

Cotton Insect Losses for 1993

Michael R. Williams; Extension Entomologist; Chairman

Cooperative Extension Service

Mississippi State University

Mississippi State, MS 39762

State Coordinators

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Virginia----Dr. James Roberts, Sr.

Background

This information was provided by state coordinators and was collected from surveys of county agents, extension specialists, private consultants and research entomologists. All data are averaged over a total reporting unit, state, etc. For example, if a unit report represents 100 acres and 25 of those acres have an 8% loss, then in the table summary there is a 2% loss shown $((.08 \times 25) / 100)$. This type of averaging is used for all data reported including yields and control costs.

Highlights

Overall losses to arthropod pests were about the same for 1992 (6.90%) and 1993 (6.88%). Boll weevils at 1.88%, and boll/budworms at 1.56% remained the leading pests of cotton. Lygus and Thrips at 0.88% were tied for third most damaging pest. Beet armyworms at 0.57%, spider mites at 0.34%, aphids at 0.30% and sweet potato whitefly at 0.21% also contributed to insect losses. Most other pests contributed less than 0.1% damage. Cutworms, not reported, were also cited for damage in some areas in 1993.

Weevils currently infest about 52% of all U.S. cotton, while the bollworm/budworm complex is found in about 73%. Thrips were reported on 82% of all U.S. cotton, this number is up by 1/3 and may reflect a change in reporting as most coordinators indicated that 'in-furrow' treatments were taken into account. Insect losses amounted to more than \$331 million with an accompanied insecticide bill of more than \$586 million (\$45.21/Ac). Total cost of arthropods to the 1993 crop exceeded \$917 million.

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TABLE 1 USDA 1993 US CROP PRODUCTION: ALL COTTON					
Acres in thousands, yield in pounds per acre, production in thousand 480 pound bales.					
Upland	Acres harv.	Indic yield	Dec.01	Nov. 01	1992
Alabama	430	525	470	470	621
Arizona	315	1,195	784	792	725
Arkansas	1,000	576	1,200	1,300	1,681
California	1,045	1,309	2,850	2,750	2,817
Florida	52	740	80	80	72
Georgia	590	569	700	670	744
Kansas	2	256	1	1	0
Louisiana	875	606	1,105	1,100	1,299
Mississippi	1,350	569	1,600	1,600	2,131
Missouri	338	490	345	370	541
New Mexico	60	704	88	88	48
N. Carolina	385	536	430	430	468
Oklahoma	350	363	265	270	210
S. Carolina	195	492	200	175	226
Tennessee	640	413	550	580	834
Texas	5,250	475	5,200	5,200	3,265
Virginia	23	600	29	209	28
Total US	12,899.3	592	15,896.5	15,904.5	15,710.2
pima Arizona	58	869	105	105	138
pima Calif.	90	1,173	220	225	294
pima N.Mex.	11	655	15	15	20
pima Texas	33	684	47	47	57
Total US	192.0	968	387.0	392.0	508.3
ALL COTTON					
Total US	13091.3	597	16,283.5	16,296.5	16,218.5

Table 2 Summary of ALL STATES Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Threshold	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	6763590	5608440	1.9	4.91	1.88	314226
Boll/Bud Worms	9486457	6560980	1.8	9.42	1.56	260846
Fleahopper	3448695	1210866	0.1	4.61	0.07	11332
Lygus bugs	6124117	2644302	0.3	7.14	0.88	146413
Leaf perforator	254250	29870	0.0	11.77	0.00	640
Pink bollworm	414070	52800	0.0	7.74	0.02	4086
Spider mites	2630752	902255	0.1	13.76	0.34	57111
Thrips	10693240	7327397	0.8	6.76	0.88	147815
Beet armyworm	3483658	1722250	0.3	12.31	0.57	94521
Fall armyworm	1382250	554900	0.1	10.48	0.09	14427
Eur corn borer	289350	199050	0.0	5.93	0.01	945
Stink bug	1789992	183584	0.0	5.07	0.02	2637
Grasshopper	217500	30075	0.0	5.09	0.00	18
SM caterpillar	276800	41630	0.0	11.59	0.00	809
Aphids	9083474	3006776	0.3	8.49	0.30	49885
Bnded w whitefly	1872942	187184	0.0	5.95	0.00	297
Swt pot whitefly	696000	298760	0.1	20.16	0.21	35251
Soybean looper	1542342	391900	0.0	10.36	0.02	3818
Cabbage looper	1564900	313200	0.0	7.02	0.02	4012
W Flower Thrips	3206442	155175	0.0	20.79	0.01	1406
Acreage harvested: 12977268 Yield per acre: 1.29 Bales						
Percent Lost: 6.88 Dollars Lost: 331,343,032 Cost per Acre: 45.21						

Table 3 Central Alabama Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applcat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	100000	100000	7.0	2.75	5.00	4688
Boll/Bud Worms	100000	100000	4.0	6.00	5.00	3750
Fleahopper	0	0	0.0	0.00	4.00	0
Lygus bugs	100000	20000	0.2	2.25	0.00	94
Leaf perforator	0	0	0.0	0.00	0.10	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	5000	0	0.0	0.00	0.00	0
Thrips	100000	100000	1.0	1.50	0.00	938
Beet armyworm	100000	50000	1.5	14.00	1.00	2813
Fall armyworm	100000	25000	0.3	8.00	3.00	117
Eur corn borer	0	0	0.0	0.00	0.13	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	100000	5000	0.1	3.50	0.00	0
Bnded w whitefly	100000	5000	0.1	7.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	50000	20000	0.2	12.00	0.10	94
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	100000	5000	0.0	0.00	0.00	0
Acreage harvested: 100000 Yield per acre: 0.94 Bales						
Percent Lost: 13.33 Dollars Lost: 3,597,750 Cost per Acre: 71.13						

***Cost for Boll Weevil Eradication: \$10.00 per acre.**

Table 4 North Alabama Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Threshold	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	220000	205000	2.2	2.00	2.67	5958
Boll/Bud Worm	235000	235000	4.0	6.15	7.15	15936
Fleahopper	0	0	0.0	0.00	0.00	0
Lygus bugs	235000	190000	0.8	1.80	1.86	4141
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	150000	70000	0.1	8.00	0.30	678
Thrips	235000	15000	0.0	1.50	0.01	15
Beet armyworm	110000	36000	0.0	9.00	0.47	1046
Fall armyworm	15000	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
Aphids	235000	160000	0.2	1.80	1.04	2325
Bnded w whitefly	175000	18000	0.0	6.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	20000	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	235000	60000	0.0	6.00	0.26	581

Acres harvested: 230000 Yield per acre: 0.97 Bales

Percent Lost: 13.77 Dollars Lost: 8,835,930 Cost per Acre: 31.81

Table 5 South Alabama Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	0	0	0.0	0.00	0.00	0
Boll/Bud Worm	120000	120000	7.0	8.00	8.00	13500
Fleahopper	0	0	0.0	0.00	0.00	0
Lygus bugs	120000	40000	0.3	2.75	0.17	281
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spidermites	20000	0	0.0	0.00	0.00	0
Thrips	120000	100000	0.8	1.50	0.42	703
Beet armyworm	120000	30000	0.8	14.00	1.00	1688
Fall armyworm	120000	120000	2.0	10.00	1.00	1688
Eur corn borer	5000	2000	0.0	8.00	0.00	3
Stink bug	120000	20000	0.3	3.50	0.03	56
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	120000	20000	0.2	3.50	0.03	56
Bnded w whitefly	120000	20000	0.2	8.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	90000	30000	0.5	15.00	0.50	844
Cabbage looper	0	0	0.0	0.00	0.00	0

W Flower Thrips	120000	0	0.0	0.00	0.00	0
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Acres harvested: 120000 Yield per acre: 1.41 Bales

Percent Lost: 11.15 Dollars Lost: 5,419,710 Cost per Acre: 99.52

*COST FOR BOLL WEEVIL ERADICATION : \$10.00 PER ACRE

Table 6 Alabama Summary Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	320000	305000	2.7	2.43	2.19	10645
Boll/Bud Worms	455000	455000	4.8	6.84	6.84	33186
Fleahopper	0	0	0.0	0.00	0.00	0
Lygus bugs	455000	250000	0.6	1.99	0.93	4516
Leaf perforator	0	0	0.0	0000	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	175000	70000	0.0	8.00	0.14	678
Thrips	455000	215000	0.4	1.50	0.34	1655
Beet armyworm	330000	116000	0.5	13.85	1.14	5546
Fall armyworm	235000	145000	0.6	9.81	0.37	1805
Eur corn borer	5000	2000	0.0	8.00	0.00	3
Stink bug	120000	20000	0.1	3.50	0.01	56
Grasshopper	0	0	0.0	0.00	0.00	0
SM Caterpillar	0	0	0.0	0.00	0.00	0
Aphids	455000	185000	0.2	2.38	0.49	2381
Bnded w whitefly	395000	43000	0.1	7.68	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	160000	50000	0.2	14.25	0.19	938
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrip	455000	65000	0.0	6.00	0.12	581

Acres harvested: 450000 Yield per acre: 1.08 Bales

Percent Lost: 12.77 Dollars Lost: 17,853,390 Cost per Acre: 58.60

Table 7 Northeast Arkansas Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Threshold	#Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	500000	300000	2.4	6.00	1.20	8750
Boll/Bud Worms	500000	250000	1.5	9.00	1.00	7292
Fleahoppers	0	0	0.0	0.00	0.00	0
Lygus bugs	300000	100000	0.4	6.00	0.40	2917
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	300000	20000	0.0	12.00	0.04	292
Thrips	500000	300000	0.9	13.40	0.90	6563
Beet armyworm	100000	50000	0.1	7.00	0.01	73
Fall armyworm	200000	50000	0.1	7.00	0.01	73
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	100000	25000	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM Caterpillar	0	0	0.0	0.00	0.00	0

Aphids	350000	250000	1.0	10.00	1.00	7292
Bnded w whitefly	100000	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	100000	5000	0.0	10.00	0.00	36
Cabbage looper	300000	10000	0.0	10.00	0.01	73
W Flower Thrips	100000	0	0.0	0.00	0.00	0
Acreage harvested: 500000 Yield per Acre: 1.46 Bales						
Percent Lost: 4.67 Dollars Lost: 9,796,500 Cost per Acre: 55.84						

Table 8 Southeast Arkansas Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Threshold	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	450000	450000	4.0	6.13	2.00	12188
Boll/Bud Worms	450000	450000	6.0	15.11	2.00	12188
Fleahopper	30000	0	0.0	0.00	0.00	0
Lygus bugs	300000	100000	0.2	4.86	0.44	2708
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	30000	3000	0.0	13.06	0.01	41
Thrips	450000	350000	0.9	13.40	0.58	3555
Beet armyworm	150000	150000	0.3	15.03	1.00	6094
Fall armyworm	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	300000	200000	0.4	9.59	0.89	5417
Bnded w whitefly	30000	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	60000	1800	0.0	0.00	0.00	12
Cabbage looper	90000	2700	0.0	0.00	0.00	18
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 450000 Yield per acre: 1.35 Bales						
Percent Lost: 6.93 Dollars Lost: 12,159,225 Cost per Acre: 138.13						

Table 9 Arkansas Summary Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	950000	750000	3.2	6.08	1.56	20938
Boll/Bud Worms	950000	700000	3.6	13.78	1.46	19479
Fleahoppers	30000	0	0.0	0.00	0.00	0
Lygus bugs	600000	200000	0.3	5.62	0.42	5625
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	330000	23000	0.0	12.14	0.02	332

Thrips	950000	650000	0.9	13.40	0.76	10117
Beet armyworms	250000	200000	0.3	13.02	0.51	6823
Fall armyworms	200000	50000	0.1	7.00	0.01	73
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	100000	25000	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	00
Aphids	650000	450000	0.7	9.88	0.95	12708
Bnded w whitefly	130000	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	160000	6800	0.0	10.00	0.00	49
Cabbage looper	390000	12700	0.0	10.00	0.01	91
W Flower Thrips	100000	0	0.0	0.00	0.00	0
Acreage harvested: 950000 Yield per acre: 1.41 Bales						
Percent Lost: 5.70 Dollars Lost: 21,955,725 Cost per Acre: 94.82						

Table 10 Arizona Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	112800	7144	0.0	12.00	0.00	0
Fleahoppers	338400	18800	0.1	11.00	0.00	0
Lygus bugs	338400	18800	0.2	13.00	0.50	4483
Leaf perforator	225000	26320	0.1	12.00	0.06	565
Pink bollworm	338400	18800	0.1	12.00	0.05	404
Spider mites	18800	7144	0.0	16.00	0.00	0
Thrips	376000	37600	0.1	30.00	0.09	807
Beet armyworms	300800	75200	0.2	12.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	263200	3384	0.0	11.00	0.00	0
Grasshopper	37600	0	0.0	0.00	0.00	0
SM caterpillar	225600	37600	0.1	12.00	0.09	807
Aphids	319600	112800	0.3	12.00	0.27	2421
Bnded w whitefly	263200	3384	0.0	14.00	0.01	73
Swt pot whitefly	282000	244400	2.6	20.00	3.25	29142
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	94000	0	0.0	0.00	0.00	0
W Flower Thrips	376000	37600	0.1	30.00	0.09	807
Acreage harvested: 376000 Yield per acre: 2.38 Bales						
Percent Lost: 4.41 Dollars Lost: 11,378,503 Cost per Acre: 69.90						

Table 11 California Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	10000	100	0.0	25.00	0.00	0
Fleahopper	10000	200	0.0	25.00	0.00	0
Lygus bugs	910000	488400	0.4	40.00	2.58	78688
Leaf perforator	100	50	0.0	0.00	0.00	0
Pink bollworm	10000	0	0.0	15.00	0.00	0
Spider mites	910000	543856	0.7	0.00	1.78	54376
Thrips	0	0	0.0	24.80	0.00	0
Beet armyworms	77500	5100	0.0	0.00	0.00	7
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.1	25.00	0.20	6042
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	70000	16000	0.0	33.70	0.18	5426
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0

Acreeage harvested: 1218348 Yield per acre: 2.50 Bales

Percent Lost: 4.74 Dollars Lost: 41,626,981 Cost per Acre: 25.17

Table 12 Florida Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	52000	52000	5.3	6.51	3.00	2379
Fleahoppers	0	0	0.0	0.00	0.00	0
Lygus bugs	30000	23000	0.3	4.31	0.44	351
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	11000	5100	0.1	10.20	0.02	16
Thrips	52000	51000	1.2	8.53	0.65	513
Beet armyworms	48000	12200	0.2	7.50	0.31	242
Fall armyworms	32000	21000	0.4	8.31	1.21	961
Eur corn borer	250	50	0.0	0.00	0.00	0
Stink bug	35000	5000	0.0	3.00	0.01	8
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	52000	1000	0.0	2.85	0.00	3
Bnded w whitefly	16700	9000	0.2	5.05	0.09	69
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	18000	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0

Acres harvested: 52000 Yield per Acre: 1.53 Bales

Percent Lost: 5.73 Dollars Lost: 1,307,674 Cost per Acre: 53.15

*COSTS FOR BOLL WEEVIL ERADICATION \$10.00 PER ACRE

Table 13 Georgia Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	20000	200000	0.2	11.85	0.00	0
Boll/Bud Worms	590000	5700000	2.7	4.88	1.93	135656
Fleahoppers	75000		0.0	0.00	0.00	0
Lygus bugs	475000	0	0.1	3.75	0.00	0
Leaf perforator	0	55000	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	590000	0	0.9	10.75	0.00	0
Beet armyworms	375000	545000	0.1	8.50	0.00	479
Fall armyworms	50000	40000 30000	0.1	9.00	0.07	1797
Eur corn borer	0	0	0.0	0.00	0.25	0
Stink bug	100000	30000	0.1	3.50	0.00	359
Grasshopper	0	0	0.0	0.00	0.05	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	475000	62500	0.1	3.50	0.00	0
Bnded w whitefly	275000	75000	0.1	5.00	0.00	0
Swt pot whitefly	3000	500	0.0	12.00	0.00	6
Soybean looper	175000	17500	0.0	12.00	0.06	419
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	50000	1000	0.0	4.00	0.00	0

Acres harvested: 590000 Yield per acre: 1.20 Bales

Percent Lost: 2.37 Dollars Lost: 4,814,475 Cost per Acre: 28.94

*COST OF BOLL WEEVIL ERADICATION \$10.00 PER ACRE

Table 14 Louisiana Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	860000	830000	4.7	4.25	4.46	49006
Boll/Bud Worms	875000	860000	4.7	10.20	3.64	39974
Fleahopper	200000	30000	0.0	4.15	0.00	11
Lygus bugs	830000	415000	0.6	4.15	0.62	6777
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	300000	25000	0.0	9.75	0.00	31
Thrips	875000	860000	1.0	6.50	0.49	5402
Beet armyworms	600000	200000	0.3	10.72	0.46	5025
Fall armyworms	131250	4000	0.0	10.72	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0

Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	825000	425000	0.3	5.00	0.24	2670
Bnded whitefly	200000	10000	0.0	5.87	0.00	4
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	500000	100000	0.0	8.51	0.02	251
Cabbage looper	250000	5000	0.0	8.33	0.00	1
W Flower Thrips	652500	50000	0.0	6.25	0.00	13

Acres harvested: 875000 Yield per acre: 1.26 Bales

Percent Lost: 9.93 Dollars Lost: 31,439,516 Cost per Acre: 82.78

Table 15 Mississippi Delta Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	810542	663300	2.4	3.10	3.07	35726
Boll/Bud Worms	882042	880042	4.5	9.00	3.32	38670
Fleahoppers	125000	14500	0.0	4.22	0.00	38
Lygus bugs	696042	613542	1.6	4.24	3.23	37627
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	211092	25550	0.0	9.86	0.02	181
Thrips	780042	616700	1.0	3.87	0.66	7668
Beet armyworms	808042	700500	2.6	12.30	5.12	59559
Fall armyworms	55500	15000	0.0	9.79	0.02	214
Eur corn borer	100	0	0.0	0.00	0.00	0
Stink bug	99542	0	0.0	0.00	0.00	0
Grasshopper	2000	0	0.0	0.00	0.00	0
SM caterpillar	21000	0	0.0	0.00	0.00	0
Aphids	739042	514700	0.9	6.73	1.05	12230
Bnded w whitefly	214542	16000	0.0	5.25	0.00	40
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	296042	122500	0.2	10.38	0.12	1348
Cabbage looper	316500	203000	0.4	6.58	0.32	3690
W Flower Thrips	294542	0	0.0	0.00	0.00	0

Acres harvested: 889542 Yield per Acre: 131 Bales

Percent Lost: 16.92 Dollars Lost: 56,733,358 Cost per Acre: 102.62

Table 16 Mississippi Hills Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	448328	442078	7.2	3.13	5.44	24546
Boll/Bud Worms	436628	408278	4.0	8.26	5.22	23565
Fleahopper	142475	8100	0.0	2.79	0.00	19
Lygus bugs	373475	218200	0.8	2.85	0.95	4304
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	57370	7650	0.0	5.92	0.01	59

Thrips	384978	346662	1.3	3.46	0.32	1454
Beet armyworms	293066	228250	1.3	12.28	2.69	12151
Fall armyworms	94500	22400	0.1	9.68	0.07	316
Eur corn borer	6000	0	0.0	0.00	0.00	0
Stink bug	169250	2100	0.0	5.00	0.00	0
Grasshopper	52700	50	0.0	2.00	0.00	0
SM caterpillar	10000	0	0.0	0.00	0.00	0
Aphids	377612	227192	0.5	7.20	0.52	2357
Bnded w whitefly	145970	29800	0.1	6.27	0.02	112
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	123300	91100	0.2	7.85	0.17	751
Cabbage looper	153900	76000	0.2	8.14	0.03	123
W Flower Thrips	116400	75	0.0	6.00	0.00	1

Acres harvested: 460458 Yield per acre: 0.98 Bales

Percent Lost: 15.45 Dollars Lost: 20,090,467 Cost per Acre: 85.75

Table 17 Mississippi Summary Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	1258870	1105378	4.1	3.12	3.73	60273
Boll/Bud Worms	1318670	1288320	4.3	8.77	3.85	62235
Fleahoppers	267475	22600	0.0	3.43	0.00	57
Lygus bugs	1069517	831742	1.3	3.97	2.60	41931
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	268462	33200	0.0	8.59	0.01	241
Thrips	1165020	963362	1.1	3.71	0.56	9122
Beet armyworms	1101108	928750	2.2	12.29	4.44	71711
Fall armyworms	150000	37400	0.0	9.72	0.03	530
Eur corn borer	6100	0	0.0	0.00	0.00	0
Stink bug	268792	2100	0.0	5.00	0.00	0
Grasshopper	54700	50	0.0	2.00	0.00	0
SM caterpillar	31000	0	0.0	0.00	0.00	0
Aphids	1116654	741892	0.8	6.83	0.90	14587
Bnded whitefly	360512	45800	0.0	6.04	0.01	152
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	419342	213600	0.2	9.40	0.13	2098
Cabbage looper	470400	279000	0.3	6.88	0.24	3813
W Flower Thrips	410942	75	0.0	6.00	0.00	1

Acres harvested: 1350000 Yield per Acre: 1.20 Bales

Percent Lost: 16.51 Dollars Lost: 76,823,825 Cost per Acre: 96.87

Table 18 Missouri Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	304000	289000	2.7	.00	3.42	12644

Boll/Bud Worms	238000	200000	.9	9.00	0.89	3281
Fleahoppers	0	0	0.0	0.00	0.00	0
Lygus bugs	219000	180000	0.7	5.20	0.40	1477
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	100	0	0.0	0.00	0.00	0
Spider mites	61000	60000	0.2	12.00	0.01	33
Thrips	235000	235000	0.8	14.50	.35	1285
Beet armyworms	2000	2000	0.0	13.00	0.00	1
Fall armyworms	173000	88000	0.3	13.00	0.20	722
Eur corn borer	30000	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	177000	128000	0.5	8.00	0.08	280
Bnded w whitefly	150000	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 338000 Yield per Acre: 1.09 Bales						
Percent Lost: 5.33 Dollars Lost: 5,680,080 Cost per Acre: 52.68						

Table 19 New Mexico Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	28500	12400	0.2	9.08	1.72	1835
Fleahopper	18100	6490	0.1	7.56	0.61	650
Lygus bugs	27200	6960	0.1	7.35	0.69	740
Leaf perforator	4150	2000	0.0	9.00	0.06	62
Pink bollworm	9010	5000	0.1	9.00	1.27	1357
Spider mites	2490	1880	0.0	7.13	0.08	87
Thrips	49500	16435	0.3	10.00	1.41	1508
Beet armyworms	8250	4500	0.1	13.00	0.41	439
Fall armyworms	1000	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	32500	6900	0.1	7.00	0.55	585
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 69200 Yield per Acre: 1.54 Bales						
Percent Lost: 6.81 Dollars Lost: 2,091,738 Cost per Acre: 8.36						

Table 20 North Carolina Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Threshold	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	392000	388000	2.5	10.00	2.28	10783
Fleahoppers	0	0	0.0	0.00	0.00	0
Lygus bugs	392000	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	392000	392000	1.0	14.00	0.40	1895
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	180000	90000	0.1	7.00	0.25	1196
Eur corn borer	195000	195000	0.0	5.50	0.20	943
Stink bug	200000	100	0.0	4.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	300000	0	0.0	0.00	0.00	0
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	100000	0	0.0	0.00	0.00	0

Acres harvested: 392000 Yield per acre: 1.21 Bales

Percent Lost: 3.13 Dollars Lost: 4,267,246 Cost per Acre: 39.82

*COST FOR BOLL WEEVIL ERADICATION: \$ 3.50 PER ACRE

Table 21 Oklahoma Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Recuotion	Bales Lost
Boll Weevils	350000	250000	2.9	6.00	4.29	11344
Boll/Bud Worms	400000	270000	2.3	10.50	3.09	8168
Fleahoppers	400000	190000	0.5	5.50	0.27	718
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	100000	40000	0.2	10.50	0.11	303
Thrips	225000	150000	0.4	5.50	0.02	57
Beet armyworms	40000	10000	0.0	10.50	0.00	4
Fall armyworms	5000	500	0.0	10.50	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0

Aphids	150000	100000	0.6	9.00	0.57	1513
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	20000	0	0.0	0.00	0.00	0
Acreage harvested: 350000 Yield per Acre: 0.76 Bales						
Percent Lost: 8.35 Dollars Lost: 6,366,348 Cost per Acre: 54.64						

Table 22 South Carolina Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	197000	190000	4.9	6.90	3.41	5971
Fleahoppers	1000	200	0.0	6.50	0.00	2
Lygus bugs	70000	20000	0.2	5.00	0.21	359
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	70000	21000	0.2	12.50	0.43	754
Thrips	197000	195000	1.2	12.00	3.00	5253
Beet armyworms	80000	30000	0.3	13.00	1.38	2424
Fall armyworms	120000	80000	0.8	13.00	4.10	7183
Eur corn borer	35000	2000	0.0	0.00	0.00	0
Stink bug	160000	60000	0.3	6.00	1.08	1886
Grasshopper	200	25	0.0	6.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	190000	60000	0.5	6.00	0.62	1078
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot Whitefly	5000	60	0.0	9.50	0.00	0
Soybean looper	10000	3000	0.0	10.00	0.03	54
Cabbage looper	20000	1500	0.0	7.00	0.00	7
W Flower Thrips	190000	0	0.0	0.00	0.00	0
Acreage harvested: 195000 Yield per Acre: 0.90 Bales						
Percent Lost: 14.26 Dollars Lost: 7,191,537 Cost per Acre: 70.41						
*COST FOR BOLL WEEVIL ERADICATION: \$ 3.50 PER ACRE						

Table 23 Tennessee Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	610000	560000	5.1	5.25	9.66	53179
Boll/Bud Worms	510000	380000	2.0	8.75	6.74	37098
Fleahoppers	0	0	0.0	0.00	0.00	0
Lygus bugs	440000	110000	0.2	4.75	0.18	976

Leaf Perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	36000	17000	0.0	9.00	0.03	151
Thrips	620000	241000	0.5	8.00	0.39	2139
Beet armyworms	100000	59000	0.1	12.00	0.29	1571
Fall armyworms	105000	9000	0.0	10.00	0.03	160
Eur corn borer	18000	0	0.0	0.00	0.00	0
Stink bug	270000	15000	0.0	5.25	0.02	133
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	300000	30000	0.0	10.00	0.05	266
Bnded w whitefly	80000	1000	0.0	7.50	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	130000	10000	0.0	8.00	0.02	89
W Flower Thrips	0	0	0.0	0.00	0.00	0

Acres harvested: 620000 Yield per Acre: 0.89 Bales

Percent Lost: 17.40 Dollars Lost: 27,579,240 Cost per Acre: 51.15

Table 24 Texas, District 1 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	68000	45000	0.8	6.00	0.82	731
Boll/Bud Worms	43000	13000	0.1	9.00	0.08	74
Fleahoppers	117000	50000	0.5	3.00	0.32	284
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	120000	80000	0.7	4.00	0.36	325
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	0	0	0.0	0.00	0.00	0
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0

Acres harvested: 110000 Yield per Acre: 0.81 Bales

Percent Lost: 4.58 Dollars Lost: 407,394 Cost per Acre: 10.25

Table 25 Texas, District 2 Cotton Insect Losses for 1993

Pest	Acres harvested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	180000	45000	0.0	6.45	0.00	84
Boll/Bud Worms	1500000	200000	0.1	9.15	0.08	2785
Fleahoppers	210000	65000	0.0	4.30	0.00	151
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	3200000	2400000	1.3	4.75	2.90	104438
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	2000000	200000	0.1	7.40	0.01	464
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0

Acreeage harvested: 3100000 Yield per Acre: 1.16 Bales

Percent Lost: 3.00 Dollars Lost: 31,081,268 Cost per Acre: 7.73

Table 26 Texas, District 3 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	460000	230000	1.3	6.20	5.00	13992
Boll/Bud Worms	460000	90000	0.4	10.41	0.59	1643
Fleahoppers	460000	75000	0.2	3.40	0.16	456
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	150000	20000	0.1	12.50	0.00	12
Thrips	200000	50000	0.1	3.66	0.02	61
Beet armyworms	80000	33000	0.1	15.80	0.07	201
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	20000	3000	0.0	7.75	0.00	2
Grasshopper	125000	30000	0.1	5.09	0.01	18
SM caterpillar	20000	4000	0.0	7.75	0.00	2
Aphids	460000	90000	0.2	5.80	0.04	110
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0

Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	15000	4000	0.0	9.00	0.00	2
W Flower Thrips	460000	100	0.0	4.70	0.00	1
Acreage harvested: 460000 Yield per Acre: 0.61 Bales						
Percent Lost: 5.90 Dollars Lost: 4,751,774 Cost per Acre: 16.80						

Table 27 Texas, District 4 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	62000	59000	1.7	6.00	4.28	1291
Boll/Bud Worms	7000	2000	0.0	10.00	0.02	6
Fleahopper	62000	55000	1.6	4.50	4.78	1444
Lygus bugs	20000	5000	0.1	6.25	0.07	22
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	.00	0.00	0
Spider mites	4000	1000	0.0	8.00	0.01	3
Thrips	69000	62000	1.8	2.00	0.90	271
Beet armyworms	0	0	.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bugs	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	40000	300	0.0	3.50	0.03	9
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 69000 Yield per Acre: 0.44 Bales						
Percent Lost: 10.09 Dollars Lost: 877,212 Cost per Acre: 22.04						

Table 28 Texas, District 5 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	20000	15000	3.0	4.50	3.75	625
Boll/Bud Worms	20000	15000	2.3	9.50	3.75	625
Fleahoppers	20000	5000	0.3	4.50	0.25	42
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	2000	500	0.0	9.50	0.03	4
Thrips	20000	5000	0.3	6.50	0.05	8
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0

Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	5000	500	0.0	0.00	0.03	4
Bnded w whitefly	1000	0	0.0	0.00	0.00	0
						0
Swt pot whitefly	1000	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 20000 Yield per Acre: 0.83 Bales						
Percent Lost: 7.85 Dollars Lost: 376,800 Cost per Acre: 37.86						

Table 29 Texas, District 6 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	340000	280000	2.1	6.00	5.60	35667
Boll/Bud Worms	416339	300000	0.8	9.00	1.50	6875
Fleahoppers	300000	15000	0.0	4.00	0.00	0
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	56560	29000	0.3	7.00	0.51	2326
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	250000	6000	0.0	6.00	0.03	138
Beet armyworms	40000	1500	0.0	10.00	0.01	34
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	150000	15000	0.1	6.00	0.04	172
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Ahpids	400000	180000	0.5	8.00	0.90	4125
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 400000 Yield per acre: 1.15 Bales						
Percent Lost: 8.58 Dollars Lost: 11,328,900 Cost per Acre: 25.75						

Table 30 Texas, District 7 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevil	200000	160000	1.8	4.50	6.40	4667
Boll/Bud Worms	200000	150000	1.0	7.00	4.29	3125
Fleahoppers	200000	200000	0.1	3.00	0.11	83
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	25000	5000	0.0	8.50	0.01	10
Thrips	200000	1000	0.0	3.50	0.00	3
Beet armyworms	50000	5000	0.0	9.00	0.02	15

Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	60000	5000	0.0	4.50	0.03	21
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.2	0.00	0.00	0
Aphids	200000	20000	0.0	7.00	0.11	83
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 175000 Yield per acre: 0.42 Bales						
Percent Lost: 10.98 Dollars Lost: 2,306,040 Cost per Acre: 17.62						

Table 31 Texas, District 8 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	55000	50000	2.5	6.80	4.80	1633
Boll/Bud Worms	22000	21000	0.9	12.00	1.65	560
Fleahoppers	55000	41000	1.3	6.80	1.21	410
Lygus bugs	38000	35000	0.5	8.00	1.37	467
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	41000	26000	0.4	10.00	0.38	130
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	0	0	0.0	0.00	0.00	0
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 51000 Yield per Acre: 0.67 Bales						
Percent Lost: 9.41 Dollars Lost: 921,600 Cost per Acre: 44.24						

Table 32 Texas, District 9 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	102000	47000	0.2	4.50	0.02	38
Boll/Bud Worms	92000	85000	0.8	9.60	0.18	412
Fleahoppers	95000	93000	1.3	2.40	0.01	15
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	21000	20000	0.3	13.50	0.00	3
Thrips	80000	15000	0.1	1.25	0.00	0
Beet armyworms	0	0	0.0	0.00	0.00	0

Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	42000	21000	0.2	7.60	0.00	0
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 140000 Yield per acre: 161 Bales						
Percent Lost: 0.21 Dollars Lost: 134,757 Cost per Acre: 16.80						

Table 33 Texas, District 10 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	21000	21000	11.0	6.53	30.50	10008
Boll/Bud Worms	21000	21000	4.5	9.00	10.00	3281
Fleahoppers	7000	7000	0.3	6.00	0.23	77
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	3000	3000	0.1	15.00	0.10	33
Thrips	21000	21000	1.0	5.50	0.00	0
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.000	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	21000	6000	0.3	8.00	0.00	0
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	15000	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 21000 Yield per Acre: 1.56 Bales						
Percent Lost: 40.83 Dollars Lost: 3,858,750 Cost per Acre: 124.26						

Table 34 Texas, District 11 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	295720	272062	6.9	6.15	8.46	23622
Boll/Bud Worms	266148	68016	0.2	7.15	0.32	899
Fleahoppers	295720	236576	0.8	4.45	1.60	4465
Lygus bugs	210000	5400	0.0	5.20	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	43000	575	0.0	5.35	0.00	0
Thrips	295720	95000	0.3	6.00	0.96	2690
Beet armyworms	1000	0	0.0	0.00	0.00	0

Fall armywoms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	43000	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	200	30	0.0	5.00	0.00	0
Aphids	295720	12350	0.0	4.90	0.04	117
Bnded w whitefly	1530	0	0.0	0.00	0.00	0
Swt pot whitefly	33000	12800	0.0	6.80	0.13	362
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	95500	0	0.0	0.00	0.00	0
W Flower Thrips	105000	0	0.0	0.00	0.00	0
Acreage harvested: 295720 Yield per acre: 0.94 Bales						
Percent Lost: 11.52 Dollars Lost: 9,260,484 Cost per Acre: 50.17						

Table 35 Texas, District 12 Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	287000	275000	5.3	7.00	3.83	13842
Boll/Bud Worms	287000	200000	2.1	12.00	0.70	2517
Fleahoppers	287000	280000	1.0	5.50	0.68	2466
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	25000	1500	0.0	10.50	0.00	13
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	100000	5000	0.0	10.50	0.01	44
Thrips	0	0	0.0	0.00	0.00	0
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	287000	50000	0.2	8.50	0.12	440
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	287000	25000	0.2	15.50	0.09	315
Soybean looper	100000	1000	0.0	10.00	0.00	9
Cabbage looper	100000	1000	0.0	10.00	0.00	9
W Flower Thrips	287000	500	0.0	9.50	0.00	4
Acreage harvested: 287000 Yield per Acre: 1.26 Bales						
Percent Lost: 5.44 Dollars Lost: 5,661,775 Cost per Acre: 72.61						

Table 36 Texas Summary Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Losses	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	2090720	1499062	1.2	6.26	1.76	96198
Boll/Bud Worms	3334487	1165016	0.4	9.97	0.42	22801
Fleahoppers	2108720	942576	0.2	4.35	0.18	9894
Lygus bugs	268000	45400	0.0	7.38	0.01	489
Leaf perforator	25000	1500	0.0	10.50	0.00	13
Pink bollworm	56560	29000	0.0	7.00	0.04	2326
Spider mites	348000	55075	0.0	12.55	0.00	110
Thrips	4496720	2761000	0.9	4.69	1.97	108063
Beet armyworms	171000	39500	0.0	14.91	0.00	250

Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	273000	23000	0.0	5.94	0.00	195
Grasshopper	125000	30000	0.0	5.09	0.00	18
SM caterpillar	20200	4030	0.0	7.73	0.00	2
Aphids	3750720	582850	0.1	7.35	0.10	5352
Bnded w whitefly	2530	0	0.00	0.00	0.00	0
Swt pot whitefly	336000	37800	0.0	14.02	0.01	677
Soybean looper	100000	1000	0.0	10.00	0.00	9
Cabbage looper	210500	5000	0.0	9.20	0.00	11
W Flower Thrips	852000	1500	0.0	6.30	0.00	5
Acreage harvested: 5128720 Yield per Acre: 1.07 Bales						
Percent Lost: 4.50 Dollars Lost: 70,966,755 Cost per Acre: 17.81						

Table 37 Virginia Cotton Insect Losses for 1993

Pest	Acres Infested	Above Treat Thresholds	# Insect Applicat	Cost of 1 Applicat	% Yield Reduction	Bales Lost
Boll Weevils	0	0	0.0	0.00	0.00	0
Boll/Bud Worms	23000	23000	1.0	12.00	0.00	0
Fleahoppers	0	0	0.0	0.00	0.00	0
Lygus bugs	0	0	0.0	0.00	0.00	0
Leaf perforator	0	0	0.0	0.00	0.00	0
Pink bollworm	0	0	0.0	0.00	0.00	0
Spider mites	0	0	0.0	0.00	0.00	0
Thrips	15000	15000	0.7	6.00	0.00	0
Beet armyworms	0	0	0.0	0.00	0.00	0
Fall armyworms	0	0	0.0	0.00	0.00	0
Eur corn borer	0	0	0.0	0.00	0.00	0
Stink bug	0	0	0.0	0.00	0.00	0
Grasshopper	0	0	0.0	0.00	0.00	0
SM caterpillar	0	0	0.0	0.00	0.00	0
Aphids	0	0	0.0	0.00	0.00	0
Bnded w whitefly	0	0	0.0	0.00	0.00	0
Swt pot whitefly	0	0	0.0	0.00	0.00	0
Soybean looper	0	0	0.0	0.00	0.00	0
Cabbage looper	0	0	0.0	0.00	0.00	0
W Flower Thrips	0	0	0.0	0.00	0.00	0
Acreage harvested: 23000 Yield per Acre: 1.35 Bales						
Percent Lost: 0.00 Dollars Lost: 0 Cost Per Acre: 15.91						
* COST OF BOLL WEEVIL ERADICATION: \$ 3.50 PER ACRE						