

University of Tennessee

Seed Treatment + In-Furrow + Insecticide Foliar Thrips Trial in Cotton - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: DP 117 B2RF (planted 4-23-08)

Application: At-planting except Trt 8 (Dimethoate, 5-20-08, High Clearance Sprayer, 8 GPA, 46 PSI, FF 8001)

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

Investigators: Stewart, Willis, S.Steckel

Ad + Imm = Adults + Immatures

Pest Name					Thrips sp.	Thrips sp.	Thrips sp.	Thrips sp.
Description					Injury	Counts	Injury	Counts
Rating Date					5/12/08	5/13/08	5/20/08	5/20/08
Rating Unit					0-5	5	0-5	5
Sample Size Unit					PLOT	PLANTS	PLOT	PLANTS
Pest Stage						Ad + Imm		Ad + Imm
Trt-Eval Interval					19 DA-A	20 DA-A	27 DA-A	27 DA-A
Trt No.	Treatment Name	Form Conc	Form Unit	Rate Rate Unit	1	5	9	12
1	APRON XL 3 LS	350	GA/L	7.5 g ai/100 kg	1.20 a	6.0 ab	4.000 a	58.5 a
	MAXIM 4 FS	480	GA/L	2.5 g ai/100 kg				
	SYSTHANE 40 WP	40	%AW/W	21.0 g ai/100 kg				
	DYNASTY CST 125 FS	125	GA/L	0.034 mg ai/seed				
2	APRON XL 3 LS	350	GA/L	7.5 g ai/100 kg	1.00 b	3.0 bc	1.438 cd	12.5 cde
	MAXIM 4 FS	480	GA/L	2.5 g ai/100 kg				
	SYSTHANE 40 WP	40	%AW/W	21.0 g ai/100 kg				
	DYNASTY CST 125 FS	125	GA/L	0.034 mg ai/seed				
	CRUISER 5 FS	600	GA/L	0.342 mg ai/seed				
3	APRON XL 3 LS	350	GA/L	7.5 g ai/100 kg	0.98 b	2.3 bc	1.313 cd	13.8 cd
	MAXIM 4 FS	480	GA/L	2.5 g ai/100 kg				
	SYSTHANE 40 WP	40	%AW/W	21.0 g ai/100 kg				
	DYNASTY CST 125 FS	125	GA/L	0.034 mg ai/seed				
	CRUISER 5 FS	600	GA/L	0.342 mg ai/seed				
	AVICTA 4.17 FS	500	GA/L	0.145 mg ai/seed				
4	APRON XL 3 LS	350	GA/L	7.5 g ai/100 kg	1.03 b	1.5 c	1.250 cd	5.5 e
	MAXIM 4 FS	480	GA/L	2.5 g ai/100 kg				
	SYSTHANE 40 WP	40	%AW/W	21.0 g ai/100 kg				
	DYNASTY CST 125 FS	125	GA/L	0.034 mg ai/seed				
	CRUISER 5 FS	600	GA/L	0.342 mg ai/seed				
	AVICTA 4.17 FS	500	GA/L	0.145 mg ai/seed				
	EXC211	480	GA/L	0.6 mg ai/seed				
5	APRON XL 3 LS	350	GA/L	7.5 g ai/100 kg	1.03 b	2.5 bc	1.250 cd	6.3 de
	MAXIM 4 FS	480	GA/L	2.5 g ai/100 kg				
	SYSTHANE 40 WP	40	%AW/W	21.0 g ai/100 kg				
	DYNASTY CST 125 FS	125	GA/L	0.034 mg ai/seed				
	CRUISER 5 FS	600	GA/L	0.342 mg ai/seed				
	AVICTA 4.17 FS	500	GA/L	0.145 mg ai/seed				
	EXC211	480	GA/L	0.9 mg ai/seed				
6	APRON XL 3 LS	350	GA/L	7.5 g ai/100 kg	1.00 b	2.5 bc	1.438 cd	9.3 de
	MAXIM 4 FS	480	GA/L	2.5 g ai/100 kg				
	SYSTHANE 40 WP	40	%AW/W	21.0 g ai/100 kg				
	DYNASTY CST 125 FS	125	GA/L	0.034 mg ai/seed				
	CRUISER 5 FS	600	GA/L	0.342 mg ai/seed				
	AVICTA 4.17 FS	500	GA/L	0.145 mg ai/seed				
	STP28271			50.0 g ai/100 kg				

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Pest Name Description Rating Date Rating Unit Sample Size Unit Pest Stage Trt-Eval Interval					Thrips sp. Injury 5/12/08 0-5 PLOT 19 DA-A	Thrips sp. Counts 5/13/08 5 PLANTS Ad + Imm 20 DA-A	Thrips sp. Injury 5/20/08 0-5 PLOT 27 DA-A	Thrips sp. Counts 5/20/08 5 PLANTS Ad + Imm 27 DA-A	
Trt No.	Treatment Name	Form Conc	Form Unit	Rate Rate Unit	1	5	9	12	
7	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS TEMIK 15 G (in-furrow)	350 480 40 125 15	GA/L GA/L %AW/W GA/L %AW/W	7.5 2.5 21.0 0.034 840.0	g ai/100 kg g ai/100 kg g ai/100 kg mg ai/seed gai/ha	0.98 b	5.5 abc	2.000 b	22.3 bc
8	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS DIMETHOATE 400 EC	350 480 40 125 600 400	GA/L GA/L %AW/W GA/L GA/L GA/L	7.5 2.5 21.0 0.034 0.342 234.0	g ai/100 kg g ai/100 kg g ai/100 kg mg ai/seed mg ai/seed gai/ha	1.05 b	6.5 ab	1.438 cd	7.5 de
9	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS AVICTA 4.17 FS XED-175	350 480 40 125 500	GA/L GA/L %AW/W GA/L GA/L	7.5 2.5 21.0 0.034 0.145 0.064	g ai/100 kg g ai/100 kg g ai/100 kg mg ai/seed mg ai/seed mg ai/seed	1.05 b	9.3 a	1.500 c	26.3 b
10	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS AVICTA 4.17 FS CRUISER 5 FS XED-175	350 480 40 125 500 600	GA/L GA/L %AW/W GA/L GA/L GA/L	7.5 2.5 21.0 0.034 0.145 0.342 0.064	g ai/100 kg g ai/100 kg g ai/100 kg mg ai/seed mg ai/seed mg ai/seed mg ai/seed	1.05 b	2.5 bc	1.250 cd	6.8 de
11	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS AVICTA 4.17 FS CRUISER 5 FS XED-175	350 480 40 125 500 600	GA/L GA/L %AW/W GA/L GA/L GA/L	7.5 2.5 21.0 0.034 0.145 0.342 0.130	g ai/100 kg g ai/100 kg g ai/100 kg mg ai/seed mg ai/seed mg ai/seed mg ai/seed	1.03 b	2.5 bc	1.250 cd	8.3 de
12	GAUCHO 600 FS APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS	600 350 480 40 125	GA/L GA/L GA/L %AW/W GA/L	37.5 7.5 2.5 21.0 0.034	g ai/100 kg g ai/100 kg g ai/100 kg g ai/100 kg mg ai/seed	1.03 b	4.5 bc	1.188 d	6.3 de

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Pest Name Description Rating Date Rating Unit Sample Size Sample Size Unit Pest Stage Trt-Eval Interval					Thrips sp. Counts 5/29/08 4 PLANTS Immature 9 DA-C	Yield Seed Cotton 9/26/08 LB 1 A 156 DA-A
Trt No.	Treatment Name	Form Conc	Form Unit	Rate Rate Unit	17	23
1	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS	350 480 40 125	GA/L GA/L %AW/W GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed	41.5 a	3905 a
2	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS	350 480 40 125 600	GA/L GA/L %AW/W GA/L GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 0.342 mg ai/seed	17.3 bc	4600 a
3	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS AVICTA 4.17 FS	350 480 40 125 600 500	GA/L GA/L %AW/W GA/L GA/L GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 0.342 mg ai/seed 0.145 mg ai/seed	6.0 c	4400 a
4	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS AVICTA 4.17 FS EXC211	350 480 40 125 600 500 480	GA/L GA/L %AW/W GA/L GA/L GA/L GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 0.342 mg ai/seed 0.145 mg ai/seed 0.6 mg ai/seed	11.8 bc	4659 a
5	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS AVICTA 4.17 FS EXC211	350 480 40 125 600 500 480	GA/L GA/L %AW/W GA/L GA/L GA/L GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 0.342 mg ai/seed 0.145 mg ai/seed 0.9 mg ai/seed	11.5 bc	4222 a
6	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS AVICTA 4.17 FS STP28271	350 480 40 125 600 500	GA/L GA/L %AW/W GA/L GA/L GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 0.342 mg ai/seed 0.145 mg ai/seed 50.0 g ai/100 kg	20.0 b	4071 a
7	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS TEMIK 15 G (in-furrow)	350 480 40 125 15	GA/L GA/L %AW/W GA/L %AW/W	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 840.0 gai/ha	13.8 bc	4348 a
8	APRON XL 3 LS MAXIM 4 FS SYSTHANE 40 WP DYNASTY CST 125 FS CRUISER 5 FS DIMETHOATE 400 EC	350 480 40 125 600 400	GA/L GA/L %AW/W GA/L GA/L GA/L	7.5 g ai/100 kg 2.5 g ai/100 kg 21.0 g ai/100 kg 0.034 mg ai/seed 0.342 mg ai/seed 234.0 gai/ha	12.0 bc	4165 a

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Pest Name					Thrips sp.	Yield
Description					Counts	Seed Cotton
Rating Date					5/29/08	9/26/08
Rating Unit						LB
Sample Size					4	1
Sample Size Unit					PLANTS	A
Pest Stage					Immature	
Trt-Eval Interval					9 DA-C	156 DA-A
Trt No.	Treatment Name	Form Conc	Form Unit	Rate Rate	Unit	
9	APRON XL 3 LS	350	GA/L	7.5	g ai/100 kg	
	MAXIM 4 FS	480	GA/L	2.5	g ai/100 kg	
	SYSTHANE 40 WP	40	%AW/W	21.0	g ai/100 kg	
	DYNASTY CST 125 FS	125	GA/L	0.034	mg ai/seed	
	AVICTA 4.17 FS	500	GA/L	0.145	mg ai/seed	
	XED-175			0.064	mg ai/seed	
10	APRON XL 3 LS	350	GA/L	7.5	g ai/100 kg	
	MAXIM 4 FS	480	GA/L	2.5	g ai/100 kg	
	SYSTHANE 40 WP	40	%AW/W	21.0	g ai/100 kg	
	DYNASTY CST 125 FS	125	GA/L	0.034	mg ai/seed	
	AVICTA 4.17 FS	500	GA/L	0.145	mg ai/seed	
	CRUISER 5 FS	600	GA/L	0.342	mg ai/seed	
	XED-175			0.064	mg ai/seed	
11	APRON XL 3 LS	350	GA/L	7.5	g ai/100 kg	
	MAXIM 4 FS	480	GA/L	2.5	g ai/100 kg	
	SYSTHANE 40 WP	40	%AW/W	21.0	g ai/100 kg	
	DYNASTY CST 125 FS	125	GA/L	0.034	mg ai/seed	
	AVICTA 4.17 FS	500	GA/L	0.145	mg ai/seed	
	CRUISER 5 FS	600	GA/L	0.342	mg ai/seed	
	XED-175			0.130	mg ai/seed	
12	GAUCHO 600 FS	600	GA/L			
	APRON XL 3 LS	350	GA/L	7.5	g ai/100 kg	
	MAXIM 4 FS	480	GA/L	2.5	g ai/100 kg	
	SYSTHANE 40 WP	40	%AW/W	21.0	g ai/100 kg	
	DYNASTY CST 125 FS	125	GA/L	0.034	mg ai/seed	

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