

# University of Tennessee

## Demonstration of Potential Yield Loss from Plant Bugs in Cotton - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: DP1522 B2XF (planted: 5-19-16)

Application: Appl A 7-6-16; Appl B 7-18-16; Appl C 7-26-16; Appl D 8-2-16; High clearance sprayer (10 GPA, 40 PSI, 80015FF)

Rating: 25 sweeps, 2 drop cloths per plot (10 row ft) in sampled rows

Plots: 8 Rows x 35 ft (RCBD, 4 Reps)

Each plot had 4 rows sampled for plant bugs and 4 rows not sampled for plant bugs

Investigators: Stewart, S.Steckel, Williams

TPB= Tarnished Plant Bug; Total PB = Tarnished + Clouded; Sq. Reten. = Square Retention

Description				TPB	Sq. Reten.	Total TPB	Total PB	Total PB	TOTAL PB	Seed Cotton	Seed Cotton								
Rating Date				Adult	%	Adult + Imm.	Adult + Imm.	Adult + Imm.	Adult + Imm.	lbs/acre	lbs/acre								
Sample Size, Unit				7/11/2016	7/11/2016	7/18/2016	7/25/2016	8/2/2016	8/8/2016	10/3/2016	10/3/2016								
Trt-Eval Interval				25 Sweeps	25 Squares	10 Row-ft	10 Row-ft	10 Row-ft	10 Row-ft	(rows sampled for insects)	(rows not sampled for insects)								
Trt-Eval Interval				5 DA-A	5 DA-A	12 DA-A	7 DA-B	7 DA-C	6 DA-D										
Treatment	Formulation	Rate	Appl																
1	Spray pre-bloom only		A	2.8	a	94.0	a	13.3	a	29.3	b	49.3	a	57.0	a	1518.4	a	1762.7	a
	Centric	1.25 oz wt/a	A																
	Couraze	1.6 lb/gal	A																
2	Spray flowering only		BCD	5.3	a	84.0	a	21.3	a	11.8	c	12.0	b	1.8	b	1931.7	a	2169.6	a
	Transform	50 %	BC																
	Orthene	97 %	C																
	Brigade	2 lb/gal	CD																
	Orthene	97 %	D																
3	Season-long control		ABCD	3.8	a	93.0	a	17.0	a	9.3	c	9.5	b	2.3	b	2178.5	a	2457.2	a
	Centric	1.25 oz wt/a	A																
	Couraze	1.6 lb/gal	A																
	Transform	50 %	B																
	Orthene	97 %	C																
	Brigade	2 lb/gal	CD																
	Orthene	97 %	D																
4	Untreated all season			3.3	a	87.0	a	21.0	a	43.5	a	68.3	a	59.3	a	1759.7	a	1759.7	a

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