

COTTON INSECT LOSSES 1999

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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.** For example, if a unit report represents 100 acres and an 8% loss on 25 of these acres, then in the table summary this shows up as a 2% loss. $((.08 \times 25)/100)$. This type of averaging is used for all data reported including yields and costs of control. Because of averaging and rounding some individual state summary numbers listed as `0' are slightly larger. Costs are averaged to the nearest cent, bales and acres to the nearest whole number, other numbers are rounded to the nearest .001. Bales are calculated at 480 pounds, and a cost of \$0.65 per pound of lint is used in figuring costs.

Highlights

Arthropod pests reduced overall yield by 7.66% in 1999. Acreage was up and yields were down, largely due to weather. Over 1 million acres of planted cotton were not harvested in 1999. Texas losses overshadowed those in the

remainder of the cotton belt. Cotton fleahopper became the number one pest in 1999 at 2.36 % reduction in yield. Boll weevil, no longer a major factor east of the Mississippi River, is still number two at 2.2% loss. The bollworm/budworm complex, causing 1.05% loss, was the number three arthropod pest of cotton in 1999. Seventy- nine percent (79%) of US cotton acres was infested by heliothines. Of those, 71% were bollworms, *Heliocoverpa zea*. Only 57% of US acreage is reported infested by boll weevils. *Lygus* at 0.93% loss was 4th and stink bugs (0.37%) were 5th. Thrips (0.27%) , aphids (0.22%) , spider mites (0.12%), pink bollworm (0.037%) and silverleaf whitefly (0.02%) complete the top ten insect pests of 1999. Total cost of management and loss to insects to the 1999 crop was \$1.269 billion or \$93.34 per acre. Of those costs approximately \$50 are direct insect management costs.

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Explanation of Tables

In an attempt at capturing as many of the costs of insect management as possible, the Cotton Insect Losses estimates have changed in the last few years. They were begun as a simple attempt to arrive at the 'average cost of spraying insecticide' for control of cotton arthropod pests. We still attempt to arrive at the most accurate estimate possible for spray activities, but have also added some of the other costs which are incurred in cotton insect pest management. These 'additional' costs increase the bottom line of expenditures for arthropod pest management - but also more accurately reflect true expenditures. We include 'at planting insecticide costs,' (an estimate of the cost of systemic insecticides applied at planting for control of thrips and other pests of seedling cotton) 'Bt cotton costs,' (an estimate of the technology fee) 'eradication costs' (which include the maintenance fee in those states which have eradicated the weevil and other eradication projects) and 'scouting costs' to the traditional 'foliar insecticide costs.' Bales lost are also given a dollar value using 480 pound bales at \$0.65 per pound. Remember, these are estimates and may not totally reflect an individual farm or area, but they do reflect trends and serve as a general comparison.

Table 1.

USDA Cotton Production

Cotton Insect Losses 1999

Upland	Pounds of lint harvested per acre					Coordinators' estimates*	
	1995	1996	1997	1998	1999	1998	1999
Alabama	409	734	597	559	549	556	525
Arizona	1046	1,189	1,255	1,177	1,236	1100	1155
Arkansas	635	793	837	645	715	674	678
California	953	1,153	1,202	887	1,250	917	1172
Florida	472	637	577	489	589	450	520
Georgia	625	747	646	578	580	517	530
Kansas	185	492	418	404	384	N/R	N/R
Louisiana	614	697	728	586	708	725	700
Mississippi	622	819	901	737	708	717	715
Missouri	544	737	695	471	595	520	525
New Mexico	609	733	676	640	609	690	768
North Carolina	479	659	652	699	486	750	480
Oklahoma	187	306	462	560	464	475	475
South Carolina	528	774	688	587	419	600	450
Tennessee	527	611	662	589	501	617	476
Texas	372	509	474	524	475	444	503
Virginia	620	748	659	765	667	750	750
US Average	533	700	666	619	596	593	599
Pima							
Arizona	720	852	912	830	960		
California	937	1,098	1,141	941	1,245		
New Mexico	605	651	641	658	608		
Texas	756	801	815	791	705		
US Average	836	991	1,056	904	1,159		

From: USDA Agricultural Statistics Service - Jan. 2000

* Cotton Insect Losses Coordinators

Table 1a.

USDA Planting and Harvest Estimates 1996-1999*

Cotton Insect Losses 1999

State	Acres Planted				Acres Harvested			
	1996	1997	1998	1999	1996	1997	1998	1999
<u>Upland</u>								
Alabama	520,000	535,000	495,000	565,000	516,000	442,000	475,000	560,000
Arizona	315,000	325,000	250,000	265,000	314,000	324,000	248,000	264,000
Arkansas	1,000,000	980,000	920,000	970,000	990,000	965,000	900,000	960,000
California	1,000,000	880,000	650,000	610,000	995,000	875,000	620,000	605,000
Florida	99,000	100,000	89,000	107,000	98,200	99,000	80,000	106,000
Georgia	1,340,000	1,440,000	1,400,000	1,470,000	1,336,000	1,425,000	1,320,000	1,300,000
Kansas	4,500	12,000	17,000	33,000	4,000	10,000	16,000	28,000
Louisiana	890,000	655,000	535,000	615,000	885,000	650,000	525,000	610,000
Mississippi	1,120,000	985,000	950,000	1,200,000	1,100,000	970,000	940,000	1,180,000
Missouri	390,000	395,000	370,000	380,000	385,000	390,000	357,000	375,000
New Mexico	59,000	70,000	60,000	70,000	55,000	66,000	58,000	67,000
North Carolina	740,000	690,000	710,000	880,000	730,000	685,000	705,000	800,000
Oklahoma	290,000	200,000	160,000	240,000	210,000	190,000	120,000	150,000
South Carolina	284,000	290,000	290,000	330,000	282,000	286,000	286,000	315,000
Tennessee	540,000	490,000	450,000	570,000	530,000	480,000	445,000	565,000
Texas	5,700,000	5,500,000	5,650,000	6,150,000	4,100,000	5,200,000	3,300,000	5,100,000
Virginia	103,000	101,000	92,000	110,000	102,000	100,000	91,000	108,000
Pima								
Total US	14,394,500	13,648,000	13,088,000	14,565,000	12,632,200	13,157,000	10,486,000	13,093,000
<u>Pima</u>								
Arizona	42,000	22,000	15,900	9,500	41,900	22,000	15,500	9,500
California	165,000	185,000	200,000	240,000	164,000	184,000	180,000	239,000
New Mexico	14,000	11,000	9,000	7,500	14,000	11,000	9,000	7,500
Texas	37,000	32,000	105,000	33,000	36,000	32,000	32,000	32,000
Total US	258,000	250,000	329,900	290,000	255,900	249,000	236,500	288,000
TOTAL US	14,652,500	13,898,000	13,417,900	14,855,000	12,888,100	13,406,000	10,722,500	13,381,000

* USDA/NASS - January 2000

Table 2.

At Planting Insecticide Applications

Cotton Insect Losses 1999

State	Number acres	Weighted Avg Cost	Cost/Treated Acre	Total Cost
Alabama, Central	85,000	\$11.33	\$12.00	\$1,020,000
Alabama, North	243,381	\$13.90	\$13.90	\$3,382,996
Alabama, South	170,000	\$10.20	\$12.00	\$2,040,000
Arizona Conv	836.5	\$0.13	\$12.50	\$10,456
Arizona Bt	31,070	\$3.25	\$16.25	\$504,888
Arkansas, Northeast	552,500	\$9.35	\$11.00	\$6,077,500
Arkansas, Southeast	272,000	\$9.35	\$11.00	\$2,992,000
California, Imperial Valley	31,070	\$45.49	\$10.00	\$310,700
California, Sacramento Valley	7,000	\$12.60	\$18.00	\$126,000
California, San Joaquin Valley	400,000	\$8.52	\$17.50	\$7,000,000
Florida	95,000	\$7.60	\$8.00	\$760,000
Georgia	1,300,000	\$8.97	\$10.00	\$13,000,000
Louisiana Conv	140,156	\$5.17	\$8.53	\$1,195,531
Louisiana Bt	226,195	\$5.12	\$8.53	\$1,929,443
Mississippi Delta	650,000	\$10.69	\$12.50	\$8,125,000
Mississippi Hills	400,000	\$10.00	\$10.50	\$4,200,000
Missouri	323,138	\$9.16	\$10.63	\$3,434,957
New Mexico	35,000	\$2.81	\$4.50	\$157,500
North Carolina	775,000	\$11.48	\$12.75	\$9,881,250
Oklahoma	40,000	\$1.44	\$5.95	\$238,000
South Carolina	280,000	\$14.22	\$16.00	\$4,480,000
Tennessee Conv	168,000	\$7.80	\$9.75	\$1,638,000
Tennessee Bt	312,000	\$7.80	\$9.75	\$3,042,000
Texas, Coastal Bend	82,200	\$1.65	\$11.02	\$905,844
Texas, South Rolling Plains	7,000	\$0.14	\$8.50	\$59,500
Texas, Far West	0	\$0.00	\$0.00	\$0
Texas, Southern Blacklands	900	\$0.09	\$12.36	\$11,124
Texas, North Rolling Plains	20,000	\$0.21	\$4.50	\$90,000
Texas, North Central	82,000	\$5.59	\$7.50	\$615,000
Texas, High Plains	700,000	\$1.51	\$6.25	\$4,375,000
Texas, Lower Rio Grande	20,000	\$0.39	\$5.00	\$100,000
Virginia	110,000	\$12.00	\$12.00	\$1,320,000
Total US	7,559,447	\$6.10	\$10.98	\$83,022,689

Table 3.

Cotton Insect Eradications

Cotton Insect Losses 1999

State	Number Acres	Cost/Acre	Wt cost/acre	Total Cost
Alabama, Central	90,000	\$5.00	\$5.00	\$450,000
Alabama, North	243,381	\$5.00	\$5.00	\$1,216,905
Alabama, South	200,000	\$5.00	\$5.00	\$1,000,000
Arizona Conv	83,650	\$1.78	\$1.78	\$148,897
Arizona Bt	155,350	\$1.78	\$1.78	\$276,523
Arkansas, Northeast	0	\$0.00	\$0.00	\$0
Arkansas, Southeast	320,000	\$15.00	\$15.00	\$4,800,000
California, Imperial Valley	0	\$0.00	\$0.00	\$0
California, Sacramento Valley	0	\$0.00	\$0.00	\$0
California, San Joaquin Valley	0	\$0.00	\$0.00	\$0
Florida	100,000	\$6.00	\$6.00	\$600,000
Georgia	1,450,000	\$2.50	\$2.50	\$3,625,000
Louisiana Conv	231,280	\$12.50	\$12.50	\$2,891,000
Louisiana Bt	376,993	\$12.50	\$12.50	\$4,712,413
Mississippi Delta	760,000	\$22.00	\$22.00	\$16,720,000
Mississippi Hills	420,000	\$22.00	\$22.00	\$9,240,000
Missouri	0	\$0.00	\$0.00	\$0
New Mexico	35,000	\$12.72	\$7.95	\$445,200
North Carolina	861,000	\$3.40	\$3.40	\$2,927,400
Oklahoma	165,000	\$12.25	\$12.25	\$2,021,250
South Carolina	315,000	\$5.50	\$5.50	\$1,732,500
Tennessee Conv	18,000	\$15.00	\$1.29	\$270,000
Tennessee Bt	146,800	\$15.00	\$5.65	\$2,202,000
Texas, Coastal Bend	355,000	\$23.14	\$14.99	\$8,214,700
Texas, South Rolling Plains	560,000	\$10.00	\$12.87	\$5,600,000
Texas, Far West	317,000	\$6.29	\$4.90	\$1,993,930
Texas, Southern Blacklands	0	\$0.00	\$0.00	\$0
Texas, North Rolling Plains	420,000	\$12.73	\$12.73	\$5,346,600
Texas, North Central	0	\$0.00	\$0.00	\$0
Texas, High Plains	1,540,000	\$8.00	\$4.25	\$12,320,000
Texas, Lower Rio Grande	0	\$0.00	\$0.00	\$0
Virginia	110,000	\$3.25	\$3.25	\$357,500
Total US - BOLL WEEVIL	9,273,454	\$6.55	\$4.47	\$60,756,726
California, Imperial Valley PINK BOLLWORM	165,000	\$32.00	\$0.39	\$5,280,000
California, San Joaquin Valley	315,000	\$4.30	\$0.10	\$1,354,500
Arizona, Conv	0	\$0.00	\$0.00	\$0
Arizona, Bt	0	\$0.00	\$0.00	\$0
Total US - Insect Eradication	9,753,454	\$6.91	\$4.95	\$67,391,226

Table 4.

Bt Cotton Costs by State

Cotton Insect Losses 1999

State	Number Acres	Bt cost/ Acre	Average/ all Acres	Total Cost	% population Bollworm	Acres Bt cotton sprayed	Avg. # appli to Bt cotton
Alabama, Central	63,000	\$28.00	\$19.60	\$1,764,000	75	5000	1.00
Alabama, North	199,572	\$26.00	\$21.32	\$5,188,872	60	10000	1.75
Alabama, South	110000	\$28.00	\$15.40	\$3,080,000	70	10000	1.00
Arizona	168000	\$32.00	\$22.49	\$5,376,000	88	0	0.00
Arkansas, Northeast	27,200	\$27.00	\$1.13	\$734,400	85	6500	0.50
Arkansas, Southeast	128,000	\$27.00	\$10.80	\$3,456,000	80	26600	0.50
California, Imperial Valley	5,806	\$32.00	\$27.20	\$185,776	NA	NA	NA
California, Sacramento Valley	450	\$32.00	\$1.44	\$14,400	NA	NA	NA
California, San Joaquin Valley	12328.2	\$32.00	\$0.48	\$394,502	NA	NA	NA
Florida	60,000	\$25.00	\$15.00	\$1,500,000	80	0	0.00
Georgia	850,000	\$26.00	\$15.24	\$22,100,000	50	85000	1.00
Louisiana	376,923	\$29.77	\$18.45	\$11,220,998	100	216719	1.45
Mississippi Delta	460,000	\$29.00	\$17.55	\$13,340,000	60	230000	0.65
Mississippi Hills	348,000	\$28.70	\$23.78	\$9,987,600	65	75000	0.25
Missouri	7,700	\$22.00	\$0.45	\$169,400	99	2212	1.00
New Mexico	16,000	\$32.00	\$9.14	\$512,000	100	0	1.00
North Carolina	172,000	\$19.00	\$3.80	\$3,268,000	95	103000	0.69
Oklahoma	49,656	\$20.00	\$6.02	\$993,120	75	1000	1.00
South Carolina	267,750	\$23.00	\$19.55	\$6,158,250	90	135,000	2.00
Tennessee	390,000	\$24.00	\$15.60	\$9,360,000	60	88900	1.10
Texas, Coastal Bend	102,700	\$21.00	\$3.94	\$2,156,700	89	3000	1.00
Texas, Southern Rolling Plains	140000	\$28.00	\$9.01	\$3,920,000	95	0	0.00
Texas, Far West	76400	\$22.04	\$4.14	\$1,683,856	100	2000	1.00
Texas, Southern Blacklands	1000	\$24.65	\$0.20	\$24,650	90	40000	1.00
Texas, North Rolling Plains	22600	\$24.70	\$1.33	\$558,220	45	200	1.00
Texas, North Central	22,000	\$22.00	\$4.40	\$484,000	98	0	0.00
Texas, High Plains	150,000	\$36.85	\$1.91	\$5,527,500	98	0	0.00
Texas, Lower Rio Grande	0	\$0.00	\$0.00	\$0	100	0	0.00
Virginia	7,700	\$18.00	\$1.26	\$138,600	90	7,700	1.00
Total US	4,234,785	\$25.49	\$8.33	\$113,296,844	76	1,055,331	0.29

Table 5.

Insecticide Application Type and Cost*

Cotton Insect Losses 1999

State	Acres treated by air	Cost/ Acre by air	Total cost application air	Acres treated by ground	Cost/ Acre by ground	Total cost application ground	Total # applications all arthropods	Average number by air	Average number by ground
Alabama, Central	13500	\$3.25	\$43,875	54000	\$2.50	\$135,000	1.172	1.500	2.000
Alabama, North	48676	\$3.10	\$150,896	194705	\$2.00	\$389,410	3.949	0.550	2.200
Alabama, South	20000	\$3.70	\$74,000	120000	\$2.50	\$300,000	1.182	1.000	2.000
Arizona Conventional	47681	\$4.06	\$193,583	22586	\$4.00	\$90,342	2.511	2.690	2.330
Arizona Bt Varieties	118066	\$4.06	\$479,348	49712	\$4.00	\$198,848	1.590	2.020	1.540
Arkansas, Northeast	637000	\$3.50	\$2,229,500	598000	\$2.50	\$1,495,000	2.713	1.750	0.660
Arkansas, Southeast	313600	\$3.50	\$1,097,600	313600	\$2.50	\$784,000	4.428	3.250	0.880
California, Imperial Valley	5464	\$6.00	\$32,784	1366	\$10.00	\$13,660	5.000	2.000	1.000
California, Sacramento Valley	7000	\$7.50	\$52,500	8000	\$6.00	\$48,000	2.450	2.000	2.000
California, San Joaquin Valley	328752	\$7.50	\$2,465,640	575316	\$15.00	\$8,629,740	0.969	1.000	1.000
Florida	7000	\$4.20	\$29,400	85000	\$2.00	\$170,000	1.174	1.000	1.500
Georgia	652500	\$3.50	\$2,283,750	1015000	\$3.00	\$3,045,000	1.366	1.000	1.000
Louisiana Conventional	154726	\$5.52	\$854,089	131830	\$2.96	\$390,216	7.805	6.100	3.970
Louisiana Bt Varieties	252208	\$5.52	\$1,392,190	214886	\$2.96	\$636,063	7.345	6.100	3.970
Mississippi Delta	608000	\$2.90	\$1,763,200	760000	\$1.80	\$1,368,000	4.854	5.000	1.000
Mississippi Hills	252000	\$2.80	\$705,600	399000	\$1.70	\$678,300	2.142	1.000	3.000
Missouri	168750	\$3.47	\$585,563	255000	\$3.53	\$900,150	3.913	2.000	2.600
New Mexico	53760	\$5.50	\$295,680	33600	\$2.75	\$92,400	2.391	4.000	0.600
North Carolina	172200	\$5.00	\$861,000	688800	\$2.25	\$1,549,800	2.749	2.000	2.700
Oklahoma	148500	\$3.50	\$519,750	66000	\$2.50	\$165,000	1.988	2.000	1.000
South Carolina	110250	\$3.50	\$385,875	189000	\$1.75	\$330,750	2.177	2.000	1.500
Tennessee Conventional	21000	\$4.00	\$84,000	199500	\$3.25	\$648,375	6.592	1.000	9.000
Tennessee Bt Varieties	39000	\$4.00	\$156,000	370500	\$3.25	\$1,204,125	6.820	1.000	8.000
Texas, Coastal Bend	191800	\$3.15	\$604,170	356200	\$2.25	\$801,450	3.467	3.000	3.400
Texas, Southern Rolling Plains	217500	\$3.65	\$793,875	43500	\$3.00	\$130,500	0.518	1.000	1.000
Texas, Far West	350020	\$3.67	\$1,284,573	40700	\$2.88	\$117,216	0.483	1.300	1.200
Texas, Southern Blacklands	112500	\$2.30	\$258,750	12500	\$2.00	\$25,000	5.920	6.000	4.000
Texas, North Rolling Plains	67200	\$3.50	\$235,200	75600	\$1.50	\$113,400	1.014	1.500	1.250
Texas, North Central	11000	\$3.00	\$33,000	99000	\$2.60	\$257,400	2.759	0.500	2.500
Texas, High Plains	1305000	\$3.75	\$4,893,750	2436000	\$3.25	\$7,917,000	3.186	2.000	3.000
Texas, Lower Rio Grande	153000	\$3.00	\$459,000	255000	\$2.00	\$510,000	0.938	3.000	3.000
Virginia	11000	\$6.50	\$71,500	99000	\$3.50	\$346,500	2.675	0.200	2.800
US AVERAGE	6,598,653	\$3.84	\$25,369,641	9,762,900	\$3.44	\$33,480,644	2.939	2.414	2.493

*Does not include treatments applied as part of boll weevil eradication programs.

Table 6.

Cotton Insect Monitoring Costs

Cotton Insect Losses 1999

State	Acres Scouted	Times per week Scouted	wt Avg Cost over all acres	Cost/ scouted acre	Total Cost
Alabama, Central	81,000	1.50	\$5.40	\$6.00	\$486,000
Alabama, North	167,000	1.30	\$3.36	\$4.90	\$818,300
Alabama, South	170,000	1.50	\$5.74	\$6.75	\$1,147,500
Arizona Conv	78,631	1.66	\$7.52	\$8.00	\$629,048
Arizona Bt	152,243	1.99	\$7.84	\$8.00	\$1,217,944
Arkansas, Northeast	520,000	1.50	\$6.20	\$7.75	\$4,030,000
Arkansas, Southeast	256,000	1.50	\$6.20	\$7.75	\$1,984,000
California, Imperial Valley	6,830	2.00	\$17.00	\$17.00	\$116,110
California, Sacramento Valley	10,000	2.00	\$10.00	\$10.00	\$100,000
California, San Joaquin Valley	700,000	2.00	\$8.52	\$10.00	\$7,000,000
Florida	47,000	2.00	\$4.11	\$8.75	\$411,250
Georgia	1,100,000	1.70	\$5.39	\$7.10	\$7,810,000
Louisiana Conv	200,288	1.70	\$6.42	\$7.41	\$1,484,134
Louisiana Bt	326,475	1.70	\$6.42	\$7.41	\$2,419,180
Mississippi Delta	690,000	1.60	\$6.81	\$7.50	\$5,175,000
Mississippi Hills	360,000	1.40	\$6.17	\$7.20	\$2,592,000
Missouri	307,500	2.00	\$4.47	\$5.45	\$1,675,875
New Mexico	39,000	1.00	\$3.83	\$5.50	\$214,500
North Carolina	820,000	1.40	\$9.52	\$10.00	\$8,200,000
Oklahoma	36,000	1.50	\$1.42	\$6.50	\$234,000
South Carolina	265,000	1.50	\$5.47	\$6.50	\$1,722,500
Tennessee Conv	168,000	1.00	\$5.60	\$7.00	\$1,176,000
Tennessee Bt	312,000	1.00	\$5.60	\$7.00	\$2,184,000
Texas, Coastal Bend	482,240	1.25	\$5.28	\$6.00	\$2,893,440
Texas, Southern Rolling Plains	108,000	1.00	\$1.29	\$5.20	\$561,600
Texas, Far West	23,000	1.70	\$0.35	\$6.13	\$140,990
Texas, Southern Blacklands	80,000	1.50	\$2.24	\$3.50	\$280,000
Texas, North Rolling Plains	21,800	1.50	\$0.31	\$6.00	\$130,800
Texas, North Central	73,000	1.00	\$3.98	\$6.00	\$438,000
Texas, High Plains	850,000	1.20	\$1.36	\$4.65	\$3,952,500
Texas, Lower Rio Grande	200,000	0.75	\$3.73	\$4.75	\$950,000
Virginia	36,400	1.50	\$2.81	\$8.50	\$309,400
Total US	8,687,407	1.50	\$4.59	\$7.19	\$62,484,071

Table 7.

Summary of All States

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	7,725,662	5504485	1.148	\$7.28	\$8.35	2.200	580081
Bollworm/budworm	10,733,132	4,345,261	0.542	\$10.50	\$5.69	1.045	275550
Pink Bollworm	269,150	63,822	0.011	\$11.05	\$0.12	0.037	9661
Cotton Fleahopper	5,917,479	1,596,969	0.152	\$5.02	\$0.76	2.358	621974
Lygus	6,890,961	2,989,275	0.340	\$7.95	\$2.71	0.933	245973
Cotton Leafperforator	734,688	57,713	0.002	\$15.90	\$0.04	0.000	0
Spider Mites	3,889,009	1,369,383	0.116	\$23.19	\$2.69	0.117	30870
Thrips, early season	11,225,335	2,697,037	0.238	\$4.55	\$1.08	0.272	71795
Beet Armyworm	2,458,898	224,447	0.028	\$20.90	\$0.59	0.052	13693
Fall Armyworm	447,615	50,200	0.004	\$11.27	\$0.04	0.005	1413
European Corn Borer	115,725	3,800	0.000	\$7.16	\$0.00	0.000	64
Stink Bugs	3,356,605	1,102,075	0.112	\$7.27	\$0.81	0.369	97216
Grasshoppers	185,589	37,200	0.003	\$5.97	\$0.02	0.006	1587
Salt-marsh Caterpillars	596,953	12,600	0.001	\$8.02	\$0.01	0.000	8
Aphids	10,239,307	2,195,607	0.177	\$8.33	\$1.48	0.217	57134
Bandedwinged Whitefly	1,883,458	275,665	0.021	\$8.90	\$0.18	0.009	2254
Silverleaf Whitefly	464,015	109,250	0.009	\$27.51	\$0.23	0.020	5371
Soybean Loopers	942,276	164,955	0.010	\$12.80	\$0.13	0.007	1954
Cabbage Loopers	943,067	15,900	0.001	\$7.70	\$0.01	0.000	5
Western Flower Thrips	2,303,444	100	0.000	\$4.50	\$0.00	0.000	1
Cutworms	844,552	393,603	0.025	\$5.25	\$0.13	0.009	2342

Percent Lost	7.66
Total Acres	13,601,364
Total Bales lost	2,018,946
Bales lost in dollars	\$581,456,519

Est. yield/acre	600
Spray applications	2.939
Cost + loss	\$1,269,510,411
Cost + loss/acre	\$93.34

Cost/ Acre	
Foliar insecticide	\$25.07
At planting	\$6.09
Bt use fees	\$8.29
Eradication	\$6.55
Scouting	\$4.59
Total	\$50.59

Table 8.

Alabama Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	1800	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	533,381	175,000	0.412	\$9.22	\$3.80	1.975	25404
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	25,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	513,381	288,381	1.111	\$4.93	\$5.48	2.502	32179
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	150,000	0	0.000	N/A	\$0.00	1.011	13000
Thrips, early season	533,381	288,381	0.678	\$3.43	\$2.32	1.197	15394
Beet Armyworm	10,000	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	35,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	533,381	60,000	0.112	\$6.00	\$0.67	1.022	13146
Grasshoppers	55,000	6,000	0.015	\$8.04	\$0.12	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	533,381	12,000	0.023	\$8.92	\$0.20	0.756	9727
Bandedwinged Whitefly	80,000	2,000	0.004	\$12.00	\$0.05	0.000	0
Silverleaf Whitefly	1,000	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	110,000	6,000	0.011	\$15.00	\$0.17	0.000	0
Cabbage Loopers	12,000	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	243,381	0	0.000	N/A	\$0.00	0.000	0
Cutworms	81,000	40,900	0.077	\$3.85	\$0.30	0.000	0

Percent Lost	8.46	Est. yield/acre	525	Cost/ Acre	
Total Acres	533,381	Spray applications	2.443	Foliar insecticide	\$13.11
Total Bales lost	108,849	Cost + loss	\$59,934,315	At planting	\$12.08
Bales lost in dollars	\$31,348,603	Cost + loss/acre	\$112.37	Bt use fees	\$18.81
				Eradication	\$5.00
				Scouting	\$4.60
				Total	\$53.59

Table 8a.

North Alabama

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	243,381	50,000	0.205	\$8.25	\$1.69	1.000	6,592
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	243,381	243,381	2.250	\$4.80	\$10.80	4.000	26,366
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	150,000	0	0.000	N/A	\$0.00	1.972	13,000
Thrips, early season	243,381	243,381	1.300	\$3.35	\$4.36	1.000	6,592
Beet Armyworm	10,000	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	10,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	243,381	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	50,000	2,000	0.008	\$3.65	\$0.03	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	243,381	5,000	0.021	\$6.00	\$0.12	1.000	6,592
Bandedwinged Whitefly	50,000	0	0.000	N/A	\$0.00	0.000	0
Sweetpotato Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	243,381	0	0.000	N/A	\$0.00	0.000	0
Cutworms	80,000	40,000	0.164	\$3.80	\$0.62	0.000	0

Percent Lost	8.97	Est. yield/acre	480	Cost/ Acre	
Total Acres	243,381	Spray applications	3.949	Foliar insecticide	\$17.63
Total Bales lost	59,141	Cost + loss	\$31,929,915	At planting	\$13.90
Bales lost in dollars	\$17,032,603	Cost + loss/acre	\$131.19	Bt use fees	\$21.32
				Eradication	\$5.00
				Scouting	\$3.36
				Total	\$61.21

Table 8b.

Central Alabama

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	1,800	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	90,000	35,000	0.389	\$9.50	\$3.69	3.000	5,063
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	15,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	90,000	25,000	0.278	\$6.50	\$1.81	1.000	1,688
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	90,000	25,000	0.278	\$4.00	\$1.11	2.500	4,219
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	5,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	90,000	10,000	0.111	\$6.00	\$0.67	1.000	1,688
Grasshoppers	5,000	4,000	0.067	\$9.50	\$0.63	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	90,000	2,000	0.022	\$11.00	\$0.24	0.500	844
Bandedwinged Whitefly	10,000	1,000	0.011	\$12.00	\$0.13	0.000	0
Sweetpotato Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	30,000	1,000	0.011	\$15.00	\$0.17	0.000	0
Cabbage Loopers	10,000	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	500	500	0.006	\$6.00	\$0.03	0.000	0

Percent Lost	8.00
Total Acres	90,000
Harvested acres	
Total Bales lost	13,500
Bales lost in dollars	\$3,888,000

Est. yield/acre	480
Spray applications	1.172
Cost + loss	\$8,372,000
Cost + loss/acre	\$93.02

Cost/ Acre	
Foliar insecticide	\$8.49
At planting	\$11.33
Bt use fees	\$19.60
Eradication	\$5.00
Scouting	\$5.40
Total	\$49.82

Table 8c.

South Alabama

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	200,000	90,000	0.675	\$9.50	\$6.41	3.000	13,750
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	10,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	180,000	20,000	0.100	\$6.50	\$0.65	0.900	4,125
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	200,000	20,000	0.100	\$4.00	\$0.40	1.000	4,583
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	20,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	200,000	50,000	0.250	\$6.00	\$1.50	2.500	11,458
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	200,000	5,000	0.025	\$11.00	\$0.28	0.500	2,292
Bandedwinged Whitefly	20,000	1,000	0.005	\$12.00	\$0.06	0.000	0
Sweetpotato Whitefly	1,000	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	80,000	5,000	0.025	\$15.00	\$0.38	0.000	0
Cabbage Loopers	2,000	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	500	400	0.002	\$6.00	\$0.01	0.000	0

Percent Lost	7.90
Total Acres	200,000
Total Bales lost	36,208
Bales lost in dollars	\$10,428,000

Est. yield/acre	600
Spray applications	1.182
Cost + loss	\$19,632,400
Cost + loss/acre	\$98.16

Cost/ Acre	
Foliar insecticide	\$9.68
At planting	\$10.20
Bt use fees	\$15.40
Eradication	\$5.00
Scouting	\$5.74
Total	\$46.02

Table 9.

Arizona Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	96,198	14,221	0.058	\$14.67	\$0.85	0.037	276
Pink Bollworm	203150	30,222	0.336	\$12.00	\$4.04	0.987	7266
Cotton Fleahopper	167,300	1,554	0.003	\$8.00	\$0.03	0.000	0
Lygus	239,000	122,368	1.019	\$19.60	\$19.98	3.323	24471
Cotton Leafperforator	32,265	883	0.004	\$15.00	\$0.06	0.000	0
Spider Mites	59,153	602	0.003	\$16.50	\$0.04	0.002	18
Thrips, early season	239,000	3,944	0.017	\$9.00	\$0.15	0.031	228
Beet Armyworm	129,060	4,649	0.027	\$15.00	\$0.41	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	20,315	3,431	0.007	\$13.00	\$0.09	0.001	7
Grasshoppers	11,950	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	40,630	0	0.000	N/A	\$0.00	0.000	0
Aphids	71,700	9,235	0.039	\$16.50	\$0.64	0.001	9
Bandedwinged Whitefly	143,400	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	218,685	95,600	0.400	\$27.28	\$10.91	0.174	1282
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	23,900	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	99,185	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	4.56
Total Acres	239,000
Total Bales lost	33,556
Bales lost in dollars	\$9,664,184

Est. yield/acre	1,235
Spray applications	1.913
Cost + loss	\$26,154,758
Cost + loss/acre	\$109.43

	Cost/ Acre
Foliar insecticide	\$37.18
At planting	\$2.16
Bt use fees	\$20.15
Eradication	\$1.78
Scouting	\$7.73
Total	\$69.00

Table 9a.

Arizona Bt Cotton Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	54,373	0	0.000	N/A	\$0.00	0.000	0
Pink Bollworm	132047.5	5,127	0.033	\$12.00	\$0.40	0.179	867
Cotton Fleahopper	108,745	1,554	0.005	\$8.00	\$0.04	0.000	0
Lygus	155,350	83,889	1.112	\$20.20	\$22.47	3.800	18448
Cotton Leafperforator	15,535	47	0.000	\$15.00	\$0.00	0.000	0
Spider Mites	46,605	435	0.003	\$16.50	\$0.05	0.003	15
Thrips, early season	155,350	3,107	0.020	\$9.00	\$0.18	0.034	165
Beet Armyworm	62,140	466	0.003	\$15.00	\$0.05	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	7,768	2,594	0.008	\$13.00	\$0.11	0.000	1
Grasshoppers	7,768	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	15,535	0	0.000	N/A	\$0.00	0.000	0
Aphids	46,605	870	0.006	\$16.50	\$0.09	0.000	1
Bandedwinged Whitefly	93,210	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	147,583	62,140	0.400	\$27.75	\$11.10	0.181	876
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	15,535	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	15,535	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	4.20
Total Acres	155,350
Total Bales lost	20,373
Bales lost in dollars	\$5,867,427

Est. yield/acre	1,270
Spray applications	1.590
Cost + loss	\$18,039,586
Cost + loss/acre	\$116.12

	Cost/ Acre
Foliar insecticide	\$34.48
At planting	\$3.25
Bt use fees	\$31.00
Eradication	\$1.78
Scouting	\$7.84
Total	\$78.35

Table 9b.

Arizona Conventional Cotton Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	41,825	14,221	0.165	\$14.67	\$2.42	0.110	276
Pink Bollworm	71102.5	25,095	0.900	\$12.00	\$10.80	2.550	6399
Cotton Fleahopper	58,555	0	0.000	N/A	\$0.00	0.000	0
Lygus	83,650	38,479	0.846	\$18.13	\$15.35	2.400	6023
Cotton Leafperforator	16,730	837	0.010	\$15.00	\$0.15	0.000	0
Spider Mites	12,548	167	0.002	\$16.50	\$0.03	0.002	4
Thrips, early season	83,650	837	0.010	\$9.00	\$0.09	0.025	63
Beet Armyworm	66,920	4,183	0.073	\$15.00	\$1.09	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	12,548	837	0.005	\$13.00	\$0.07	0.002	6
Grasshoppers	4,183	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	25,095	0	0.000	N/A	\$0.00	0.000	0
Aphids	25,095	8,365	0.100	\$16.50	\$1.65	0.003	8
Bandedwinged Whitefly	50,190	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	71,103	33,460	0.400	\$26.40	\$10.56	0.162	405
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	8,365	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	83,650	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	5.25	Est. yield/acre	1,170	Cost/ Acre	
Total Acres	83,650	Spray applications	2.511	Foliar insecticide	\$42.20
Total Bales lost	13,183	Cost + loss	\$8,115,172	At planting	\$0.13
Bales lost in dollars	\$3,796,756	Cost + loss/acre	\$97.01	Bt use fees	\$0.00
				Eradication	\$1.78
				Scouting	\$7.52
				Total	\$51.62

Figure 10.

Arkansas Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	970000	613000	1.003	\$7.00	\$7.02	0.764	14663
Bollworm/budworm	970,000	484,000	0.490	\$10.59	\$5.19	1.300	24944
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	258,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	970,000	630,500	0.813	\$7.00	\$5.69	1.114	21366
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	582,000	135,000	0.273	\$17.00	\$4.64	0.133	2559
Thrips, early season	970,000	145,500	0.300	\$4.00	\$1.20	0.300	5756
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	970,000	388,000	0.400	\$9.00	\$3.60	0.300	5756
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	3.91	Est. yield/acre	678	Cost/ Acre	
Total Acres	970,000	Spray applications	3.278	Foliar insecticide	\$27.34
Total Bales lost	75,044	Cost + loss	\$72,205,375	At planting	\$9.35
Bales lost in dollars	\$21,612,600	Cost + loss/acre	\$74.44	Bt use fees	\$4.32
				Eradication	\$4.95
				Scouting	\$6.20
				Total	\$52.16

Table 10a.

Northeast Arkansas

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	650000	325000	0.500	\$7.00	\$3.50	0.60	7313
Bollworm/budworm	650,000	260,000	0.300	\$10.00	\$3.00	1.30	15844
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	130,000	0	0.000	N/A	\$0.00	0.00	0
Lygus	650,000	422,500	0.813	\$7.00	\$5.69	1.15	14016
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	390,000	130,000	0.400	\$17.00	\$6.80	0.21	2559
Thrips, early season	650,000	97,500	0.300	\$4.00	\$1.20	0.30	3656
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	650,000	260,000	0.400	\$9.00	\$3.60	0.30	3656
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	3.86
Total Acres	650,000
Total Bales lost	47,044
Bales lost in dollars	\$13,548,600

Est. yield/acre	650
Spray applications	2.712
Cost + loss	\$39,852,375
Cost + loss/acre	\$61.31

Cost/ Acre	
Foliar insecticide	\$23.79
At planting	\$9.35
Bt use fees	\$1.13
Eradication	\$0.00
Scouting	\$6.20
Total	\$40.47

Table 10b.

Southeast Arkansas

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	320000	288000	2.025	\$7.00	\$14.18	1.05	7350
Bollworm/budworm	320,000	224,000	0.875	\$11.00	\$9.63	1.30	9100
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	128,000	0	0.000	N/A	\$0.00	0.00	0
Lygus	320,000	208,000	0.813	\$7.00	\$5.69	1.05	7350
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	192,000	5,000	0.016	\$17.00	\$0.27	0.00	0
Thrips, early season	320,000	48,000	0.300	\$4.00	\$1.20	0.30	2100
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	320,000	128,000	0.400	\$9.00	\$3.60	0.30	2100
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	4.00
Total Acres	320,000
Total Bales lost	28,000
Bales lost in dollars	\$8,064,000

Est. yield/acre	735
Spray applications	4.428
Cost + loss	\$32,354,600
Cost + loss/acre	\$101.11

Cost/ Acre	
Foliar insecticide	\$34.56
At planting	\$9.35
Bt use fees	\$10.80
Eradication	\$15.00
Scouting	\$6.20
Total	\$75.91

Table 11.

California Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	0	0	0.000	N/A	\$0.00	0.000	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	426,770	98,018	0.117	\$28.60	\$3.34	0.758	17306
Cotton Leafperforator	6,830	6,830	0.008	\$45.00	\$0.37	0.000	0
Spider Mites	801,714	801,714	0.956	\$32.00	\$30.59	0.253	5766
Thrips, early season	746,522	89,018	0.106	\$25.23	\$2.68	0.013	294
Beet Armyworm	329,252	164,876	0.393	\$22.00	\$8.64	0.586	13371
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	123,282	41,094	0.049	\$26.00	\$1.27	0.001	33
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	626,410	92,188	0.110	\$22.00	\$2.42	0.531	12123
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	47,924	15,049	0.026	\$34.25	\$0.89	0.008	185
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	2.15	Est. yield/acre	1,172	Cost/ Acre	
Total Acres	838,710	Spray applications	1.765	Foliar insecticide	\$50.20
Total Bales lost	49,079	Cost + loss	\$71,241,433	At planting	\$8.58
Bales lost in dollars	\$14,134,777	Cost + loss/acre	\$84.94	Bt use fees	\$0.71
				Eradication	\$0.00
				Scouting	\$8.60
				Total	\$68.09

Table 11a.

Imperial Valley - California

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	0	0	0.000	N/A	\$0.00	0.00	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.00	0
Lygus	6,830	6,830	1.000	\$30.00	\$30.00	0.20	49
Cotton Leafperforator	6,830	6,830	1.000	\$45.00	\$45.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	6,830	6,830	1.000	\$16.00	\$16.00	0.30	74
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	0	0	0.000	N/A	\$0.00	0.00	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	6,830	6,830	2.000	\$35.00	\$70.00	0.30	74
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	0.80	Est. yield/acre	1,272	Cost/ Acre	
Total Acres	6,830	Spray applications	5.000	Foliar insecticide	\$161.00
Total Bales lost	197	Cost + loss	\$1,526,467	At planting	\$10.00
Bales lost in dollars	\$56,651	Cost + loss/acre	\$223.49	Bt use fees	\$27.20
				Eradication	\$0.00
				Scouting	\$17.00
				Total	\$215.20

Table 11b.

Sacramento Valley - California

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	0	0	0.000	N/A	\$0.00	0.00	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.00	0
Lygus	9,000	9,000	0.900	\$28.50	\$25.65	1.80	563
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	5,000	5,000	0.500	\$32.00	\$16.00	0.50	156
Thrips, early season	0	0	0.000	N/A	\$0.00	0.00	0
Beet Armyworm	500	500	0.050	\$22.00	\$1.10	0.05	16
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	10,000	10,000	1.000	\$22.00	\$22.00	3.00	938
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	5.35	Est. yield/acre	1,125	Foliar insecticide	Cost/ Acre
Total Acres	10,000	Spray applications	2.450	At planting	\$64.75
Total Bales lost	1,672	Cost + loss	\$1,369,400	Bt use fees	\$12.60
Bales lost in dollars	\$481,500	Cost + loss/acre	\$136.94	Eradication	\$1.44
				Scouting	\$10.00
				Total	\$88.79

Table 11c.

San Joaquin Valley - California

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	0	0	0.000	N/A	\$0.00	0.00	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.00	0
Lygus	410,940	82,188	0.100	\$28.50	\$2.85	0.75	16694
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	796,714	796,714	0.969	\$32.00	\$31.02	0.25	5610
Thrips, early season	739,692	82,188	0.100	\$26.00	\$2.60	0.01	220
Beet Armyworm	328,752	164,376	0.400	\$22.00	\$8.80	0.60	13356
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	123,282	41,094	0.050	\$26.00	\$1.30	0.00	33
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	616,410	82,188	0.100	\$22.00	\$2.20	0.50	11185
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	41,094	8,219	0.010	\$33.00	\$0.33	0.01	111
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	2.12	Est. yield/acre	1,172	Foliar insecticide	Cost/ Acre
Total Acres	821,880	Spray applications	1.729	At planting	\$49.10
Total Bales lost	47,211	Cost + loss	\$68,345,567	Bt use fees	\$8.52
Bales lost in dollars	\$13,596,626	Cost + loss/acre	\$83.16	Eradication	\$0.48
				Scouting	\$8.52
				Total	\$66.61

Table 12.

Florida Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	50,000	45,000	0.450	\$9.00	\$4.05	0.650	1490
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	100	0	0.000	N/A	\$0.00	0.000	0
Lygus	7,000	100	0.001	\$2.60	\$0.00	0.007	16
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	100,000	500	0.005	\$3.00	\$0.02	0.300	688
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	500	200	0.002	\$12.00	\$0.02	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	90,000	70,000	0.700	\$4.60	\$3.22	0.900	2063
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	100,000	100	0.001	\$5.50	\$0.01	0.300	688
Bandedwinged Whitefly	7,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	25,000	1,000	0.010	\$7.00	\$0.07	0.000	0
Soybean Loopers	10,000	500	0.005	\$5.75	\$0.03	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	200	0	0.000	N/A	\$0.00	0.002	5

Percent Lost	2.16
Total Acres	100,000
Total Bales lost	4,948
Bales lost in dollars	\$1,425,060

Est. yield/acre	520
Spray applications	1.174
Cost + loss	\$5,437,895
Cost + loss/acre	\$54.38

	Cost/ Acre
Foliar insecticide	\$7.42
At planting	\$7.60
Bt use fees	\$15.00
Eradication	\$6.00
Scouting	\$4.11
Total	\$40.13

Table 13.

Georgia Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	1,200,000	400,000	0.552	\$10.00	\$5.52	0.828	25000
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	50,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	400,000	50,000	0.034	\$6.00	\$0.21	0.138	4167
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	5,000	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	1,000,000	200,000	0.138	\$5.00	\$0.69	0.069	2083
Beet Armyworm	20,000	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	10,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	800,000	600,000	0.621	\$7.00	\$4.34	1.655	50000
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	400,000	20,000	0.014	\$7.00	\$0.10	0.138	4167
Bandedwinged Whitefly	25,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	75,000	5,000	0.003	\$18.00	\$0.06	0.129	3906
Soybean Loopers	20,000	5,000	0.003	\$10.00	\$0.03	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	5,000	1,000	0.001	\$8.00	\$0.01	0.000	5

Percent Lost	2.96
Total Acres	1,450,000
Total Bales lost	89,328
Bales lost in dollars	\$25,726,440

Est. yield/acre	530
Spray applications	1.366
Cost + loss	\$88,149,440
Cost + loss/acre	\$60.79

	Cost/ Acre
Foliar insecticide	\$10.96
At planting	\$8.97
Bt use fees	\$15.24
Eradication	\$2.50
Scouting	\$5.39
Total	\$43.05

Table 14.

Louisiana Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	484,462	462,398	2.942	\$8.83	\$25.96	1.054	12051
Bollworm/budworm	559,715	407,267	1.203	\$13.53	\$16.28	0.781	8927
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	134,504	52,925	0.031	\$7.34	\$0.23	0.018	206
Lygus	515,750	387,601	1.198	\$9.22	\$11.05	0.738	8437
Cotton Leafperforator	42,593	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	307,728	166,042	0.253	\$13.17	\$3.34	0.099	1129
Thrips, early season	564,124	381,469	0.841	\$6.41	\$5.39	0.290	3317
Beet Armyworm	86,312	14,602	0.016	\$13.78	\$0.22	0.010	114
Fall Armyworm	19,265	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	50,634	12,011	0.012	\$8.31	\$0.10	0.011	122
Grasshoppers	12,639	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	93,823	0	0.000	N/A	\$0.00	0.000	0
Aphids	435,113	292,969	0.498	\$10.82	\$5.39	0.167	1913
Bandedwinged Whitefly	203,908	91,465	0.141	\$10.07	\$1.42	0.025	284
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	267,276	100,455	0.122	\$12.23	\$1.49	0.040	452
Cabbage Loopers	159,372	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	197,878	0	0.000	N/A	\$0.00	0.000	0
Cutworms	177,352	201,490	0.262	\$5.26	\$1.38	0.001	10

Percent Lost	3.23
Total Acres	608,273
Total Bales lost	36,962
Bales lost in dollars	\$10,644,923

Est. yield/acre	700
Spray applications	7.520
Cost + loss	\$80,446,934
Cost + loss/acre	\$132.25

	Cost/ Acre
Foliar insecticide	\$72.25
At planting	\$5.14
Bt use fees	\$18.45
Eradication	\$12.50
Scouting	\$6.42
Total	\$114.75

Table 14a.

Louisiana Conventional Cotton Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	188,870	175,866	2.707	\$8.91	\$24.12	1.02	4466
Bollworm/budworm	219,756	190,548	1.804	\$14.83	\$26.76	1.01	4406
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	51,142	20,123	0.033	\$7.36	\$0.24	0.02	97
Lygus	199,058	148,758	1.106	\$9.27	\$10.26	0.65	2862
Cotton Leafperforator	14,713	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	118,938	61,651	0.248	\$13.17	\$3.26	0.10	450
Thrips, early season	212,594	143,304	0.812	\$6.35	\$5.15	0.32	1408
Beet Armyworm	39,201	8,882	0.030	\$13.78	\$0.42	0.01	52
Fall Armyworm	7,325	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	18,956	4,567	0.012	\$8.31	\$0.10	0.03	122
Grasshoppers	4,806	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	35,822	0	0.000	N/A	\$0.00	0.00	0
Aphids	165,440	109,912	0.494	\$10.91	\$5.39	0.17	751
Bandedwinged Whitefly	83,043	39,583	0.161	\$9.96	\$1.60	0.03	126
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	102,943	38,170	0.122	\$12.23	\$1.49	0.04	175
Cabbage Loopers	62,079	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	70,004	0	0.000	N/A	\$0.00	0.00	0
Cutworms	71,845	80,458	0.275	\$5.26	\$1.45	0.00	5

Percent Lost	3.41
Total Acres	231,280
Total Bales lost	14,919
Bales lost in dollars	\$4,296,783

Est. yield/acre	712
Spray applications	7.805
Cost + loss	\$28,427,806
Cost + loss/acre	\$122.92

	Cost/ Acre
Foliar insecticide	\$80.25
At planting	\$5.17
Bt use fees	\$0.00
Eradication	\$12.50
Scouting	\$6.42
Total	\$104.34

Table 14b.

Louisiana Bt-Cotton Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	295592	286532	3.086	\$8.78	\$27.09	1.07	7585
Bollworm/budworm	339,959	216,719	0.834	\$11.81	\$9.84	0.64	4521
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	83,362	32,802	0.030	\$7.32	\$0.22	0.02	109
Lygus	316,692	238,843	1.254	\$9.20	\$11.54	0.79	5575
Cotton Leafperforator	27,880	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	188,790	104,391	0.257	\$13.17	\$3.38	0.10	679
Thrips, early season	351,530	238,165	0.859	\$6.45	\$5.54	0.27	1909
Beet Armyworm	47,111	5,720	0.007	\$13.78	\$0.09	0.01	62
Fall Armyworm	11,940	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	31,678	7,444	0.012	\$8.31	\$0.10	0.00	0
Grasshoppers	7,833	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	58,001	0	0.000	N/A	\$0.00	0.00	0
Aphids	269,673	183,057	0.500	\$10.76	\$5.38	0.16	1162
Bandedwinged Whitefly	120,865	51,882	0.129	\$10.16	\$1.31	0.02	158
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	164,333	62,285	0.122	\$12.23	\$1.50	0.04	277
Cabbage Loopers	97,293	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	127,874	0	0.000	N/A	\$0.00	0.00	0
Cutworms	105,507	121,032	0.254	\$5.26	\$1.33	0.00	5

Percent Lost	3.12
Total Acres	376,993
Total Bales lost	22,042
Bales lost in dollars	\$6,348,140

Est. yield/acre	692
Spray applications	7.345
Cost + loss	\$52,019,127
Cost + loss/acre	\$137.98

	Cost/ Acre
Foliar insecticide	\$67.35
At planting	\$5.12
Bt use fees	\$29.76
Eradication	\$12.50
Scouting	\$6.42
Total	\$121.15

Table 15.

Mississippi Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	792000	330000	0.280	\$5.30	\$1.48	0.186	4693
Bollworm/budworm	1,180,000	670,000	1.271	\$13.20	\$16.78	2.467	62396
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	78,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	1,180,000	598,000	0.817	\$6.89	\$5.63	0.238	6013
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	1,180,000	123,000	0.104	\$14.09	\$1.47	0.084	2135
Thrips, early season	1,180,000	447,000	0.379	\$3.24	\$1.23	0.181	4581
Beet Armyworm	92,000	14,700	0.012	\$14.64	\$0.18	0.007	168
Fall Armyworm	215,000	30,000	0.025	\$13.24	\$0.34	0.052	1306
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	270,000	17,500	0.015	\$7.21	\$0.11	0.131	3325
Grasshoppers	24,000	200	0.000	\$5.80	\$0.00	0.002	45
Salt-marsh Caterpillars	153,000	2,600	0.002	\$8.09	\$0.02	0.000	8
Aphids	1,180,000	703,000	0.704	\$7.25	\$5.10	0.400	10117
Bandedwinged Whitefly	1,180,000	172,000	0.156	\$8.31	\$1.30	0.066	1658
Silverleaf Whitefly	12,000	800	0.001	\$12.00	\$0.01	0.003	68
Soybean Loopers	455,000	52,000	0.044	\$13.66	\$0.60	0.059	1501
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	1,180,000	0	0.000	N/A	\$0.00	0.000	0
Cutworms	270,000	92,000	0.078	\$6.01	\$0.47	0.056	1404

Percent Lost	3.93
Total Acres	1,180,000
Total Bales lost	99,418
Bales lost in dollars	\$28,632,258

Est. yield/acre	715
Spray applications	3.889
Cost + loss	\$138,973,458
Cost + loss/acre	\$117.77

	Cost/ Acre
Foliar insecticide	\$34.71
At planting	\$10.44
Bt use fees	\$19.77
Eradication	\$22.00
Scouting	\$6.58
Total	\$93.51

Table 15a.

Mississippi Delta

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	512000	330000	0.434	\$5.30	\$2.30	0.27	4693
Bollworm/budworm	760,000	510,000	1.342	\$13.20	\$17.72	2.00	34833
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	50,000	0	0.000	N/A	\$0.00	0.00	0
Lygus	760,000	523,000	1.170	\$6.90	\$8.07	0.30	5225
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	760,000	85,000	0.112	\$14.40	\$1.61	0.10	1742
Thrips, early season	760,000	320,000	0.421	\$3.30	\$1.39	0.15	2613
Beet Armyworm	60,000	12,500	0.016	\$14.70	\$0.24	0.01	138
Fall Armyworm	160,000	19,000	0.025	\$13.50	\$0.34	0.06	1100
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	120,000	12,000	0.016	\$7.40	\$0.12	0.13	2200
Grasshoppers	12,000	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	33,000	1,800	0.002	\$8.00	\$0.02	0.00	8
Aphids	760,000	640,000	1.011	\$7.25	\$7.33	0.40	6967
Bandedwinged Whitefly	760,000	120,000	0.174	\$8.20	\$1.42	0.05	871
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	300,000	30,000	0.039	\$14.00	\$0.55	0.04	688
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	760,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	110,000	70,000	0.092	\$6.20	\$0.57	0.03	504

Percent Lost	3.54
Total Acres	760,000
Total Bales lost	61,580
Bales lost in dollars	\$17,735,058

Est. yield/acre	765
Spray applications	4.854
Cost + loss	\$92,770,698
Cost + loss/acre	\$122.07

	Cost/ Acre
Foliar insecticide	\$41.68
At planting	\$10.69
Bt use fees	\$17.55
Eradication	\$22.00
Scouting	\$6.81
Total	\$98.73

Table 15b.

Mississippi Hills

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	280000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	420,000	160,000	1.143	\$13.20	\$15.09	3.50	27563
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	28,000	0	0.000	N/A	\$0.00	0.00	0
Lygus	420,000	75,000	0.179	\$6.80	\$1.21	0.10	788
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	420,000	38,000	0.090	\$13.40	\$1.21	0.05	394
Thrips, early season	420,000	127,000	0.302	\$3.10	\$0.94	0.25	1969
Beet Armyworm	32,000	2,200	0.005	\$14.30	\$0.07	0.00	30
Fall Armyworm	55,000	11,000	0.026	\$12.80	\$0.34	0.03	206
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	150,000	5,500	0.013	\$6.80	\$0.09	0.14	1125
Grasshoppers	12,000	200	0.000	\$5.80	\$0.00	0.01	45
Salt-marsh Caterpillars	120,000	800	0.002	\$8.30	\$0.02	0.00	0
Aphids	420,000	63,000	0.150	\$7.20	\$1.08	0.40	3150
Bandedwinged Whitefly	420,000	52,000	0.124	\$8.60	\$1.06	0.10	788
Silverleaf Whitefly	12,000	800	0.002	\$12.00	\$0.02	0.01	68
Soybean Loopers	155,000	22,000	0.052	\$13.20	\$0.69	0.10	814
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	420,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	160,000	22,000	0.052	\$5.40	\$0.28	0.11	900

Percent Lost	4.80
Total Acres	420,000
Total Bales lost	37,838
Bales lost in dollars	\$10,897,200

Est. yield/acre	625
Spray applications	2.142
Cost + loss	\$46,202,760
Cost + loss/acre	\$110.01

	Cost/ Acre
Foliar insecticide	\$22.11
At planting	\$10.00
Bt use fees	\$23.78
Eradication	\$22.00
Scouting	\$6.17
Total	\$84.06

Table 16.

Missouri Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	375000	264600	1.764	\$7.21	\$12.72	1.420	11140
Bollworm/budworm	370,838	241,163	0.913	\$8.25	\$7.53	0.732	5741
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	41,775	6,930	0.003	\$7.00	\$0.02	0.000	0
Lygus	375,000	189,675	0.577	\$7.00	\$4.04	0.819	6425
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	185,513	42,256	0.121	\$10.33	\$1.25	0.208	1630
Thrips, early season	375,000	73,913	0.170	\$3.04	\$0.52	0.253	1985
Beet Armyworm	10,163	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	29,850	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	12,225	3,000	0.001	\$7.00	\$0.01	0.000	0
Stink Bugs	41,775	4,163	0.002	\$6.00	\$0.01	0.017	130
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	243,713	113,213	0.302	\$7.50	\$2.26	0.450	3533
Bandedwinged Whitefly	9,150	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	41,775	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	97,500	32,663	0.062	\$3.70	\$0.23	0.111	871

Percent Lost	4.01
Total Acres	375,000
Total Bales lost	31,455
Bales lost in dollars	\$9,059,134

Est. yield/acre	525
Spray applications	3.913
Cost + loss	\$25,056,179
Cost + loss/acre	\$66.82

	Cost/ Acre
Foliar insecticide	\$28.58
At planting	\$9.16
Bt use fees	\$0.45
Eradication	\$0.00
Scouting	\$4.47
Total	\$42.66

Table 17.

New Mexico Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	28000	21000	1.125	\$12.00	\$13.50	1.700	1809
Bollworm/budworm	52,000	44,000	1.100	\$12.00	\$13.20	3.714	3952
Pink Bollworm	20000	5,000	0.089	\$12.00	\$1.07	0.179	190
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	5,000	2,000	0.036	\$6.75	\$0.24	0.446	475
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	7,000	0	0.000	N/A	\$0.00	0.005	5
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	300	300	0.005	\$9.50	\$0.05	0.011	11
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	13,000	2,000	0.036	\$15.00	\$0.54	0.000	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	200	0	0.000	N/A	\$0.00	0.029	30
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	6.08
Total Acres	56,000
Total Bales lost	6,473
Bales lost in dollars	\$1,864,201

Est. yield/acre	768
Spray applications	2.391
Cost + loss	\$4,794,951
Cost + loss/acre	\$85.62

	Cost/ Acre
Foliar insecticide	\$28.60
At planting	\$2.81
Bt use fees	\$9.14
Eradication	\$7.95
Scouting	\$3.83
Total	\$52.33

Table 18.

North Carolina Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	861,000	800,000	1.923	\$7.50	\$14.43	4.100	37728
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	200,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	861,000	4,300	0.005	\$4.00	\$0.02	0.000	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	170,000	1,000	0.001	\$11.00	\$0.01	0.000	0
Thrips, early season	861,000	515,000	0.778	\$4.25	\$3.30	2.000	18404
Beet Armyworm	85,000	120	0.000	\$14.00	\$0.00	0.000	0
Fall Armyworm	100,000	20,000	0.023	\$8.30	\$0.19	0.012	107
European Corn Borer	60,000	800	0.001	\$7.25	\$0.01	0.007	64
Stink Bugs	520,000	6,000	0.007	\$7.25	\$0.05	0.242	2223
Grasshoppers	10,000	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	100,000	0	0.000	N/A	\$0.00	0.000	0
Aphids	690,000	8,000	0.009	\$13.00	\$0.12	0.040	369
Bandedwinged Whitefly	20,000	200	0.000	\$7.75	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	30,000	1,000	0.001	\$14.25	\$0.02	0.000	0
Cabbage Loopers	0	100	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	50,000	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	6.40
Total Acres	861,000
Total Bales lost	58,895
Bales lost in dollars	\$16,961,627

Est. yield/acre	480
Spray applications	2.749
Cost + loss	\$56,868,632
Cost + loss/acre	\$66.05

	Cost/ Acre
Foliar insecticide	\$18.15
At planting	\$11.48
Bt use fees	\$3.80
Eradication	\$3.40
Scouting	\$9.52
Total	\$46.35

Table 19.

Oklahoma Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	165000	500	0.003	\$6.00	\$0.02	1.000	2320
Bollworm/budworm	165,000	55,000	0.667	\$13.00	\$8.67	5.000	11602
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	165,000	50,000	0.303	\$5.25	\$1.59	1.000	2320
Lygus	20,000	500	0.003	\$6.50	\$0.02	0.030	70
Cotton Leafperforator	5,000	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	30,000	2,000	0.024	\$13.00	\$0.32	0.091	211
Thrips, early season	165,000	60,000	0.364	\$4.75	\$1.73	1.000	2320
Beet Armyworm	5,000	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	3,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	5,600	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	12,000	3,000	0.018	\$6.25	\$0.11	0.018	42
Salt-marsh Caterpillars	3,000	0	0.000	N/A	\$0.00	0.000	0
Aphids	100,000	50,000	0.606	\$7.00	\$4.24	1.212	2813
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	100,000	0	0.000	N/A	\$0.00	0.000	0
Cutworms	3,000	0	0.000	N/A	\$0.00	0.002	5

Percent Lost	9.35
Total Acres	165,000
Total Bales lost	21,703
Bales lost in dollars	\$6,250,590

Est. yield/acre	475
Spray applications	1.988
Cost + loss	\$12,491,460
Cost + loss/acre	\$75.71

	Cost/ Acre
Foliar insecticide	\$16.69
At planting	\$1.44
Bt use fees	\$6.02
Eradication	\$12.25
Scouting	\$1.42
Total	\$37.82

Table 20.

South Carolina Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	300,000	175,000	1.111	\$9.75	\$10.83	1.905	10625
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	20,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	10,000	2,500	0.008	\$9.00	\$0.07	0.006	35
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	5	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	300,000	35,000	0.167	\$5.50	\$0.92	0.095	531
Beet Armyworm	12,000	500	0.002	\$15.00	\$0.02	0.004	21
Fall Armyworm	5,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	1,500	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	250,000	125,000	0.794	\$8.50	\$6.75	2.381	13281
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	170,000	15,000	0.095	\$9.50	\$0.90	0.022	120
Bandedwinged Whitefly	5,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	1,000	100	0.000	\$15.00	\$0.00	0.000	2

Percent Lost	4.41
Total Acres	315,000
Total Bales lost	24,616
Bales lost in dollars	\$7,089,510

Est. yield/acre	450
Spray applications	2.177
Cost + loss	\$27,325,510
Cost + loss/acre	\$86.75

	Cost/ Acre
Foliar insecticide	\$19.50
At planting	\$14.22
Bt use fees	\$19.55
Eradication	\$5.50
Scouting	\$5.47
Total	\$64.24

Table 21.

Tennessee Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	585200	558187	4.279	\$7.00	\$29.96	4.387	53087
Bollworm/budworm	582,000	251,860	0.598	\$11.72	\$7.00	1.576	19067
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	594,000	344,520	0.881	\$6.16	\$5.43	2.077	25137
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	280,896	84,269	0.281	\$11.77	\$3.31	0.338	4096
Thrips, early season	540,000	108,000	0.216	\$5.45	\$1.18	0.604	7307
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	30,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	42,000	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	540,000	149,670	0.249	\$8.50	\$2.12	0.511	6186
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	420,000	121,170	0.202	\$10.40	\$2.10	0.470	5683
Bandedwinged Whitefly	150,000	10,000	0.017	\$9.00	\$0.15	0.026	312
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	5,000	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	15,000	10,000	0.017	\$5.50	\$0.09	0.001	10

Percent Lost	9.99
Total Acres	600,000
Total Bales lost	120,885
Bales lost in dollars	\$34,814,789

Est. yield/acre	476
Spray applications	6.740
Cost + loss	\$85,487,010
Cost + loss/acre	\$142.48

	Cost/ Acre
Foliar insecticide	\$51.33
At planting	\$7.80
Bt use fees	\$15.60
Eradication	\$4.12
Scouting	\$5.60
Total	\$84.45

Table 21a.

Tennessee Bt Cotton Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	396120	380452	4.487	\$7.00	\$31.41	4.195	32992
Bollworm/budworm	378,300	88,900	0.251	\$10.78	\$2.70	0.805	6332
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	401,400	232,812	0.955	\$6.16	\$5.88	2.470	19428
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	182,582	54,775	0.281	\$11.77	\$3.31	0.338	2662
Thrips, early season	351,000	70,200	0.216	\$5.45	\$1.18	0.604	4750
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	19,500	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	369,000	129,150	0.331	\$8.50	\$2.81	0.537	4227
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	297,000	103,950	0.267	\$10.40	\$2.77	0.511	4019
Bandedwinged Whitefly	97,500	6,000	0.015	\$9.00	\$0.14	0.026	203
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	9,750	6,500	0.017	\$5.50	\$0.09	0.001	5

Percent Lost	9.49
Total Acres	390,000
Total Bales lost	74,617
Bales lost in dollars	\$21,489,727

Est. yield/acre	490
Spray applications	6.820
Cost + loss	\$57,894,169
Cost + loss/acre	\$148.45

	Cost/ Acre
Foliar insecticide	\$50.30
At planting	\$7.80
Bt use fees	\$24.00
Eradication	\$5.65
Scouting	\$5.60
Total	\$93.34

Table 21b.

Tennessee Conventional Cotton Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	189080	177735	3.893	\$7.00	\$27.25	4.745	20095
Bollworm/budworm	203,700	162,960	1.242	\$12.07	\$14.99	3.007	12735
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	192,600	111,708	0.745	\$6.16	\$4.59	1.348	5710
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	98,314	29,494	0.281	\$11.77	\$3.31	0.338	1433
Thrips, early season	189,000	37,800	0.216	\$5.45	\$1.18	0.604	2558
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	10,500	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	42,000	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	171,000	20,520	0.098	\$8.50	\$0.83	0.463	1959
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	123,000	17,220	0.082	\$10.40	\$0.85	0.393	1664
Bandedwinged Whitefly	52,500	4,000	0.019	\$9.00	\$0.17	0.026	109
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	5,000	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	5,250	3,500	0.017	\$5.50	\$0.09	0.001	5

Percent Lost	10.93
Total Acres	210,000
Total Bales lost	46,268
Bales lost in dollars	\$13,325,062

Est. yield/acre	450
Spray applications	6.592
Cost + loss	\$27,592,841
Cost + loss/acre	\$131.39

	Cost/ Acre
Foliar insecticide	\$53.26
At planting	\$7.80
Bt use fees	\$0.00
Eradication	\$1.29
Scouting	\$5.60
Total	\$67.94

Table 22.

Texas Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	4324200	3254800	1.775	\$7.13	\$12.65	5.101	480318
Bollworm/budworm	3,713,000	482,750	0.097	\$9.46	\$0.92	0.403	37918
Pink Bollworm	46000	28,600	0.012	\$9.69	\$0.11	0.023	2206
Cotton Fleahopper	4,777,800	1,485,560	0.385	\$4.99	\$1.92	6.578	619447
Lygus	1,185,000	353,000	0.095	\$9.40	\$0.89	1.238	116570
Cotton Leafperforator	648,000	50,000	0.005	\$7.51	\$0.03	0.000	0
Spider Mites	135,000	13,000	0.003	\$8.62	\$0.02	0.003	325
Thrips, early season	4,274,000	338,000	0.066	\$4.71	\$0.31	0.091	8593
Beet Armyworm	1,680,111	25,000	0.004	\$12.94	\$0.05	0.000	19
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	234,600	54,000	0.010	\$7.33	\$0.08	0.071	6722
Grasshoppers	60,000	28,000	0.006	\$5.40	\$0.03	0.016	1500
Salt-marsh Caterpillars	206,500	10,000	0.002	\$8.00	\$0.02	0.000	0
Aphids	4,897,400	450,920	0.089	\$7.43	\$0.66	0.120	11302
Bandedwinged Whitefly	60,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	125,300	20	0.000	\$24.00	\$0.00	0.000	12
Soybean Loopers	50,000	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	701,020	15,800	0.003	\$7.70	\$0.02	0.000	5
Western Flower Thrips	483,000	100	0.000	\$4.50	\$0.00	0.000	1
Cutworms	144,000	15,250	0.002	\$6.52	\$0.01	0.000	30

Percent Lost	13.65
Total Acres	5,200,000
Total Bales lost	1,284,970
Bales lost in dollars	\$370,071,254

Est. yield/acre	503
Spray applications	2.552
Cost + loss	\$525,565,086
Cost + loss/acre	\$101.07

Cost/ Acre	
Foliar insecticide	\$17.72
At planting	\$1.18
Bt use fees	\$2.76
Eradication	\$6.44
Scouting	\$1.80
Total	\$29.90

Table 22a.

Texas, Coastal Bend

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	465000	191800	0.875	\$6.39	\$5.59	1.70	19375
Bollworm/budworm	411,000	162,100	0.296	\$8.75	\$2.59	0.75	8563
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	548,000	476,760	1.740	\$4.76	\$8.28	1.00	11417
Lygus	120,000	40,000	0.073	\$8.15	\$0.59	0.00	0
Cotton Leafperforator	350,000	20,000	0.037	\$8.65	\$0.32	0.00	0
Spider Mites	15,000	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	548,000	70,000	0.128	\$5.25	\$0.67	0.00	0
Beet Armyworm	65,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	100,000	40,000	0.073	\$7.10	\$0.52	0.55	6250
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	200,000	10,000	0.018	\$8.00	\$0.15	0.00	0
Aphids	694,000	100,000	0.182	\$7.40	\$1.35	0.00	0
Bandedwinged Whitefly	55,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	50,000	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	60,000	15,000	0.027	\$7.50	\$0.21	0.00	0
Western Flower Thrips	250,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	100,000	10,000	0.018	\$6.50	\$0.12	0.00	5

Percent Lost	4.00
Total Acres	548,000
Total Bales lost	45,609
Bales lost in dollars	\$13,135,440

Est. yield/acre	856
Spray applications	3.467
Cost + loss	\$38,475,259
Cost + loss/acre	\$70.21

Cost/ Acre	
Foliar insecticide	\$20.38
At planting	\$1.65
Bt use fees	\$3.94
Eradication	\$14.99
Scouting	\$5.28
Total	\$46.24

Table 22b.

Texas, North Central

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	95000	90000	0.818	\$6.00	\$4.91	2.59	3088
Bollworm/budworm	15,000	3,000	0.027	\$7.00	\$0.19	0.01	16
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	90,000	85,000	1.159	\$4.25	\$4.93	2.70	3218
Lygus	6,000	3,000	0.027	\$6.00	\$0.16	0.01	7
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	100,000	80,000	0.727	\$4.00	\$2.91	0.91	1083
Beet Armyworm	1,173,611	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	0	0	0.000	N/A	\$0.00	0.00	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	5

Percent Lost	6.22
Total Acres	110,000
Total Bales lost	7,416
Bales lost in dollars	\$2,135,832

Est. yield/acre	457
Spray applications	2.759
Cost + loss	\$5,113,707
Cost + loss/acre	\$46.49

	Cost/ Acre
Foliar insecticide	\$13.10
At planting	\$5.59
Bt use fees	\$4.40
Eradication	\$0.00
Scouting	\$3.98
Total	\$27.07

Table 22c.

Texas, Northern Rolling Plains

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	150000	98000	0.397	\$5.80	\$2.30	1.43	7500
Bollworm/budworm	260,000	23,000	0.082	\$11.30	\$0.93	1.86	9750
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	420,000	30,000	0.071	\$4.90	\$0.35	0.40	2100
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	10,000	3,000	0.008	\$9.00	\$0.07	0.00	13
Thrips, early season	90,000	35,000	0.092	\$4.60	\$0.42	0.01	56
Beet Armyworm	40,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	8,000	1,000	0.002	\$7.00	\$0.02	0.00	20
Grasshoppers	60,000	28,000	0.073	\$5.40	\$0.40	0.29	1500
Salt-marsh Caterpillars	6,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	420,000	80,000	0.286	\$7.65	\$2.19	0.50	2625
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	4,300	800	0.002	\$11.41	\$0.02	0.00	5
Western Flower Thrips	1,000	100	0.000	\$4.50	\$0.00	0.00	1
Cutworms	2,000	250	0.001	\$10.00	\$0.01	0.00	5

Percent Lost	4.49
Total Acres	420,000
Total Bales lost	23,575
Bales lost in dollars	\$6,789,708

Est. yield/acre	270
Spray applications	1.014
Cost + loss	\$15,728,656
Cost + loss/acre	\$37.45

	Cost/ Acre
Foliar insecticide	\$6.70
At planting	\$0.21
Bt use fees	\$1.33
Eradication	\$12.73
Scouting	\$0.31
Total	\$21.28

Table 22d.

Texas, High Plains

Cotton Insect Losses 1999

Pest	Acres infested	Acres treated	No. insect appls	Cost of 1 applic	Cost/acre	% Yield loss	Bales lost
Boll weevil	2900000	2630000	2.721	\$7.25	\$19.73	7.00	412344
Bollworm/budworm	2,150,000	100,000	0.034	\$10.75	\$0.37	0.07	4367
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	2,810,000	600,000	0.207	\$5.00	\$1.03	9.98	587905
Lygus	1,000,000	280,000	0.145	\$9.75	\$1.41	1.97	115781
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	80,000	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	2,900,000	110,000	0.038	\$4.85	\$0.18	0.10	5891
Beet Armyworm	300,000	20,000	0.007	\$13.00	\$0.09	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	2,900,000	100,000	0.034	\$7.85	\$0.27	0.10	5891
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	425,000	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	5

Percent Lost	19.22
Total Acres	2,900,000
Total Bales lost	1,132,183
Bales lost in dollars	\$326,068,740

Est. yield/acre	508
Spray applications	3.186
Cost + loss	\$419,194,740
Cost + loss/acre	\$144.55

	Cost/ Acre
Foliar insecticide	\$23.09
At planting	\$1.51
Bt use fees	\$1.91
Eradication	\$4.25
Scouting	\$1.36
Total	\$32.11

Table 22e.

Texas, Far West

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	344000	5000	0.025	\$7.00	\$0.17	3.38	17831
Bollworm/budworm	62,000	23,200	0.057	\$10.00	\$0.57	0.30	1607
Pink Bollworm	46000	28,600	0.148	\$9.69	\$1.43	0.42	2206
Cotton Fleahopper	129,800	57,000	0.144	\$6.56	\$0.95	0.32	1682
Lygus	9,000	0	0.000	N/A	\$0.00	0.00	1
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	1,000	0	0.000	N/A	\$0.00	0.00	0
Beet Armyworm	1,500	0	0.000	N/A	\$0.00	0.00	19
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	21,600	12,000	0.029	\$8.00	\$0.24	0.05	280
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	500	0	0.000	N/A	\$0.00	0.00	0
Aphids	178,400	25,920	0.080	\$12.95	\$1.03	0.04	231
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	300	20	0.000	\$24.00	\$0.00	0.00	12
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	11,720	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	32,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	32,000	0	0.000	N/A	\$0.00	0.00	5

Percent Lost	4.53
Total Acres	407,000
Total Bales lost	23,873
Bales lost in dollars	\$6,875,523

Est. yield/acre	362
Spray applications	0.483
Cost + loss	\$12,479,478
Cost + loss/acre	\$30.66

	Cost/ Acre
Foliar insecticide	\$4.39
At planting	\$0.00
Bt use fees	\$4.14
Eradication	\$4.90
Scouting	\$0.35
Total	\$13.77

Table 22f.

Texas, Lower Rio Grande Valley

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	195000	120000	0.442	\$7.06	\$3.12	0.15	650
Bollworm/budworm	255,000	100,000	0.235	\$6.91	\$1.63	0.20	833
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	255,000	20,000	0.061	\$4.71	\$0.29	0.20	833
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	200,000	30,000	0.014	\$1.18	\$0.02	0.00	0
Spider Mites	10,000	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	100,000	0	0.000	N/A	\$0.00	0.00	0
Beet Armyworm	100,000	5,000	0.000	\$0.24	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	255,000	100,000	0.184	\$2.82	\$0.52	0.10	416
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	125,000	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	200,000	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	200,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	10,000	5,000	0.000	\$0.20	\$0.00	0.00	0

Percent Lost	0.64
Total Acres	255,000
Total Bales lost	2,732
Bales lost in dollars	\$786,816

Est. yield/acre	481
Spray applications	0.938
Cost + loss	\$3,258,092
Cost + loss/acre	\$12.78

	Cost/ Acre
Foliar insecticide	\$5.57
At planting	\$0.39
Bt use fees	\$0.00
Eradication	\$0.00
Scouting	\$3.73
Total	\$9.69

Table 22g.

Texas, Southern Rolling Plains

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	50200	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	435,000	21,450	0.049	\$12.50	\$0.62	0.76	3017
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	435,000	136,800	0.314	\$6.00	\$1.89	1.68	6669
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	98,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	435,000	13,000	0.030	\$4.52	\$0.14	0.00	0
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	105,000	1,000	0.002	\$9.00	\$0.02	0.04	172
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	435,000	35,000	0.122	\$7.00	\$0.86	0.48	1905
Bandedwinged Whitefly	5,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	2.96
Total Acres	435,000
Total Bales lost	11,763
Bales lost in dollars	\$3,387,755

Est. yield/acre	252
Spray applications	0.518
Cost + loss	\$15,057,940
Cost + loss/acre	\$34.62

	Cost/ Acre
Foliar insecticide	\$3.52
At planting	\$0.14
Bt use fees	\$9.01
Eradication	\$12.87
Scouting	\$1.29
Total	\$26.83

Table 22h.

Texas, Southern Blacklands

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	125000	120000	3.840	\$6.50	\$24.96	5.00	19531
Bollworm/budworm	125,000	50,000	0.800	\$9.50	\$7.60	2.50	9766
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	90,000	80,000	0.640	\$6.00	\$3.84	1.44	5625
Lygus	50,000	30,000	0.240	\$6.50	\$1.56	0.20	781
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	20,000	10,000	0.080	\$8.50	\$0.68	0.08	313
Thrips, early season	100,000	30,000	0.240	\$5.00	\$1.20	0.40	1563
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	15,000	10,000	0.080	\$7.00	\$0.56	0.06	234
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	5

Percent Lost	9.68
Total Acres	125,000
Total Bales lost	37,818
Bales lost in dollars	\$10,891,440

Est. yield/acre	1,050
Spray applications	5.920
Cost + loss	\$16,257,214
Cost + loss/acre	\$130.06

Cost/ Acre	
Foliar insecticide	\$40.40
At planting	\$0.09
Bt use fees	\$0.20
Eradication	\$0.00
Scouting	\$2.24
Total	\$42.93

Table 23.

Virginia Summary

Cotton Insect Losses 1999

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	%red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	100,000	100,000	1.818	\$11.00	\$20.00	0.280	481
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	\$0.00	0.000	0
Lygus	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	2,000	500	0.005	\$13.00	\$0.06	0.000	0
Thrips, early season	110,000	93,500	0.850	\$5.50	\$4.68	0.308	529
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	5,000	0	0.000	N/A	\$0.00	0.000	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	500	200	0.002	\$11.00	\$0.02	0.000	0

Percent Lost	0.59
Total Acres	110,000
Total Bales lost	1,011
Bales lost in dollars	\$291,063

Est. yield/acre	750
Spray applications	2.675
Cost + loss	\$5,139,513
Cost + loss/acre	\$46.72

Cost/ Acre	
Foliar insecticide	\$24.75
At planting	\$12.00
Bt use fees	\$1.26
Eradication	\$3.25
Scouting	\$2.81
Total	\$44.08