0.0	d
	Prevathon	0.43 lb/gal	20 fl oz/a	B																			
	Prevathon	0.43 lb/gal	14 fl oz/a	C																			
3	Widestrike PHY333 WRF		A	0.0	b	0.5	b	0.5	b	0.8	b	2.3	b	2.3	b	4.5	b	1.3	ab	2.3	a	4.0	ab
4	Widestrike PHY333 WRF		A	0.0	b	0.0	b	0.0	b	0.3	c	0.0	c	0.0	c	0.0	d	0.0	c	0.3	b	0.5	cd
	Prevathon	0.43 lb/gal	20 fl oz/a	B																			
	Prevathon	0.43 lb/gal	14 fl oz/a	C																			
5	Widestrike 3 PHY330 W3FE		A	0.0	b	0.0	b	0.0	b	0.0	c	0.0	c	0.0	c	0.0	d	0.0	c	0.0	b	0.0	d
6	Widestrike 3 PHY330 W3FE		A	0.3	b	0.0	b	0.3	b	0.0	c	0.0	c	0.0	c	0.0	d	0.0	c	0.0	b	0.0	d
	Prevathon	0.43 lb/gal	20 fl oz/a	B																			
	Prevathon	0.43 lb/gal	14 fl oz/a	C																			
7	Twinlink ST4949 GLT		A	0.0	b	0.0	b	0.0	b	0.3	c	0.8	c	1.5	b	2.3	c	1.3	b	0.3	b	1.8	bc
8	Twinlink ST4949 GLT		A	0.0	b	0.0	b	0.0	b	0.0	c	0.3	c	0.0	c	0.3	d	0.0	c	0.0	b	0.0	d
	Prevathon	0.43 lb/gal	20 fl oz/a	B																			
	Prevathon	0.43 lb/gal	14 fl oz/a	C																			
9	Bollgard 2 ST4946 GLB2		A	0.5	b	0.0	b	0.5	b	0.0	c	0.3	c	0.3	c	0.5	d	0.3	c	0.3	b	0.5	cd
10	Bollgard 2 ST4946 GLB2		A	0.0	b	0.3	b	0.3	b	0.0	c	0.0	c	0.0	c	0.0	d	0.0	c	0.0	b	0.5	cd
	Prevathon	0.43 lb/gal	20 fl oz/a	B																			
	Prevathon	0.43 lb/gal	14 fl oz/a	C																			

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

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Description				Total Dam.	Total CEW	Dam. Sq.	Dam. Bolls	Total Dam.	Total CEW	Dam. Sq.	Dam. Bolls	Dam. Bolls	Seed Cotton
Pest Stage Majority				Total	Total	Total	Total	Total	Total	Total	Total	Total	lbs/acre
Rating Date				8/21/2017	8/21/2017	8/25/2017	8/25/2017	8/25/2017	8/25/2017	8/30/2017	8/30/2017	9/5/2017	10/24/2017
Sample Size, Unit				50 Fruit	50 Fruit	25 Square	25 Boll	50 Fruit	50 Fruit	25 Square	25 Boll	50 Boll	
Trt-Eval Interval				18 DA-B	18 DA-B	22 DA-B	22 DA-B	22 DA-B	22 DA-B	1 DA-C	1 DA-C	7 DA-C	
Treatment	Formulation	Rate	Appl										
1 Non-Bt DP1441RF			A	9.8 a	0.5 b	4.8 a	5.5 a	10.3 a	1.8 ab	6.5 a	4.0 ab	9.5 a	1709.6 e
2 Non-Bt DP1441RF			A	0.0 c	0.0 b	0.0 b	0.5 c	0.5 d	0.0 d	0.8 bc	0.0 c	0.8 cd	3007.2 abc
Prevathon	0.43 lb/gal	20 fl oz/a	B										
Prevathon	0.43 lb/gal	14 fl oz/a	C										
3 Widestrike PHY333 WRF			A	6.3 a	3.0 a	3.5 a	4.5 ab	8.0 a	2.3 a	4.3 a	5.8 a	9.5 a	2771.3 cd
4 Widestrike PHY333 WRF			A	0.8 bc	0.3 b	0.3 b	0.5 c	0.8 cd	0.3 d	0.3 c	0.3 c	0.5 d	3202.9 ab
Prevathon	0.43 lb/gal	20 fl oz/a	B										
Prevathon	0.43 lb/gal	14 fl oz/a	C										
5 Widestrike 3 PHY330 W3FE			A	0.0 c	0.0 b	0.3 b	0.0 c	0.3 d	0.0 d	0.5 bc	0.3 c	0.0 d	2885.3 bc
6 Widestrike 3 PHY330 W3FE			A	0.0 c	0.0 b	0.0 b	0.0 c	0.0 d	0.0 d	0.0 c	0.0 c	0.0 d	3272.7 a
Prevathon	0.43 lb/gal	20 fl oz/a	B										
Prevathon	0.43 lb/gal	14 fl oz/a	C										
7 Twinlink ST4949 GLT			A	2.0 b	0.0 b	1.3 b	2.0 b	3.3 b	1.3 bc	4.0 a	3.5 ab	2.3 bc	1989.7 e
8 Twinlink ST4949 GLT			A	0.0 c	0.0 b	0.0 b	0.0 c	0.0 d	0.0 d	0.5 bc	0.0 c	0.5 d	2694.6 cd
Prevathon	0.43 lb/gal	20 fl oz/a	B										
Prevathon	0.43 lb/gal	14 fl oz/a	C										
9 Bollgard 2 ST4946 GLB2			A	0.8 bc	0.0 b	1.5 b	0.3 c	1.8 bc	0.5 cd	1.8 b	2.0 b	2.8 b	2511.8 d
10 Bollgard 2 ST4946 GLB2			A	0.5 c	0.3 b	0.0 b	0.0 c	0.0 d	0.0 d	0.0 c	0.0 c	0.0 d	2912.8 bc
Prevathon	0.43 lb/gal	20 fl oz/a	B										
Prevathon	0.43 lb/gal	14 fl oz/a	C										

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

### Seed Cotton (lbs/acre)

