

COTTON INSECT LOSS ESTIMATES - 2002

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Abstract

Arthropod pests reduced overall yield by 4.61% in 2002. There were 14.38 million acres of cotton planted in 2002, but only 12.86 million acres harvested. Alabama at 16.1% reported the greatest percentage loss to insects in 2002. The bollworm/budworm complex was the top pest of 2002 taking 2.31% of the 2002 crop. Almost 80% of the US crop was infested with the complex of which 83% were bollworms. No other pest exceeded 1% reduction. Fifty-three percent (53%) of US cotton acres was infested by *Lygus* which reduced yields by 0.72%. Thrips and stink bugs were almost tied for third at 0.447% (Thrips) and 0.446% (stink bugs) reduction. Thrips infest 96% of US cotton acres and stink bugs infest 42%. Boll weevil at 0.175% were 5th infesting 2.21 million acres. Aphids (0.118%) were 6th in the pest loss rankings. Cotton fleahoppers (0.109%), silverleaf whitefly (0.087%), fall armyworm (0.045%) and beet armyworm (0.039%) complete the top ten insect pests of 2002. Total cost of management and loss to insects to the 2002 crop was \$1.14 billion or \$86.11 per acre. Of those costs approximately \$60 are direct insect management costs.

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Table 1. USDA Cotton Production. Cotton Insect Losses – 2002.

State	Upland Cotton		Cotton yields in pounds lint per acre			
	Acres planted	Acres harvested	Est. Yield*	December	January	2001
Alabama	590,000	585,000	814	492	511	730
Arizona	235,000	232,000	1,320	1,241	1,262	1142
Arkansas	1,000,000	930,000	726	852	861	826
California	460,000	477,000	1,397	1,439	1,439	1359
Florida	121,000	114,000	460	579	346	566
Georgia	1,450,000	1,430,000	600	587	582	720
Kansas	60,000	60,000	700	579	608	566
Louisiana	580,000	500,000	700	720	727	580
Mississippi	1,180,000	1,170,000	734	788	826	719
Missouri	390,000	385,000	797	761	796	834
New Mexico	60,000	56,000	816	857	960	916
North Carolina	980,000	945,000	428	453	412	483
Oklahoma	230,000	190,000	580	505	533	511
South Carolina	300,000	286,000	325	252	328	686
Tennessee	580,000	560,000	762	686	729	763
Texas	5,800,000	4,600,000	512	522	533	481
Virginia	100,000	100,000	550	480	485	929
total US	14,116,000	12,620,000	627	636	651	694
<u>Pima</u>						
Arizona	7,500	7,400		908	972	928
California	230,000	209,000		1,332	1,332	1,283
New Mexico	7,000	7,000		960	946	969
Texas	20,000	18,000		987	1,023	1,059
total US	264,500	241,400		1,283	1,286	1,254
TOTAL US	14,380,500	12,861,400		648	663	705

Table 1a. USDA Cotton Production. Cotton Insect Losses – 2002.

State	Area Planted			Area Harvested		
	2000	2001	2002	2000	2001	2002
<u>Upland</u>						
Alabama	590,000	610,000	590,000	540,000	605,000	585,000
Arizona	280,000	286,000	235,000	279,000	285,500	232,000
Arkansas	960,000	1,170,000	1,000,000	950,000	1,080,000	930,000
California	775,000	825,000	460,000	765,000	864,000	477,000
Florida	130,000	116,000	121,000	106,000	115,000	114,000
Georgia	1,500,000	1,600,000	1,450,000	1,300,000	1,490,000	1,430,000
Kansas	40,000	45,000	60,000	37,000	44,000	60,000
Louisiana	710,000	910,000	580,000	700,000	855,000	500,000
Mississippi	1,300,000	1,700,000	1,180,000	1,280,000	1,630,000	1,170,000
Missouri	400,000	400,000	390,000	400,000	395,000	385,000
New Mexico	72,000	82,000	60,000	85,000	77,000	56,000
North Carolina	930,000	1,060,000	980,000	930,000	975,000	945,000
Oklahoma	280,000	250,000	230,000	200,000	200,000	190,000
South Carolina	300,000	300,000	300,000	310,000	296,000	286,000
Tennessee	570,000	610,000	580,000	570,000	605,000	560,000
Texas	6,400,000	6,217,000	5,800,000	4,800,000	4,317,000	4,600,000
Virginia	110,000	105,000	100,000	109,000	104,000	100,000
total US	15,347,000	15,517,200	14,116,000	13,218,000	13,053,000	12,620,000
<u>Pima</u>						
Arizona	5,000	6,000	7,500	4,900	7,500	7,400
California	145,000	205,000	230,000	144,000	209,000	209,000
New Mexico	4,200	7,000	7,000	4,100	7,000	7,000
Texas	16,000	17,000	20,000	16,000	17,000	18,000
total US	170,200	235,000	264,500	169,000	240,500	241,400
TOTAL US	15,517,200	15,752,200	14,380,500	13,387,000	13,293,500	12,861,400

Table 2. At planting insecticide application. Cotton Insect Losses – 2002.

State	Number acres	Weighted Avg Cost	Cost/Treated Acre	Total Cost
Alabama, South	240,000	\$9.60	\$10.00	\$2,400,000
Alabama, Central	80,000	\$10.00	\$10.00	\$800,000
Alabama, North	187000	\$12.50	\$12.50	\$2,337,500
Arizona, BT	7050	\$0.20	\$4.00	\$28,200
Arizona, nonBt	9400	\$0.40	\$4.00	\$37,600
Arkansas, Southeast	350000	\$10.50	\$12.00	\$4,200,000
Arkansas, Northeast	400000	\$9.60	\$12.00	\$4,800,000
California	326683	\$7.50	\$15.00	\$4,900,245
Florida	73,000	\$4.87	\$8.00	\$584,000
Georgia, Bt	540000	\$8.06	\$10.00	\$5,400,000
Georgia, non-Bt	580000	\$7.95	\$10.00	\$5,800,000
Kansas, South Central	70	\$0.02	\$10.00	\$700
Kansas, Southwest	70	\$0.02	\$10.00	\$700
Louisiana, non-Bt	84870	\$6.19	\$8.25	\$700,178
Louisiana, Bt	290191	\$6.32	\$8.25	\$2,394,076
Mississippi, Hills	230000	\$5.75	\$9.50	\$2,185,000
Mississippi, Delta	600000	\$7.69	\$10.25	\$6,150,000
Missouri	316855	\$7.20	\$8.75	\$2,772,481
New Mexico	13000	\$1.14	\$4.50	\$58,500
North Carolina, Bt	580,000	\$9.44	\$10.50	\$6,090,000
North Carolina, non-Bt	275,000	\$10.82	\$12.00	\$3,300,000
Oklahoma	57750	\$3.47	\$10.50	\$606,375
South Carolina, Bt	200000.00	\$22.86	\$16.00	\$3,200,000
South Carolina, non-Bt	85000.00	\$22.67	\$16.00	\$1,360,000
Tennessee, non-Bt	86832	\$8.64	\$9.60	\$833,587
Tennessee, Bt	395570	\$8.64	\$9.60	\$3,797,472
Texas, Lower Rio Grande valley	50000	\$1.68	\$7.50	\$375,000
Texas, Southern Blackland	45000	\$5.08	\$7.00	\$315,000
Texas, Northern Blacklands	57000	\$6.33	\$7.00	\$399,000
Texas, High Plains	550000	\$1.94	\$10.00	\$5,500,000
Texas, Southern Rolling Plains	15000	\$0.08	\$3.50	\$52,500
Texas, Far West	20000	\$0.60	\$12.00	\$240,000
Texas, Northern Rolling Plains	50000	\$0.56	\$5.25	\$262,500
Texas, Upper Coastal Bend	102300	\$6.38	\$11.60	\$1,186,680
Texas, Lower Coastal Bend	45892	\$1.17	\$10.60	\$486,455
Virginia	103,000	\$12.00	\$12.00	\$1,236,000
All states	7,046,533	\$5.65	\$10.61	\$74,789,749

Table 3. Cotton Insect Eradication. Cotton Insect Losses – 2002.

State	Number Acres	Cost/Acre	Wt cost/acre	Total Cost
Alabama, South	187,000	\$5.00	\$5.00	\$935,000
Alabama, Central	250,000	\$5.00	\$5.00	\$1,250,000
Alabama, North	80,000	\$5.00	\$5.00	\$400,000
Arizona, BT	141,000	\$1.78	\$1.78	\$250,980
Arizona, nonBt	94,000	\$1.78	\$1.78	\$167,320
Arkansas, Southeast	400,000	\$35.00	\$35.00	\$14,000,000
Arkansas, Northeast	250,000	\$26.00	\$13.00	\$6,500,000
California	0	\$0.00	\$0.00	\$0
Florida	120,000	\$6.00	\$6.00	\$720,000
Georgia, Bt	670,000	\$3.80	\$3.80	\$2,546,000
Georgia, non-Bt	730,000	\$3.80	\$3.80	\$2,774,000
Kansas, South Central	0	\$0.00	\$0.00	\$0
Kansas, Southwest	0	\$0.00	\$0.00	\$0
Louisiana, non-Bt	113,160	\$35.00	\$35.00	\$3,960,600
Louisiana, Bt	378,840	\$35.00	\$35.00	\$13,259,400
Mississippi, Hills	380,000	\$12.00	\$12.00	\$4,560,000
Mississippi, Delta	800,000	\$22.00	\$22.00	\$17,600,000
Missouri	385,000	\$12.50	\$12.50	\$4,812,500
New Mexico	51,524	\$18.00	\$18.00	\$927,432
North Carolina, Bt	645,000	\$3.90	\$3.90	\$2,515,500
North Carolina, non-Bt	305,000	\$3.75	\$3.75	\$1,143,750
Oklahoma	175,000	\$13.30	\$13.30	\$2,327,500
South Carolina, Bt	210,000	\$5.35	\$8.03	\$1,123,500
South Carolina, non-Bt	90,000	\$5.35	\$8.03	\$481,500
Tennessee, non-Bt	96,480	\$19.84	\$19.84	\$1,914,163
Tennessee, Bt	439,520	\$19.84	\$19.84	\$8,720,077
Texas, Lower Rio Grande Valley	0	\$0.00	\$0.00	\$0
Texas, Southern Blackland	62,000	\$19.50	\$19.50	\$1,209,000
Texas, Northern Blacklands	0	\$0.00	\$0.00	\$0
Texas, High Plains	2,349,472	\$8.00	\$6.64	\$18,795,776
Texas, Southern Rolling Plains	630,000	\$9.50	\$9.50	\$5,985,000
Texas, Far West	347,500	\$9.18	\$8.03	\$3,190,050
Texas, Northern Rolling Plains	472,453	\$10.30	\$10.30	\$4,866,266
Texas, Upper Coastal Bend	186,000	\$20.20	\$20.20	\$3,757,200
Texas, lower Coastal Bend	417,202	\$23.14	\$23.14	\$9,654,054
Virginia	103,000	\$3.85	\$3.85	\$396,550
Total US-BOLL WEEVIL	11,559,151	\$10.63	\$9.28	\$122,882,049
California Pink Bollworm	653,365	\$5.82	\$0.29	\$3,802,584
New Mexico Pink Bollworm	14,995	\$10.00	\$0.01	\$149,950
West Texas Pink Bollworm	47,500	\$20.00	\$0.07	\$950,000
Total US-Insect Eradication	12,275,011	\$10.41	\$9.65	\$127,784,583

Table 4. Bt Cotton costs by state. Cotton Insect Losses – 2002.

State	Number acres	Bt cost /Acre	Average /all Acres	Total Cost	% population Bollworm	Acres Bt cotton sprayed	Avg. # bworm applied to Bt cotton
Alabama, South	125,000	\$26.00	\$13.00	\$3,250,000	40	20,000	1.00
Alabama, Central	38,400	\$28.00	\$13.44	\$1,075,200	60	5,000	1.00
Alabama, North	74000	\$24.00	\$9.50	\$1,776,000	90	0	0.00
Arizona, BT	141000	\$31.90	\$19.14	\$4,497,900	80	141	0.10
Arizona, nonBt	0	\$0.00	\$0.00	\$0	80	0	0.00
Arkansas, Southeast	260000	\$28.00	\$18.20	\$7,280,000	65	250000	2.50
Arkansas, Northeast	200000	\$22.00	\$8.80	\$4,400,000	50	175000	2.00
California	4481	\$3.00	\$0.02	\$13,443	100	0	0.00
Florida	63,600	\$26.50	\$14.05	\$1,685,400	45	0	0.00
Georgia, Bt	670000	\$26.00	\$12.44	\$17,420,000	100	225000	1.00
Georgia, non-Bt	0	\$0.00	\$0.00	\$0	35	0	0.00
Kansas, South Central	0	\$0.00	\$0.00	\$0	100	0	0.00
Kansas, Southwest	0	\$0.00	\$0.00	\$0	100	0	0.00
Louisiana, non-Bt	0	\$0.00	\$0.00	\$0	20	0	0.00
Louisiana, Bt	378840	\$29.50	\$22.72	\$11,175,780	100	314036	3.10
Mississippi, Hills	285000	\$26.00	\$19.50	\$7,410,000	90	200000	1.00
Mississippi, Delta	650000	\$26.00	\$21.13	\$16,900,000	85	610000	2.40
Missouri	157509	\$24.00	\$9.82	\$3,780,216	50	99946	1.00
New Mexico	12000	\$32.00	\$5.00	\$384,000	100	750	1.00
North Carolina, Bt	645,000	\$19.25	\$13.07	\$12,416,250	100	516,000	1.10
North Carolina, non-Bt	0	\$0.00	\$0.00	\$0	92	0	0.00
Oklahoma	61,035	\$29.00	\$10.11	\$1,770,015	93	78750	1.50
South Carolina, Bt	140000.00	\$20.50	\$14.35	\$2,870,000	85.00	165000.00	1.50
South Carolina, non-Bt	0.00	\$0.00	\$0.00	\$0	85.00	0.00	0.00
Tennessee, non-Bt	0	\$0.00	\$0.00	\$0	67	0	0.00
Tennessee, Bt	439520	\$23.00	\$18.86	\$10,108,960	100	331000	1.20
Texas, Lower Rio Grande valley	10000	\$15.00	\$0.67	\$150,000	99	0	0.00
Texas, Southern Blackland	48000	\$18.00	\$13.94	\$864,000	35	3	0.10
Texas, Northern Blacklands	11000	\$21.50	\$3.75	\$236,500	80	200	1.00
Texas, High Plains	136480	\$20.00	\$0.96	\$2,729,600	100	0	0.00
Texas, Southern Rolling Plains	55000	\$10.00	\$0.87	\$550,000	95	2000	1.00
Texas, Far West	72000	\$20.00	\$3.62	\$1,440,000	100	2000	0.00
Texas, Northern Rolling Plains	50000	\$10.00	\$1.06	\$500,000	95	1000	1.00
Texas, Upper Coastal Bend	89280	\$20.15	\$9.67	\$1,798,992	45	29760	1.00
Texas, lower Coastal Bend	70924	\$19.97	\$3.39	\$1,416,352	45	2000	1.00
Virginia	67,000	\$12.00	\$7.81	\$804,000	85	64,000	1.00
Total US	4,893,810	\$23.96	\$8.85	\$117,235,100	83	3,091,586	0.52

Table 5. Insecticide Application Type and Cost. Cotton Insect Losses 2002.

State	% treated air	treated by air	Per Acre air	Total cost air	% treated ground	treated by ground	Per Acre ground	Total cost ground
Alabama, South	15.0	37,500	\$3.75	\$140,625	25.0	95,000	2.5	\$237,500
Alabama, Central	15.0	12,000	\$3.50	\$42,000	60.0	48,000	2.5	\$120,000
Alabama, North	45.0	84,150	\$3.10	\$260,865	90.0	168,300	3.2	\$538,560
Arizona, BT	90.0	126,900	\$4.50	\$571,050	50.0	70,500	6.75	\$475,875
Arizona, nonBt	90.0	84,600	\$4.50	\$380,700	50.0	47,000	6.75	\$317,250
Arkansas, Southeast	90.0	360,000	\$4.00	\$1,440,000	75.0	300,000	2.5	\$750,000
Arkansas, Northeast	80.0	400,000	\$3.50	\$1,400,000	80.0	400,000	2.5	\$1,000,000
California	50.0	326,683	\$12.00	\$3,920,190	70.0	457,356	8	\$3,658,844
Florida	60.0	72,000	\$4.75	\$342,000	60.0	72,000	5.5	\$396,000
Georgia, Bt	40.0	268,000	\$3.50	\$938,000	75.0	502,500	3	\$1,507,500
Georgia, non-Bt	40.0	292,000	\$3.50	\$1,022,000	75.0	547,500	3	\$1,642,500
Kansas, South Central	5.0	1,500	\$4.50	\$6,750	20.0	6,000	3.5	\$21,000
Kansas, Southwest	20.0	6,000	\$3.75	\$22,500	10.0	3,000	3.5	\$10,500
Louisiana, non-Bt	92.5	104,673	\$3.73	\$390,430	53.0	59,975	2.4	\$143,940
Louisiana, Bt	92.5	350,427	\$3.73	\$1,307,093	53.0	200,785	2.4	\$481,884
Mississippi, Hills	30.0	114,000	\$3.50	\$399,000	70.0	266,000	3.15	\$837,900
Mississippi, Delta	90.0	720,000	\$3.50	\$2,520,000	90.0	720,000	3.1	\$2,232,000
Missouri	60.7	233,734	\$3.50	\$818,067	83.0	319,550	2.75	\$878,763
New Mexico	100.0	76,753	\$14.00	\$1,074,542	4.0	3,070	7	\$21,491
North Carolina, Bt	10.0	64,500	\$5.50	\$354,750	85.0	548,250	2.55	\$1,398,038
North Carolina, non-Bt	20.0	61,000	\$5.50	\$335,500	90.0	300,600	2.55	\$766,530
Oklahoma	75.0	131,250	\$4.00	\$525,000	50.0	87,500	3	\$262,500
South Carolina, Bt	20.0	28,000	\$4.00	\$112,000	90.0	126,000	7.00	\$882,000
South Carolina, non-Bt	20.0	12,000	\$4.00	\$48,000	90.0	54,000	7.00	\$378,000
Tennessee, non-Bt	35.0	33,768	\$3.50	\$118,188	88.0	84,902	3.25	\$275,933
Tennessee, Bt	25.0	109,880	\$3.50	\$384,580	84.0	369,197	3.25	\$1,199,890
Texas, Lower Rio Grande Valley	30.0	66,974	\$3.50	\$234,407	70.0	156,272	2	\$312,543
Texas, Southern Blackland	99.0	61,380	\$3.25	\$199,485	85.0	52,700	2.25	\$118,575
Texas, Northern Blacklands	20.0	12,600	\$4.00	\$50,400	80.0	50,400	3	\$151,200
Texas, High Plains	32.5	919,750	\$4.15	\$3,816,963	16.0	452,800	3.65	\$1,652,720
Texas, Southern Rolling Plains	10.0	63,000	\$3.50	\$220,500	15.0	94,500	3.5	\$330,750
Texas, Far West	60.9	242,237	\$2.58	\$624,970	8.2	32,595	2.53	\$82,465
Texas, Northern Rolling Plains	37.0	174,808	\$3.50	\$611,827	10.0	47,245	3.5	\$165,359
Texas, Upper Coastal Bend	33.0	61,380	\$3.35	\$205,623	66.0	188,760	2.75	\$519,090
Texas, lower Coastal Bend	28.0	116,817	\$3.35	\$391,335	72.0	300,385	2.75	\$826,060
Virginia	0.0	0	\$0.00	\$0	100.0	103,000	4.5	\$463,500
Total US	43.8	5,805,032	\$1.88	\$10,907,441	54.5	7,302,700	\$1.87	\$13,635,539

Table 6. Cotton Insect Monitoring Costs. Cotton Insect Losses – 2002.

State	Acres Scouted	Times per week Scouted	wt Avg Cost over all acres	Cost per scouted acre	Total Cost
Alabama, South	140,000	1.10	\$2.58	\$7.00	\$980,000
Alabama, Central	50,000	1.00	\$4.06	\$6.50	\$325,000
Alabama, North	270,000	1.30	\$7.72	\$5.35	\$1,444,500
Arizona, BT	138,180	1.80	\$8.19	\$8.36	\$1,155,185
Arizona, nonBt	92,120	1.90	\$8.19	\$8.36	\$770,123
Arkansas, Southeast	340,000	2.00	\$7.23	\$8.50	\$2,890,000
Arkansas, Northeast	450,000	1.00	\$6.75	\$7.50	\$3,375,000
California	600,000	1.20	\$8.26	\$9.00	\$5,400,000
Florida	99,200	1.20	\$7.65	\$9.25	\$917,600
Georgia, Bt	400,000	1.20	\$4.18	\$7.00	\$2,800,000
Georgia, non-Bt	600,000	1.70	\$6.16	\$7.50	\$4,500,000
Kansas, South Central	22,000	1.00	\$4.40	\$6.00	\$132,000
Kansas, Southwest	22,000	1.00	\$4.40	\$6.00	\$132,000
Louisiana, non-Bt	93,923	1.80	\$7.16	\$8.63	\$810,555
Louisiana, Bt	329,591	1.80	\$7.51	\$8.63	\$2,844,370
Mississippi, Hills	270,000	1.50	\$4.97	\$7.00	\$1,890,000
Mississippi, Delta	750,000	1.20	\$7.97	\$8.50	\$6,375,000
Missouri	327,250	1.50	\$5.10	\$6.00	\$1,963,500
New Mexico	24,000	1.00	\$2.81	\$9.00	\$216,000
North Carolina, Bt	480,000	0.70	\$5.58	\$7.50	\$3,600,000
North Carolina, non-Bt	245,000	1.20	\$5.84	\$7.50	\$1,950,000
Oklahoma	95,000	1.00	\$2.71	\$5.00	\$475,000
South Carolina, Bt	165,000	1.00	\$8.84	\$7.50	\$1,237,500
South Carolina, non-Bt	85,000	1.00	\$10.63	\$7.50	\$637,500
Tennessee, non-Bt	70,430	1.20	\$5.00	\$6.85	\$482,446
Tennessee, Bt	294,500	1.20	\$4.59	\$6.85	\$2,017,325
Texas, Lower Rio Grande Valley	180,000	0.50	\$4.03	\$5.00	\$900,000
Texas, Southern Blackland	25,000	1.30	\$2.12	\$5.25	\$131,250
Texas, Northern Blacklands	40,000	1.00	\$2.86	\$4.50	\$180,000
Texas, High Plains	707,500	1.20	\$1.25	\$5.00	\$3,537,500
Texas, Southern Rolling Plains	66,000	1.00	\$0.63	\$6.00	\$396,000
Texas, Far West	50,000	1.30	\$0.75	\$6.00	\$300,000
Texas, Northern Rolling Plains	35,000	1.00	\$0.33	\$4.50	\$157,500
Texas, Upper Coastal Bend	148,800	1.20	\$6.28	\$6.85	\$1,796,080
Texas, lower Coastal Bend	333,762	1.00	\$4.88	\$6.10	\$2,035,948
Virginia	7,000	1.50	\$0.58	\$8.50	\$59,500
Total US	7,946,256	1.27	\$4.33	\$7.22	\$58,814,383

Table 7. Summary All States. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	2,221,449	1,219,524	0.204	\$6.23	\$1.27	0.175	46,536
Bollworm/Budworm	10,511,085	6,615,770	1.149	\$10.98	\$12.61	2.311	613,102
Pink Bollworm	313,735	104,470	0.020	\$14.47	\$0.29	0.033	8,800
Cotton Fleahopper	3,951,601	935,054	0.104	\$5.13	\$0.53	0.109	29,031
Lygus	7,024,825	3,294,405	0.506	\$7.93	\$4.01	0.719	190,869
Cotton Leaf Perforator	221,081	2,470	0.000	\$11.13	\$0.00	0.000	9
Spider Mites	2,071,859	777,171	0.068	\$22.04	\$1.50	0.027	7,256
Thrips	12,659,849	4,497,253	0.407	\$6.06	\$2.47	0.447	118,484
Beet Armyworm	3,049,492	659,971	0.051	\$12.49	\$0.64	0.039	10,469
Fall Armyworm	2,306,786	472,698	0.035	\$11.55	\$0.40	0.046	12,200
European Cornborer	99,964	125	0.000	\$9.15	\$0.00	0.001	162
Stink Bugs	5,604,138	2,090,710	0.164	\$7.79	\$1.27	0.446	118,346
Grasshoppers	2,606,268	413,335	0.043	\$8.44	\$0.36	0.025	6,721
Saltmarsh Caterpillars	1,201,700	157,516	0.012	\$9.32	\$0.12	0.002	549
Aphids	9,307,757	2,090,846	0.180	\$10.60	\$1.90	0.119	31,450
Banded Winged Whitefly	1,888,875	149,639	0.011	\$9.40	\$0.11	0.001	356
Silverleaf Whitefly (Bemesia)	1,029,510	546,433	0.071	\$30.94	\$2.19	0.087	23,169
Loopers	2,198,629	390,184	0.029	\$10.15	\$0.30	0.010	2,695
Southern Armyworms	154,000	5,100	0.000	\$7.69	\$0.00	0.000	25
Other Insects	458,345	9,970	0.001	\$15.08	\$0.01	0.001	330
Cutworms	1,180,341	1,114,351	0.084	\$3.27	\$0.28	0.009	2,336

Percent Lost	4.61
Total Acres	13,239,289
Total Bales lost	1,222,896
Bales lost in dollars	\$352,194,184

Est. yield/acre	627
Spray applications	3.139
Cost + loss	\$1,140,045,310
Cost + loss/acre	\$86.11

	Cost/ Acre
Foliar insecticide	\$30.26
At planting	\$5.65
Bt use fees	\$8.85
Eradication	\$10.41
Scouting	\$4.33
Total	\$59.51

Table 8. Alabama Summary. Cotton Insect Losses 2002.

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	517,000	240,000	0.815	\$11.96	\$9.75	9.85	116,749
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	10,000	0	0.000	N/A	0.00	0.00	0
Lygus	392,000	194,000	0.484	\$5.72	\$2.77	2.07	24,524
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	19,000	4,000	0.009	\$12.50	\$0.11	0.00	0
Thrips	517,000	108,000	0.209	\$4.38	\$0.92	1.04	12,363
Beet Armyworm	22,000	1,500	0.003	\$14.17	\$0.04	0.00	0
Fall Armyworm	200,000	10,000	0.019	\$10.00	\$0.19	0.03	406
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	447,000	54,000	0.124	\$6.36	\$0.79	2.33	27,660
Grasshoppers	46,000	18,500	0.042	\$9.35	\$0.39	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	517,000	103,000	0.199	\$9.43	\$1.88	0.81	9,655
Banded Winged Whitefly	30,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	5,000	0	0.000	N/A	\$0.00	0.00	0
Loopers	50,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	50,000	2,000	0.004	\$7.00	\$0.03	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	28,000	83,000	0.161	\$3.22	\$0.52	0.00	0

Percent Lost	16.14
Total Acres	517,000
Total Bales lost	191,357
Bales lost in dollars	\$55,110,690

Est. yield/acre	467
Spray applications	2.068
Cost + loss	\$80,530,035
Cost + loss/acre	\$155.76

	Cost/ Acre
Foliar insecticide	\$17.37
At planting	\$10.71
Bt use fees	\$11.80
Eradication	\$5.00
Scouting	\$4.28
Total	\$49.17

Table 8a. Alabama North. Cotton Insect Losses 2002.

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	187,000	120,000	0.770	\$8.60	\$6.62	4.50	22,791
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	187,000	187,000	1.300	\$5.70	\$7.41	4.00	20,258
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	19,000	4,000	0.024	\$12.50	\$0.29	0.00	0
Thrips	187,000	95,000	0.508	\$4.30	\$2.18	1.10	5,571
Beet Armyworm	20,000	1,000	0.005	\$13.75	\$0.07	0.00	0
Fall Armyworm	150,000	0	0.000	N/A	\$0.00	0.08	406
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	187,000	4,000	0.021	\$4.30	\$0.09	0.30	1,519
Grasshoppers	6,000	500	0.003	\$6.25	\$0.02	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	187,000	85,000	0.455	\$9.40	\$4.27	1.75	8,863
Banded Winged Whitefly	10,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	45,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	20,000	65,000	0.348	\$3.00	\$1.04	0.00	0

Percent Lost	11.73
Total Acres	187,000
Total Bales lost	59,409
Bales lost in dollars	\$17,109,690

Est. yield/acre	580
Spray applications	3.433
Cost + loss	\$27,183,335
Cost + loss/acre	\$145.37

	Cost/ Acre
Foliar insecticide	\$22.01
At planting	\$12.50
Bt use fees	\$9.50
Eradication	\$5.00
Scouting	\$4.86
Total	\$53.87

Table 8b. Alabama Central. Cotton Insect Losses 2002.

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	80,000	45,000	1.125	\$11.00	\$12.38	10.000	15,833
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	5,000	2,000	0.025	\$6.00	\$0.15	0.063	99
Cotton Leaf Perforator	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	80,000	8,000	0.100	\$5.00	\$0.50	1.000	1,583
Beet Armyworm	1,000	500	0.006	\$15.00	\$0.09	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	10,000	0	0.000	N/A	\$0.00	0.063	99
Grasshoppers	30,000	15,000	0.225	\$9.50	\$2.14	0.000	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	80,000	8,000	0.100	\$9.00	\$0.90	0.500	792
Banded Winged Whitefly	5,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.000	0
Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.000	0
Other Insects	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	3,000	10,000	0.125	\$4.00	\$0.50	0.000	0

Percent Lost	11.63
Total Acres Harvested acres	80,000
Total Bales lost	18,406
Bales lost in dollars	\$5,301,000

Est. yield/acre	475
Spray applications	1.706
Cost + loss	\$9,233,700
Cost + loss/acre	\$115.42

	Cost/ Acre
Foliar insecticide	\$16.66
At planting	\$10.00
Bt use fees	\$13.44
Eradication	\$5.00
Scouting	\$4.06
Total	\$49.16

Table 8c. Alabama South. Cotton Insect Losses 2002.

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	250,000	75,000	0.750	\$15.00	\$11.25	15.00	78,125
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	200,000	5,000	0.020	\$6.50	\$0.13	0.80	4,167
Cotton Leaf Perforator	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	250,000	5,000	0.020	\$5.00	\$0.10	1.00	5,208
Beet Armyworm	1,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	50,000	10,000	0.040	\$10.00	\$0.40	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	250,000	50,000	0.240	\$6.50	\$1.56	5.00	26,042
Grasshoppers	10,000	3,000	0.012	\$9.00	\$0.11	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	250,000	10,000	0.040	\$10.00	\$0.40	0.00	0
Banded Winged Whitefly	15,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	5,000	0	0.000	N/A	\$0.00	0.00	0
Loopers	5,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	50,000	2,000	0.008	\$7.00	\$0.06	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	5,000	8,000	0.032	\$4.00	\$0.13	0.00	0

Percent Lost	21.80
Total Acres	250,000
Total Bales lost	113,542
Bales lost in dollars	\$32,700,000

Est. yield/acre	380
Spray applications	1.162
Cost + loss	\$44,113,000
Cost + loss/acre	\$176.45

	Cost/ Acre
Foliar insecticide	\$14.13
At planting	\$9.60
Bt use fees	\$13.00
Eradication	\$5.00
Scouting	\$3.92
Total	\$45.65

Table 9. Arizona Summary. Cotton Insect Losses 2002.

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	119,350	42,141	0.179	\$13.63	\$2.44	0.156	1,292
Pink Bollworm	227,950	65,800	0.672	\$14.00	\$9.41	0.963	7,990
Cotton Fleahopper	211,500	4,700	0.010	\$8.00	0.08	0.000	0
Lygus	232,650	152,750	1.092	\$16.00	\$17.47	2.911	24,140
Cotton Leaf Perforator	28,200	470	0.001	\$12.28	\$0.01	0.000	0
Spider Mites	61,100	12,690	0.049	\$16.38	\$0.80	0.030	249
Thrips	108,100	12,690	0.027	\$9.80	\$0.26	0.043	358
Beet Armyworm	79,900	8,930	0.025	\$16.26	\$0.41	0.058	482
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	94,000	1,175	0.003	\$13.80	\$0.03	0.040	332
Grasshoppers	126,900	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	79,900	28,200	0.150	\$18.00	\$2.70	0.066	548
Aphids	35,250	2,350	0.010	\$14.80	\$0.15	0.000	0
Banded Winged Whitefly	129,250	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemesia)	232,650	199,750	1.105	\$27.35	\$30.22	0.535	4,435
Loopers	84,600	0	0.000	N/A	\$0.00	0.000	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.000	0
Yellowstriped Armyworms	42,300	8,930	0.025	\$16.26	\$0.41	0.036	299
Cutworms	1,410	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	4.84
Total Acres	235,000
Total Bales lost	40,125
Bales lost in dollars	\$11,555,955

Est. yield/acre	1,320
Spray applications	3.347
Cost + loss	\$33,595,706
Cost + loss/acre	\$142.96

	Cost/ Acre
Foliar insecticide	\$64.39
At planting	\$0.28
Bt use fees	\$19.14
Eradication	\$1.78
Scouting	\$8.19
Total	\$93.79

Table 9a. Arizona *Bt*. Cotton Insect Losses 2002.

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	49,350	141	0.000	\$13.63	\$0.00	0.011	52
Pink Bollworm	133,950	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	126,900	2,820	0.010	\$8.00	0.08	0.000	0
Lygus	139,590	91,650	1.040	\$16.00	\$16.64	2.871	14,253
Cotton Leaf Perforator	14,100	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	42,300	7,050	0.045	\$16.38	\$0.74	0.030	149
Thrips	14,100	7,050	0.025	\$9.80	\$0.25	0.005	25
Beet Armyworm	42,300	4,230	0.012	\$11.80	\$0.14	0.030	149
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	56,400	705	0.003	\$13.80	\$0.03	0.040	199
Grasshoppers	70,500	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	42,300	14,100	0.100	\$16.80	\$1.68	0.030	149
Aphids	21,150	1,410	0.010	\$14.80	\$0.15	0.000	0
Banded Winged Whitefly	77,550	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemesia)	139,590	119,850	1.105	\$28.57	\$31.57	0.495	2,457
Loopers	42,300	0	0.000	N/A	\$0.00	0.000	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.000	0
Yellowstriped Armyworms	14,100	4,230	0.012	\$11.80	\$0.14	0.010	50
Cutworms	1,410	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	3.52
Total Acres	141,000
Total Bales lost	17,482
Bales lost in dollars	\$5,034,829

Est. yield/acre	1,340
Spray applications	2.362
Cost + loss	\$18,217,175
Cost + loss/acre	\$129.20

	Cost/ Acre
Foliar insecticide	\$51.42
At planting	\$0.20
Bt use fees	\$31.90
Eradication	\$1.78
Scouting	\$8.19
Total	\$93.49

Table 9b. Arizona non*Bt*. Cotton Insect Losses 2002.

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	70,000	42,000	0.447	\$13.63	\$6.09	0.372	1,240
Pink Bollworm	94,000	65,800	1.680	\$14.00	\$23.52	2.400	7,990
Cotton Fleahopper	84,600	1,880	0.010	\$8.00	0.08	0.000	0
Lygus	93,060	61,100	1.170	\$16.00	\$18.72	2.970	9,888
Cotton Leaf Perforator	14,100	470	0.003	\$12.28	\$0.03	0.000	0
Spider Mites	18,800	5,640	0.054	\$16.38	\$0.88	0.030	100
Thrips	94,000	5,640	0.030	\$9.80	\$0.29	0.100	333
Beet Armyworm	37,600	4,700	0.045	\$18.04	\$0.81	0.100	333
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	37,600	470	0.003	\$13.80	\$0.03	0.040	133
Grasshoppers	56,400	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	37,600	14,100	0.225	\$18.80	\$4.23	0.120	400
Aphids	14,100	940	0.010	\$14.80	\$0.15	0.000	0
Banded Winged Whitefly	51,700	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemisia)	93,060	79,900	1.105	\$25.52	\$28.20	0.594	1,978
Loopers	42,300	0	0.000	N/A	\$0.00	0.000	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.000	0
Yellowstriped Armyworms	28,200	4,700	0.045	\$18.04	\$0.81	0.075	250
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	6.80
Total Acres	94,000
Total Bales lost	22,643
Bales lost in dollars	\$6,521,125

Est. yield/acre	1,290
Spray applications	4.826
Cost + loss	\$15,378,531
Cost + loss/acre	\$163.60

	Cost/ Acre
Foliar insecticide	\$83.85
At planting	\$0.40
Bt use fees	\$0.00
Eradication	\$1.78
Scouting	\$8.19
Total	\$94.23

Table 10. Arkansas Summary. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll Weevil	900,000	800,000	0.889	\$5.00	\$4.44	0.56	9,896
Bollworm/Budworm	900,000	850,000	3.778	\$13.35	\$50.44	5.22	93,021
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	350,000	0	0.000	N/A	0.00	0.01	198
Lygus	900,000	600,000	1.056	\$7.50	\$7.92	1.00	17,813
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	150,000	75,000	0.139	\$12.00	\$1.67	0.04	693
Thrips	900,000	825,000	1.375	\$6.00	\$8.25	0.90	16,031
Beet Armyworm	300,000	75,000	0.083	\$15.00	\$1.25	0.02	297
Fall Armyworm	550,000	250,000	0.278	\$12.00	\$3.33	0.19	3,464
European Cornborer	50,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	900,000	350,000	0.389	\$8.00	\$3.11	0.50	8,906
Grasshoppers	130,000	40,000	0.044	\$6.00	\$0.27	0.00	0
Saltmarsh Caterpillars	400,000	125,000	0.139	\$7.00	\$0.97	0.00	0
Aphids	750,000	200,000	0.222	\$9.00	\$2.00	0.00	0
Banded Winged Whitefly	500,000	110,000	0.122	\$9.00	\$1.10	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	675,000	50,000	0.000	N/A	\$0.06	0.04	668
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	300,000	200,000	0.222	\$5.00	\$1.11	0.00	0

Percent Lost	8.48
Total Acres	900,000
Total Bales lost	150,986
Bales lost in dollars	\$43,483,875

Est. yield/acre	726
Spray applications	8.736
Cost + loss	\$168,258,875
Cost + loss/acre	\$186.95

	Cost/ Acre
Foliar insecticide	\$85.92
At planting	\$10.00
Bt use fees	\$12.98
Eradication	\$22.78
Scouting	\$6.96
Total	\$138.64

Table 10a. Arkansas Northeast. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	500000	400000	1.600	\$5.00	\$8.00	1.000	9,896
Bollworm/Budworm	500,000	450,000	3.600	\$15.00	\$54.00	7.000	69,271
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	150,000	0	0.000	N/A	0.00	0.000	0
Lygus	500,000	250,000	0.500	\$7.50	\$3.75	1.000	9,896
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	50,000	25,000	0.100	\$12.00	\$1.20	0.050	495
Thrips	500,000	475,000	1.425	\$6.00	\$8.55	1.500	14,844
Beet Armyworm	200,000	50,000	0.100	\$15.00	\$1.50	0.020	198
Fall Armyworm	300,000	150,000	0.300	\$12.00	\$3.60	0.300	2,969
European Cornborer	25,000	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	500,000	150,000	0.300	\$8.00	\$2.40	0.500	4,948
Grasshoppers	30,000	15,000	0.030	\$6.00	\$0.18	0.000	0
Saltmarsh Caterpillars	250,000	100,000	0.200	\$7.00	\$1.40	0.000	0
Aphids	400,000	100,000	0.200	\$9.00	\$1.80	0.000	0
Banded Winged Whitefly	300,000	100,000	0.200	\$9.00	\$1.80	0.000	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.000	0
Loopers	400,000	30,000	0.000	N/A	\$0.06	0.040	396
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.000	0
Other Insects	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	200,000	100,000	0.200	\$5.00	\$1.00	0.000	0

Percent Lost	11.41
Total Acres	500,000
Total Bales lost	112,911
Bales lost in dollars	\$32,518,500

Est. yield/acre	703
Spray applications	8.755
Cost + loss	\$96,213,500
Cost + loss/acre	\$192.43

	Cost/ Acre
Foliar insecticide	\$89.24
At planting	\$9.60
Bt use fees	\$8.80
Eradication	\$13.00
Scouting	\$6.75
Total	\$127.39

Table 10b. Arkansas Southeast. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	400,000	400,000	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	400,000	400,000	4.000	\$11.50	\$46.00	3.00	23,750
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	200,000	0	0.000	N/A	0.00	0.03	198
Lygus	400,000	350,000	1.750	\$7.50	\$13.13	1.00	7,917
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	100,000	50,000	0.188	\$12.00	\$2.25	0.03	198
Thrips	400,000	350,000	1.313	\$6.00	\$7.88	0.15	1,188
Beet Armyworm	100,000	25,000	0.063	\$15.00	\$0.94	0.01	99
Fall Armyworm	250,000	100,000	0.250	\$12.00	\$3.00	0.06	495
European Cornborer	25,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	400,000	200,000	0.500	\$8.00	\$4.00	0.50	3,958
Grasshoppers	100,000	25,000	0.063	\$6.00	\$0.38	0.00	0
Saltmarsh Caterpillars	150,000	25,000	0.063	\$7.00	\$0.44	0.00	0
Aphids	350,000	100,000	0.250	\$9.00	\$2.25	0.00	0
Banded Winged Whitefly	200,000	10,000	0.025	\$9.00	\$0.23	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	275,000	20,000	0.000	N/A	\$0.05	0.03	272
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	100,000	100,000	0.250	\$5.00	\$1.25	0.00	0

Percent Lost	4.81
Total Acres	400,000
Total Bales lost	38,074
Bales lost in dollars	\$10,965,375

Est. yield/acre	755
Spray applications	8.713
Cost + loss	\$72,045,375
Cost + loss/acre	\$180.11

	Cost/ Acre
Foliar insecticide	\$81.78
At planting	\$10.50
Bt use fees	\$18.20
Eradication	\$35.00
Scouting	\$7.23
Total	\$152.70

Table 11. California Summary. Cotton Insect Losses 2002.

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	65,337	0	0.000	N/A	\$0.00	0.00	0
Pink Bollworm	21,290	1,000	0.002	\$18.00	\$0.03	0.00	0
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.00	0
Lygus	522,692	65,337	0.100	\$15.00	\$1.50	0.01	174
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	588,029	457,356	0.700	\$30.00	\$21.00	0.05	980
Thrips	646,831	326,683	0.500	\$15.00	\$7.50	0.00	0
Beet Armyworm	261,346	6,534	0.010	\$18.00	\$0.18	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	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
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	588,029	326,683	0.600	\$18.00	\$10.80	0.18	3,920
Banded Winged Whitefly	10,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	555,360	326,683	1.000	\$33.00	\$33.00	0.85	18,512
Loopers	6,534	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	1.08
Total Acres	653,365
Total Bales lost	23,586
Bales lost in dollars	\$6,792,904

Est. yield/acre	1,397
Spray applications	2.912
Cost + loss	\$69,263,199
Cost + loss/acre	\$106.01

	Cost/ Acre
Foliar insecticide	\$74.01
At planting	\$7.50
Bt use fees	\$0.02
Eradication	\$5.82
Scouting	\$8.26
Total	\$95.61

Table 12. Florida Summary. Cotton Insect Losses 2002.

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	21,000	10,000	0.250	\$14.00	\$3.50	1.05	2,888
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	900	0	0.000	N/A	0.00	0.00	0
Lygus	20,000	2,000	0.017	\$7.00	\$0.12	0.17	458
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	400	0	0.000	N/A	\$0.00	0.00	0
Thrips	82,000	18,600	0.155	\$7.25	\$1.12	0.55	1,503
Beet Armyworm	500	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	2,000	100	0.001	\$17.00	\$0.01	0.01	28
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	84,000	36,000	0.300	\$10.50	\$3.15	1.40	3,850
Grasshoppers	6,000	600	0.005	\$10.75	\$0.05	0.02	55
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	120,000	4,500	0.038	\$9.50	\$0.36	1.50	4,125
Banded Winged Whitefly	20,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	500	0	0.000	N/A	\$0.00	0.00	0
Loopers	8,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	2,000	100	0.001	\$12.00	\$0.01	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	1,000	200	0.002	\$8.00	\$0.01	0.00	2

Percent Lost	4.69
Total Acres	120,000
Total Bales lost	12,909
Bales lost in dollars	\$3,717,780

Est. yield/acre	460
Spray applications	0.768
Cost + loss	\$8,625,330
Cost + loss/acre	\$71.88

	Cost/ Acre
Foliar insecticide	\$8.34
At planting	\$4.87
Bt use fees	\$14.05
Eradication	\$6.00
Scouting	\$7.65
Total	\$40.90

Table 13. Georgia Summary. Cotton Insect Losses 2002.

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	1,200,000	850,000	1.946	\$10.75	\$20.93	2.86	83,333
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	400,000	80,000	0.057	\$6.00	\$0.34	0.03	833
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	10,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	1,350,000	130,000	0.093	\$5.00	\$0.46	0.00	0
Beet Armyworm	300,000	70,000	0.050	\$10.50	\$0.53	0.02	625
Fall Armyworm	200,000	35,000	0.025	\$9.00	\$0.23	0.01	417
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	1,200,000	800,000	0.571	\$7.00	\$4.00	1.29	37,500
Grasshoppers	40,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	650,000	90,000	0.064	\$8.00	\$0.51	0.00	135
Banded Winged Whitefly	40,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	50,000	10,000	0.007	\$14.00	\$0.10	0.01	208
Loopers	40,000	10,000	0.007	\$11.00	\$0.08	0.00	8
Southern Armyworms	30,000	3,000	0.002	\$8.00	\$0.02	0.00	6
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	10,000	2,000	0.001	\$8.00	\$0.01	0.00	2

Percent Lost	4.22
Total Acres	1,400,000
Total Bales lost	123,069
Bales lost in dollars	\$35,443,800

Est. yield/acre	600
Spray applications	2.825
Cost + loss	\$114,773,800
Cost + loss/acre	\$81.98

	Cost/ Acre
Foliar insecticide	\$27.21
At planting	\$8.00
Bt use fees	\$12.44
Eradication	\$3.80
Scouting	\$5.21
Total	\$56.66

Table 13a. Georgia *Bt*. Cotton Insect Losses 2002.

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	500,000	225,000	0.336	\$8.00	\$2.69	0.75	10,417
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	25,000	0	0.000	N/A	\$0.00	0.00	0
Lygus	200,000	45,000	0.067	\$6.00	\$0.40	0.03	417
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	5,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	650,000	60,000	0.090	\$5.00	\$0.45	0.00	0
Beet Armyworm	100,000	20,000	0.030	\$10.50	\$0.31	0.01	208
Fall Armyworm	100,000	25,000	0.037	\$9.00	\$0.34	0.01	208
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	600,000	500,000	0.746	\$7.00	\$5.22	1.79	25,000
Grasshoppers	20,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	300,000	50,000	0.075	\$8.00	\$0.60	0.00	63
Banded Winged Whitefly	20,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	25,000	5,000	0.007	\$14.00	\$0.10	0.01	104
Loopers	20,000	5,000	0.007	\$11.00	\$0.08	0.00	4
Southern Armyworms	20,000	2,000	0.003	\$8.00	\$0.02	0.00	4
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	5,000	1,000	0.001	\$8.00	\$0.01	0.00	1

Percent Lost	2.61
Total Acres	670,000
Total Bales lost	36,426
Bales lost in dollars	\$10,490,700

Est. yield/acre	600
Spray applications	1.400
Cost + loss	\$45,510,700
Cost + loss/acre	\$67.93

	Cost/ Acre
Foliar insecticide	\$10.23
At planting	\$8.06
Bt use fees	\$26.00
Eradication	\$3.80
Scouting	\$4.18
Total	\$52.27

Table 13b. Georgia non*Bt*. Cotton Insect Losses 2002.

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	700,000	625,000	3.425	\$11.00	\$37.67	4.79	72,917
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	25,000	0	0.000	N/A	0.00	0.00	0
Lygus	200,000	35,000	0.048	\$6.00	\$0.29	0.03	417
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	5,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	700,000	70,000	0.096	\$5.00	\$0.48	0.00	0
Beet Armyworm	200,000	50,000	0.068	\$10.50	\$0.72	0.03	417
Fall Armyworm	100,000	10,000	0.014	\$9.00	\$0.12	0.01	208
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	600,000	300,000	0.411	\$7.00	\$2.88	0.82	12,500
Grasshoppers	20,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	350,000	40,000	0.055	\$8.00	\$0.44	0.00	73
Banded Winged Whitefly	20,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	25,000	5,000	0.007	\$14.00	\$0.10	0.01	104
Loopers	20,000	5,000	0.007	\$11.00	\$0.08	0.00	4
Southern Armyworms	10,000	1,000	0.001	\$8.00	\$0.01	0.00	2
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	5,000	1,000	0.001	\$8.00	\$0.01	0.00	1

Percent Lost	5.70
Total Acres	730,000
Total Bales lost	86,643
Bales lost in dollars	\$24,953,100

Est. yield/acre	600
Spray applications	4.133
Cost + loss	\$69,263,100
Cost + loss/acre	\$94.88

	Cost/ Acre
Foliar insecticide	\$42.79
At planting	\$7.95
Bt use fees	\$0.00
Eradication	\$3.80
Scouting	\$6.16
Total	\$60.70

Table 14. Kansas Summary. Cotton Insect Losses 2002.

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	8,000	3,000	0.050	\$13.50	\$0.68	0.71	885
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	15,000	4,000	0.067	\$8.00	0.53	0.23	286
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	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	14,000	7,000	0.117	\$8.00	\$0.93	0.21	260
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 Cornborer	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	1,500	500	0.008	\$13.00	\$0.11	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	0	0	0.000	N/A	\$0.00	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	1.15
Total Acres	60,000
Total Bales lost	1,432
Bales lost in dollars	\$412,500

Est. yield/acre	700
Spray applications	0.242
Cost + loss	\$812,900
Cost + loss/acre	\$13.55

	Cost/ Acre
Foliar insecticide	\$2.25
At planting	\$0.02
Bt use fees	\$0.00
Eradication	\$0.00
Scouting	\$4.40
Total	\$6.67

Table 14a. Kansas Southwest. Cotton Insect Losses 2002.

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	5,000	2,000	0.067	\$13.50	\$0.90	0.83	651
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	5,000	1,000	0.033	\$8.00	0.27	0.17	130
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	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	4,000	2,000	0.067	\$8.00	\$0.53	0.13	104
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 Cornborer	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
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	0	0	0.000	N/A	\$0.00	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	1.13
Total Acres	30,000
Total Bales lost	885
Bales lost in dollars	\$255,000

Est. yield/acre	900
Spray applications	0.167
Cost + loss	\$438,700
Cost + loss/acre	\$14.62

	Cost/ Acre
Foliar insecticide	\$1.70
At planting	\$0.02
Bt use fees	\$0.00
Eradication	\$0.00
Scouting	\$4.40
Total	\$6.12

Table 14b. Kansas South Central. Cotton Insect Losses 2002.

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	3,000	1,000	0.033	\$13.50	\$0.45	0.50	234
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	10,000	3,000	0.100	\$8.00	0.80	0.33	156
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	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	10,000	5,000	0.167	\$8.00	\$1.33	0.33	156
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 Cornborer	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	1,500	500	0.017	\$13.00	\$0.22	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	0	0	0.000	N/A	\$0.00	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	1.17
Total Acres	30,000
Total Bales lost	547
Bales lost in dollars	\$157,500

Est. yield/acre	500
Spray applications	0.317
Cost + loss	\$374,200
Cost + loss/acre	\$12.47

	Cost/ Acre
Foliar insecticide	\$2.80
At planting	\$0.02
Bt use fees	\$0.00
Eradication	\$0.00
Scouting	\$4.40
Total	\$7.22

Table 15. Louisiana Summary. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 Applic	cost/acre	% red	Bales lost
Boll Weevil	357,198	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	477,580	415,880	2.952	\$11.89	\$35.08	2.17	23,370
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	17,330	3,886	0.004	\$8.75	0.03	0.00	38
Lygus	456,227	406,792	1.425	\$9.75	\$13.89	2.32	24,950
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	162,337	42,857	0.174	\$15.50	\$2.70	0.05	533
Thrips	467,052	311,523	0.633	\$7.50	\$4.75	0.14	1,533
Beet Armyworm	223,860	149,247	0.152	\$10.75	\$1.63	0.09	979
Fall Armyworm	147,603	22,644	0.023	\$10.75	\$0.25	0.02	161
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	363,200	230,603	0.372	\$10.75	\$4.00	0.25	2,692
Grasshoppers	163,838	24,630	0.050	\$11.25	\$0.56	0.00	0
Saltmarsh Caterpillars	120,800	1,316	0.001	\$10.25	\$0.01	0.00	0
Aphids	405,610	405,910	1.238	\$11.12	\$13.76	0.04	444
Banded Winged Whitefly	98,401	35,670	0.073	\$10.53	\$0.76	0.01	108
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	328,171	204,184	0.415	\$10.63	\$4.41	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	69,177	246,005	0.500	\$5.75	\$2.88	0.00	0

Percent Lost	5.09
Total Acres	492,000
Total Bales lost	54,806
Bales lost in dollars	\$15,784,251

Est. yield/acre	700
Spray applications	8.011
Cost + loss	\$92,611,978
Cost + loss/acre	\$188.24

	Cost/ Acre
Foliar insecticide	\$84.72
At planting	\$6.29
Bt use fees	\$22.72
Eradication	\$35.00
Scouting	\$7.43
Total	\$156.15

Table 15a. Louisiana *Bt*. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	275044	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	364,420	314,036	2.570	\$9.75	\$25.05	1.92	15,943
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	12,125	2,150	0.003	\$8.75	0.02	0.00	27
Lygus	351,295	313,230	1.406	\$9.75	\$13.70	2.32	19,211
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	125,000	33,000	0.174	\$15.50	\$2.70	0.05	410
Thrips	359,630	239,873	0.633	\$7.50	\$4.75	0.14	1,180
Beet Armyworm	172,372	114,920	0.152	\$10.75	\$1.63	0.09	754
Fall Armyworm	113,654	17,436	0.023	\$10.75	\$0.25	0.02	124
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	250,040	117,443	0.372	\$10.75	\$4.00	0.25	2,073
Grasshoppers	126,156	18,942	0.050	\$11.25	\$0.56	0.00	0
Saltmarsh Caterpillars	93,016	1,013	0.001	\$10.25	\$0.01	0.00	0
Aphids	312,251	312,551	1.238	\$11.12	\$13.76	0.04	342
Banded Winged Whitefly	75,769	27,466	0.073	\$10.53	\$0.76	0.01	83
Silverleaf Whitefly (<i>Bemisia</i>)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	252,692	157,222	0.415	\$10.63	\$4.41	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	53,267	189,424	0.500	\$5.75	\$2.88	0.00	0

Percent Lost	4.84
Total Acres	378,840
Total Bales lost	40,147
Bales lost in dollars	\$11,562,439

Est. yield/acre	700
Spray applications	7.609
Cost + loss	\$69,458,787
Cost + loss/acre	\$183.35

	Cost/ Acre
Foliar insecticide	\$74.50
At planting	\$6.32
Bt use fees	\$29.50
Eradication	\$35.00
Scouting	\$7.51
Total	\$152.83

Table 15b. Louisiana nonBt. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	82154	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	113,160	101,844	4.230	\$16.23	\$68.65	3.00	7,426
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	5,205	1,736	0.008	\$8.75	0.07	0.00	11
Lygus	104,932	93,562	1.488	\$9.75	\$14.51	2.32	5,738
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	37,337	9,857	0.174	\$15.50	\$2.70	0.05	123
Thrips	107,422	71,650	0.633	\$7.50	\$4.75	0.14	352
Beet Armyworm	51,488	34,327	0.152	\$10.75	\$1.63	0.09	225
Fall Armyworm	33,949	5,208	0.023	\$10.75	\$0.25	0.02	37
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	113,160	113,160	0.372	\$10.75	\$4.00	0.25	619
Grasshoppers	37,682	5,688	0.050	\$11.25	\$0.57	0.00	0
Saltmarsh Caterpillars	27,784	303	0.001	\$10.25	\$0.01	0.00	0
Aphids	93,359	93,359	1.238	\$11.12	\$13.76	0.04	102
Banded Winged Whitefly	22,632	8,204	0.072	\$10.53	\$0.76	0.01	25
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	75,479	46,962	0.415	\$10.63	\$4.41	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	15,910	56,581	0.500	\$5.75	\$2.88	0.00	0

Percent Lost	5.92
Total Acres	113,160
Total Bales lost	14,659
Bales lost in dollars	\$4,221,812

Est. yield/acre	700
Spray applications	9.357
Cost + loss	\$23,153,191
Cost + loss/acre	\$204.61

	Cost/ Acre
Foliar insecticide	\$118.95
At planting	\$6.19
Bt use fees	\$0.00
Eradication	\$35.00
Scouting	\$7.16
Total	\$167.30

Table 16. Mississippi Summary. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect apps	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	1,180,000	1,030,000	1.674	\$9.08	\$15.21	3.22	111,250
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	8,000	1,400	0.001	\$6.51	0.01	0.00	19
Lygus	1,080,000	1,000,000	2.729	\$7.03	\$19.17	2.33	80,500
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	215,000	70,000	0.064	\$12.81	\$0.82	0.08	2,688
Thrips	1,180,000	471,000	0.455	\$4.53	\$2.06	0.43	14,780
Beet Armyworm	13,700	2,300	0.002	\$8.70	\$0.02	0.00	3
Fall Armyworm	411,000	47,300	0.040	\$8.87	\$0.36	0.17	6,028
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	340,000	145,000	0.123	\$7.06	\$0.87	0.36	12,281
Grasshoppers	190,000	16,000	0.014	\$7.25	\$0.10	0.00	0
Saltmarsh Caterpillars	60,000	3,000	0.003	\$4.00	\$0.01	0.00	0
Aphids	500,000	150,000	0.127	\$8.30	\$1.06	0.13	4,625
Banded Winged Whitefly	42,000	3,000	0.003	\$10.00	\$0.03	0.00	0
Silverleaf Whitefly (Bemesia)	1,000	0	0.000	N/A	\$0.00	0.00	0
Loopers	370,000	123,000	0.104	\$9.04	\$0.94	0.06	2,000
Southern Armyworms	60,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	268,000	250,000	0.212	\$1.55	\$0.33	0.05	1,838

Percent Lost	6.84
Total Acres	1,180,000
Total Bales lost	236,011
Bales lost in dollars	\$67,971,213

Est. yield/acre	734
Spray applications	5.551
Cost + loss	\$179,399,255
Cost + loss/acre	\$152.03

	Cost/ Acre
Foliar insecticide	\$40.98
At planting	\$7.06
Bt use fees	\$20.60
Eradication	\$18.78
Scouting	\$7.00
Total	\$94.43

Table 16a. Mississippi Delta. Cotton Insect Losses 2002.

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	800,000	760,000	2.090	\$9.10	\$19.02	3.50	87,500
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	1,000	500	0.001	\$6.00	0.00	0.00	2
Lygus	800,000	800,000	3.500	\$7.00	\$24.50	2.80	70,000
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	165,000	64,000	0.080	\$12.60	\$1.01	0.08	2,063
Thrips	800,000	331,000	0.497	\$4.51	\$2.24	0.50	12,500
Beet Armyworm	8,700	1,800	0.002	\$8.90	\$0.02	0.00	3
Fall Armyworm	321,000	42,000	0.053	\$8.90	\$0.47	0.20	5,016
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	210,000	100,000	0.125	\$7.00	\$0.88	0.39	9,844
Grasshoppers	90,000	6,000	0.008	\$6.00	\$0.05	0.00	0
Saltmarsh Caterpillars	50,000	3,000	0.004	\$4.00	\$0.02	0.00	0
Aphids	200,000	100,000	0.125	\$8.50	\$1.06	0.13	3,125
Banded Winged Whitefly	12,000	3,000	0.004	\$10.00	\$0.04	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	240,000	80,000	0.100	\$8.80	\$0.88	0.05	1,350
Southern Armyworms	10,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	148,000	160,000	0.200	\$1.50	\$0.30	0.06	1,388

Percent Lost	7.71
Total Acres	800,000
Total Bales lost	192,789
Bales lost in dollars	\$55,523,133

Est. yield/acre	750
Spray applications	6.787
Cost + loss	\$142,925,925
Cost + loss/acre	\$178.66

	Cost/ Acre
Foliar insecticide	\$50.47
At planting	\$7.69
Bt use fees	\$21.13
Eradication	\$22.00
Scouting	\$7.97
Total	\$109.25

Table 16b. Mississippi Hills. Cotton Insect Losses 2002.

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	380,000	270,000	0.799	\$9.00	\$7.19	2.50	23,750
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	7,000	900	0.002	\$6.80	0.02	0.00	18
Lygus	280,000	200,000	1.105	\$7.20	\$7.96	1.11	10,500
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	50,000	6,000	0.032	\$13.90	\$0.44	0.07	625
Thrips	380,000	140,000	0.368	\$4.60	\$1.69	0.24	2,280
Beet Armyworm	5,000	500	0.001	\$8.00	\$0.01	0.00	0
Fall Armyworm	90,000	5,300	0.014	\$8.60	\$0.12	0.11	1,013
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	130,000	45,000	0.118	\$7.20	\$0.85	0.26	2,438
Grasshoppers	100,000	10,000	0.026	\$8.00	\$0.21	0.00	0
Saltmarsh Caterpillars	10,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	300,000	50,000	0.132	\$7.90	\$1.04	0.16	1,500
Banded Winged Whitefly	30,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	1,000	0	0.000	N/A	\$0.00	0.00	0
Loopers	130,000	43,000	0.113	\$9.50	\$1.08	0.07	650
Southern Armyworms	50,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	120,000	90,000	0.237	\$1.65	\$0.39	0.05	450

Percent Lost	4.55
Total Acres	380,000
Total Bales lost	43,223
Bales lost in dollars	\$12,448,080

Est. yield/acre	700
Spray applications	2.949
Cost + loss	\$36,473,330
Cost + loss/acre	\$95.98

	Cost/ Acre
Foliar insecticide	\$21.00
At planting	\$5.75
Bt use fees	\$19.50
Eradication	\$12.00
Scouting	\$4.97
Total	\$63.22

Table 17. Missouri Summary. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	81,415	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	341,631	290,376	2.338	\$15.43	\$36.08	4.25	34,944
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	229,659	42,384	0.143	\$6.63	\$0.95	0.26	2,158
Lygus	300,627	252,921	1.051	\$7.43	\$7.81	0.97	7,960
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	202,573	64,798	0.185	\$17.50	\$3.24	0.25	2,033
Thrips	385,000	200,585	0.521	\$4.96	\$2.58	1.56	12,825
Beet Armyworm	20,896	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	57,168	22,079	0.057	\$12.83	\$0.74	0.08	671
European Cornborer	29,964	0	0.000	N/A	\$0.00	0.02	160
Stink Bugs	205,018	8,673	0.023	\$8.00	\$0.18	0.12	963
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	19,250	0	0.000	N/A	\$0.00	0.00	0
Aphids	255,286	146,863	0.381	\$6.75	\$2.57	0.22	1,799
Banded Winged Whitefly	197,724	789	0.002	\$11.00	\$0.02	0.03	211
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	110,394	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	78,262	16,362	0.042	\$4.75	\$0.20	0.06	485

Percent Lost	7.81
Total Acres	385,000
Total Bales lost	64,210
Bales lost in dollars	\$18,492,516

Est. yield/acre	797
Spray applications	4.744
Cost + loss	\$51,285,229
Cost + loss/acre	\$133.21

	Cost/ Acre
Foliar insecticide	\$54.37
At planting	\$7.20
Bt use fees	\$6.00
Eradication	\$12.50
Scouting	\$5.10
Total	\$85.18

Table 18. New Mexico Summary. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	51,524	51,524	0.900	\$18.00	\$16.20	0.00	1
Bollworm/Budworm	21,000	15,000	0.291	\$18.00	\$5.24	1.63	1,680
Pink Bollworm	14,995	14,995	0.873	\$10.00	\$8.73	0.58	600
Cotton Fleahopper	10,000	0	0.000	N/A	0.00	0.00	0
Lygus	19,000	1,000	0.019	\$7.00	\$0.14	0.30	304
Cotton Leaf Perforator	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	8,000	0	0.000	N/A	\$0.00	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 Cornborer	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
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	2,500	500	0.010	\$21.00	\$0.20	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	2.51
Total Acres	51,524
Total Bales lost	2,585
Bales lost in dollars	\$744,431

Est. yield/acre	816
Spray applications	2.093
Cost + loss	\$4,046,154
Cost + loss/acre	\$78.53

	Cost/ Acre
Foliar insecticide	\$30.51
At planting	\$1.14
Bt use fees	\$7.45
Eradication	\$20.79
Scouting	\$4.19
Total	\$64.08

Table 19. North Carolina Summary. Cotton Insect Losses 2002.

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	950,000	801,000	1.347	\$7.56	\$10.19	1.32	22,421
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	950,000	14,500	0.015	\$5.00	\$0.08	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	170,000	3,400	0.004	\$13.00	\$0.05	0.00	0
Thrips	950,000	943,000	1.231	\$4.80	\$5.91	0.00	0
Beet Armyworm	647,000	72,500	0.076	\$11.00	\$0.84	0.00	0
Fall Armyworm	95,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	15,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	950,000	33,000	0.035	\$7.00	\$0.24	0.23	3,898
Grasshoppers	160,000	1,000	0.001	\$9.50	\$0.01	0.00	0
Saltmarsh Caterpillars	470,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	950,000	46,000	0.048	\$11.50	\$0.56	0.00	0
Banded Winged Whitefly	50,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	16,000	3,000	0.003	\$9.70	\$0.03	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	236,000	3,500	0.004	\$4.95	\$0.02	0.00	0

Percent Lost	1.55
Total Acres	950,000
Total Bales lost	26,319
Bales lost in dollars	\$7,579,836

Est. yield/acre	428
Spray applications	2.764
Cost + loss	\$55,504,966
Cost + loss/acre	\$58.43

	Cost/ Acre
Foliar insecticide	\$17.92
At planting	\$9.88
Bt use fees	\$13.07
Eradication	\$3.85
Scouting	\$5.72
Total	\$50.45

Table 19a. North Carolina *Bt*. Cotton Insect Losses 2002.

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	645,000	516,000	0.880	\$7.20	\$6.34	0.60	7,095
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	645,000	13,000	0.020	\$5.00	\$0.10	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	120,000	2,400	0.004	\$13.00	\$0.05	0.00	0
Thrips	645,000	641,000	1.391	\$4.80	\$6.68	0.00	0
Beet Armyworm	387,000	39,000	0.060	\$11.00	\$0.67	0.00	0
Fall Armyworm	65,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	645,000	32,000	0.050	\$7.00	\$0.35	0.20	2,365
Grasshoppers	130,000	1,000	0.002	\$9.50	\$0.01	0.00	0
Saltmarsh Caterpillars	320,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	645,000	34,000	0.053	\$11.50	\$0.61	0.00	0
Banded Winged Whitefly	35,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	15,000	3,000	0.005	\$9.70	\$0.05	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	160,000	2,500	0.004	\$4.95	\$0.02	0.00	0

Percent Lost	0.80
Total Acres	645,000
Total Bales lost	9,460
Bales lost in dollars	\$2,724,480

Est. yield/acre	440
Spray applications	2.468
Cost + loss	\$36,931,645
Cost + loss/acre	\$57.26

	Cost/ Acre
Foliar insecticide	\$14.86
At planting	\$9.44
Bt use fees	\$19.25
Eradication	\$3.90
Scouting	\$5.58
Total	\$53.03

Table 19b. North Carolina non*Bt*. Cotton Insect Losses 2002.

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	305,000	285,000	2.336	\$7.85	\$18.34	3.00	15,326
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	305,000	1,500	0.005	\$5.00	\$0.02	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	50,000	1,000	0.003	\$13.00	\$0.04	0.00	0
Thrips	305,000	302,000	0.891	\$4.80	\$4.28	0.00	0
Beet Armyworm	260,000	33,500	0.110	\$11.00	\$1.21	0.00	0
Fall Armyworm	30,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	15,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	305,000	1,000	0.003	\$7.00	\$0.02	0.30	1,533
Grasshoppers	30,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	150,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	305,000	12,000	0.039	\$11.50	\$0.45	0.00	0
Banded Winged Whitefly	15,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	1,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	76,000	1,000	0.003	\$4.95	\$0.02	0.00	0

Percent Lost	3.30
Total Acres	305,000
Total Bales lost	16,859
Bales lost in dollars	\$4,855,356

Est. yield/acre	402
Spray applications	3.391
Cost + loss	\$18,573,321
Cost + loss/acre	\$60.90

	Cost/ Acre
Foliar insecticide	\$24.38
At planting	\$10.82
Bt use fees	\$0.00
Eradication	\$3.75
Scouting	\$6.02
Total	\$44.98

Table 20. Oklahoma Summary. Cotton Insect Losses 2002.

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	148,870	52,500	0.750	\$9.25	\$6.94	3.40	8,994
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	175,000	166,250	1.900	\$7.75	\$14.73	3.60	9,516
Lygus	87,500	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	26,250	0	0.000	N/A	\$0.00	0.00	0
Thrips	157,500	161,000	0.920	\$7.75	\$7.13	1.67	4,401
Beet Armyworm	31,500	8,750	0.050	\$12.00	\$0.60	0.14	381
Fall Armyworm	17,500	1,750	0.010	\$11.75	\$0.12	0.04	106
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	80,500	33,250	0.190	\$8.25	\$1.57	0.12	304
Grasshoppers	45,500	10,500	0.060	\$7.25	\$0.44	0.26	687
Saltmarsh Caterpillars	26,250	0	0.000	N/A	\$0.00	0.00	0
Aphids	45,500	7,000	0.040	\$9.50	\$0.38	0.17	447
Banded Winged Whitefly	17,500	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	26,250	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	21,000	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	9.40
Total Acres	175,000
Total Bales lost	24,835
Bales lost in dollars	\$7,152,509

Est. yield/acre	580
Spray applications	3.920
Cost + loss	\$17,912,587
Cost + loss/acre	\$102.36

	Cost/ Acre
Foliar insecticide	\$31.89
At planting	\$3.47
Bt use fees	\$10.11
Eradication	\$13.30
Scouting	\$2.71
Total	\$61.49

Table 21. South Carolina Summary. Cotton Insect Losses 2002.

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	295,000	245,000	2.838	\$8.00	\$22.70	4.69	16,175
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	60,000	0	0.000	N/A	0.00	0.00	0
Lygus	125,000	5,000	0.038	\$7.00	\$0.26	0.51	1,750
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	43,500	15,000	0.150	\$12.00	\$1.80	0.00	0
Thrips	300,000	35,000	0.263	\$6.00	\$1.58	0.00	0
Beet Armyworm	145,000	52,000	0.520	\$13.00	\$6.76	0.94	3,250
Fall Armyworm	69,000	8,000	0.040	\$13.00	\$0.52	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	175,000	115,000	1.000	\$8.00	\$8.00	2.39	8,229
Grasshoppers	70,000	30,000	0.300	\$7.00	\$2.10	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	270,000	17,500	0.175	\$8.50	\$1.49	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	12,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	13,000	1,500	0.008	\$8.00	\$0.06	0.00	0

Percent Lost	8.52
Total Acres	200,000
Total Bales lost	29,404
Bales lost in dollars	\$8,468,400

Est. yield/acre	325
Spray applications	5.330
Cost + loss	\$29,866,400
Cost + loss/acre	\$149.33

	Cost/ Acre
Foliar insecticide	\$45.27
At planting	\$22.80
Bt use fees	\$21.53
Eradication	\$8.03
Scouting	\$9.38
Total	\$106.99

Table 21a. South Carolina *Bt.* Cotton Insect Losses 2002.

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	140,000	165,000	1.768	\$8.00	\$14.14	2.00	4,900
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	100,000	5,000	0.054	\$7.00	\$0.38	0.71	1,750
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	30,000	10,500	0.150	\$12.00	\$1.80	0.00	0
Thrips	210,000	20,000	0.214	\$6.00	\$1.29	0.00	0
Beet Armyworm	100,000	40,000	0.571	\$13.00	\$7.43	0.71	1,750
Fall Armyworm	42,000	5,000	0.036	\$13.00	\$0.46	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	125,000	85,000	1.214	\$8.00	\$9.71	2.68	6,563
Grasshoppers	50,000	25,000	0.357	\$7.00	\$2.50	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	190,000	10,000	0.143	\$8.50	\$1.21	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	10,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	10,000	1,000	0.007	\$8.00	\$0.06	0.00	0

Percent Lost	6.11
Total Acres	140,000
Total Bales lost	14,963
Bales lost in dollars	\$4,309,200

Est. yield/acre	325
Spray applications	4.514
Cost + loss	\$16,675,700
Cost + loss/acre	\$119.11

	Cost/ Acre
Foliar insecticide	\$38.98
At planting	\$16.00
Bt use fees	\$20.50
Eradication	\$5.35
Scouting	\$7.50
Total	\$88.33

Table 21b. South Carolina nonBt. Cotton Insect Losses 2002.

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	60,000	50,000	3.333	\$8.00	\$26.67	6.00	6,000
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	10,000	0	0.000	N/A	0.00	0.00	0
Lygus	25,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	13,500	4,500	0.150	\$12.00	\$1.80	0.00	0
Thrips	90,000	15,000	0.375	\$6.00	\$2.25	0.00	0
Beet Armyworm	45,000	12,000	0.400	\$13.00	\$5.20	1.50	1,500
Fall Armyworm	27,000	3,000	0.050	\$13.00	\$0.65	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	50,000	30,000	0.500	\$8.00	\$4.00	1.67	1,667
Grasshoppers	20,000	5,000	0.167	\$7.00	\$1.17	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	80,000	7,500	0.250	\$8.50	\$2.13	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	2,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	3,000	500	0.008	\$8.00	\$0.07	0.00	0

Percent Lost	9.17
Total Acres	60,000
Total Bales lost	9,167
Bales lost in dollars	\$2,640,000

Est. yield/acre	325
Spray applications	5.233
Cost + loss	\$7,754,500
Cost + loss/acre	\$129.24

	Cost/ Acre
Foliar insecticide	\$43.93
At planting	\$22.67
Bt use fees	\$0.00
Eradication	\$8.03
Scouting	\$10.63
Total	\$85.24

Table 22. Tennessee Summary. Cotton Insect Losses 2002.

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	487,370	380,000	0.979	\$10.90	\$10.67	3.38	30,990
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	17,010	0	0.000	N/A	0.00	0.00	0
Lygus	498,475	428,180	1.198	\$8.50	\$10.19	0.65	5,961
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	196,170	20,720	0.043	\$12.40	\$0.53	0.01	67
Thrips	519,920	434,160	0.972	\$5.95	\$5.78	1.70	15,543
Beet Armyworm	116,890	1,110	0.002	\$10.85	\$0.02	0.01	55
Fall Armyworm	50,405	775	0.001	\$10.85	\$0.02	0.00	29
European Cornborer	5,000	125	0.000	\$9.15	\$0.00	0.00	2
Stink Bugs	460,220	144,350	0.318	\$9.15	\$2.91	0.92	8,427
Grasshoppers	91,030	105	0.000	\$8.20	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	428,420	37,760	0.070	\$8.20	\$0.58	0.02	220
Banded Winged Whitefly	220,000	180	0.000	\$10.20	\$0.00	0.00	38
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	200,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Clouded Plant Bug	176,800	1,040	0.002	\$8.40	\$0.02	0.00	30
Cutworms	53,600	301,000	0.562	\$1.25	\$0.70	0.00	9

Percent Lost	6.70
Total Acres	536,000
Total Bales lost	61,371
Bales lost in dollars	\$17,674,733

Est. yield/acre	720
Spray applications	4.148
Cost + loss	\$62,387,975
Cost + loss/acre	\$116.40

	Cost/ Acre
Foliar insecticide	\$31.42
At planting	\$8.64
Bt use fees	\$18.86
Eradication	\$19.84
Scouting	\$4.66
Total	\$83.42

Table 22a. Tennessee *Bt*. Cotton Insect Losses 2002.

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	395,570	331,000	0.904	\$9.75	\$8.81	2.07	15,543
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	14,070	0	0.000	N/A	0.00	0.00	0
Lygus	408,750	351,000	1.198	\$8.50	\$10.18	0.65	4,888
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	160,860	17,210	0.043	\$12.40	\$0.53	0.01	55
Thrips	426,330	356,010	0.972	\$5.95	\$5.78	1.70	12,745
Beet Armyworm	87,940	200	0.000	\$10.85	\$0.00	0.00	30
Fall Armyworm	41,330	575	0.001	\$10.85	\$0.01	0.00	21
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	395,570	129,880	0.355	\$9.15	\$3.24	0.99	7,433
Grasshoppers	74,630	80	0.000	\$8.20	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	351,620	32,000	0.073	\$8.20	\$0.60	0.02	180
Banded Winged Whitefly	110,000	140	0.000	\$10.20	\$0.00	0.00	19
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	164,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Clouded Plant Bugs	145,000	880	0.002	\$8.40	\$0.02	0.00	25
Cutworms	44,000	246,000	0.560	\$1.25	\$0.70	0.00	8

Percent Lost	5.45
Total Acres	439,520
Total Bales lost	40,947
Bales lost in dollars	\$11,792,723

Est. yield/acre	729
Spray applications	4.108
Cost + loss	\$49,575,030
Cost + loss/acre	\$112.79

	Cost/ Acre
Foliar insecticide	\$29.89
At planting	\$8.64
Bt use fees	\$23.00
Eradication	\$19.84
Scouting	\$4.59
Total	\$85.96

Table 22b. Tennessee non*Bt*. Cotton Insect Losses 2002.

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	91,800	49,000	1.320	\$14.50	\$19.15	9.37	15,447
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	2,940	0	0.000	N/A	0.00	0.00	0
Lygus	89,725	77,180	1.200	\$8.50	\$10.20	0.65	1,073
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	35,310	3,510	0.040	\$12.40	\$0.50	0.01	12
Thrips	93,590	78,150	0.972	\$5.95	\$5.78	1.70	2,798
Beet Armyworm	28,950	910	0.009	\$10.85	\$0.10	0.02	25
Fall Armyworm	9,075	200	0.002	\$10.85	\$0.02	0.00	8
European Cornborer	5,000	125	0.001	\$9.15	\$0.01	0.00	2
Stink Bugs	64,650	14,470	0.150	\$9.15	\$1.37	0.60	994
Grasshoppers	16,400	25	0.000	\$8.20	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	76,800	5,760	0.060	\$8.20	\$0.49	0.02	39
Banded Winged Whitefly	110,000	40	0.000	\$10.20	\$0.00	0.01	19
Silverleaf Whitefly (Bemisia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	36,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Clouded Plant Bugs	31,800	160	0.002	\$8.40	\$0.01	0.00	5
Cutworms	9,600	55,000	0.570	\$1.25	\$0.71	0.00	2

Percent Lost	12.39
Total Acres	96,480
Total Bales lost	20,424
Bales lost in dollars	\$5,882,010

Est. yield/acre	680
Spray applications	4.327
Cost + loss	\$12,812,945
Cost + loss/acre	\$132.80

	Cost/ Acre
Foliar insecticide	\$38.36
At planting	\$8.64
Bt use fees	\$0.00
Eradication	\$19.84
Scouting	\$5.00
Total	\$71.84

Table 23. Texas Summary. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll Weevil	831,312	368,000	0.350	\$6.46	\$2.26	0.42	36,639
Bollworm/Budworm	3,677,947	1,289,873	0.282	\$9.15	\$2.58	0.81	71,802
Pink Bollworm	49,500	22,675	0.012	\$18.61	\$0.23	0.00	210
Cotton Fleahopper	2,797,202	712,434	0.185	\$4.12	\$0.76	0.19	16,817
Lygus	960,654	90,925	0.020	\$8.74	\$0.18	0.02	1,501
Cotton Leaf Perforator	192,881	2,000	0.000	\$11.00	\$0.00	0.00	9
Spider Mites	215,500	10,350	0.002	\$9.12	\$0.02	0.00	15
Thrips	4,971,446	410,012	0.086	\$4.67	\$0.40	0.41	35,912
Beet Armyworm	836,900	202,100	0.046	\$12.81	\$0.59	0.05	4,397
Fall Armyworm	507,110	75,050	0.014	\$12.75	\$0.18	0.01	891
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	266,200	139,659	0.027	\$6.75	\$0.18	0.05	4,070
Grasshoppers	1,535,500	271,500	0.075	\$8.75	\$0.65	0.07	5,979
Saltmarsh Caterpillars	25,500	0	0.000	N/A	\$0.00	0.00	1
Aphids	3,710,162	552,680	0.105	\$7.87	\$0.82	0.07	6,081
Banded Winged Whitefly	464,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	185,000	10,000	0.002	\$11.60	\$0.03	0.00	13
Loopers	271,680	0	0.000	N/A	\$0.00	0.00	19
Southern Armyworms	12,000	0	0.000	N/A	\$0.00	0.00	19
Other Insects	239,245	0	0.000	N/A	\$0.00	0.00	0
Cutworms	100,892	10,784	0.002	\$7.22	\$0.01	0.00	0

Percent Lost	2.09
Total Acres	5,281,400
Total Bales lost	184,375
Bales lost in dollars	\$53,099,949

Est. yield/acre	507
Spray applications	1.208
Cost + loss	\$174,752,935
Cost + loss/acre	\$33.09

	Cost/ Acre
Foliar insecticide	\$8.91
At planting	\$1.67
Bt use fees	\$1.83
Eradication	\$8.99
Scouting	\$1.64
Total	\$23.03

Table 23a. Texas, Upper Coastal Bend. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	186,000	186,000	4.300	\$7.73	\$33.24	6.00	27,900
Bollworm/Budworm	186,000	93,000	0.500	\$7.82	\$3.91	1.00	4,650
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	186,000	139,500	0.750	\$3.60	\$2.70	0.25	1,163
Lygus	115,762	46,500	0.250	\$7.53	\$1.88	0.00	0
Cotton Leaf Perforator	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	167,400	74,400	0.400	\$4.35	\$1.74	0.23	1,046
Beet Armyworm	27,900	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	19,510	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	158,100	110,559	0.594	\$6.80	\$4.04	0.85	3,953
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	130,000	37,200	0.200	\$7.30	\$1.46	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	63,680	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	55,000	3,900	0.021	\$7.22	\$0.15	0.00	0

Percent Lost	8.33
Total Acres	186,000
Total Bales lost	38,711
Bales lost in dollars	\$11,148,840

Est. yield/acre	808
Spray applications	7.015
Cost + loss	\$28,048,210
Cost + loss/acre	\$150.80

	Cost/ Acre
Foliar insecticide	\$49.12
At planting	\$6.38
Bt use fees	\$9.67
Eradication	\$20.20
Scouting	\$5.48
Total	\$90.86

Table 23b. Texas, Lower Coastal Bend. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll Weevil	51,000	0	0.000	N/A	\$0.00	0.12	1,063
Bollworm/Budworm	417,202	262,873	0.630	\$8.92	\$5.62	1.00	8,692
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	417,202	337,934	1.377	\$3.60	\$4.96	0.25	2,173
Lygus	45,892	3,675	0.009	\$7.53	\$0.07	0.00	0
Cotton Leaf Perforator	166,881	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	146,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	449,593	87,612	0.210	\$4.35	\$0.91	0.00	0
Beet Armyworm	21,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	11,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	70,000	26,600	0.064	\$6.80	\$0.43	0.00	0
Grasshoppers	15,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	25,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	333,417	271,180	0.650	\$7.30	\$4.74	0.20	1,737
Banded Winged Whitefly	14,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	46,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	16,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	45,892	6,884	0.017	\$7.22	\$0.12	0.00	0

Percent Lost	1.57
Total Acres	417,202
Total Bales lost	13,664
Bales lost in dollars	\$3,935,141

Est. yield/acre	571
Spray applications	2.956
Cost + loss	\$24,559,915
Cost + loss/acre	\$58.87

	Cost/ Acre
Foliar insecticide	\$16.86
At planting	\$1.17
Bt use fees	\$3.39
Eradication	\$23.14
Scouting	\$4.88
Total	\$49.44

Table 23c. Texas, North Rolling Plains. Cotton Insect Losses 2002.

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	380,000	40,000	0.102	\$10.25	\$1.04	1.37	6,864
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	300,000	11,000	0.023	\$5.50	\$0.13	0.19	956
Lygus	5,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	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	472,453	4,000	0.008	\$4.25	\$0.04	0.10	502
Beet Armyworm	2,000	500	0.001	\$13.00	\$0.01	0.00	2
Fall Armyworm	600	50	0.000	\$13.00	\$0.00	0.00	0
European Cornborer	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	150,000	40,000	0.169	\$7.50	\$1.27	0.06	319
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	450,000	6,000	0.013	\$8.00	\$0.10	0.10	478
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	1.82
Total Acres	472,453
Total Bales lost	9,121
Bales lost in dollars	\$2,626,843

Est. yield/acre	444
Spray applications	0.317
Cost + loss	\$9,637,759
Cost + loss/acre	\$20.40

	Cost/ Acre
Foliar insecticide	\$2.59
At planting	\$0.56
Bt use fees	\$1.06
Eradication	\$10.30
Scouting	\$0.33
Total	\$14.84

Table 23d. Texas, High Plains. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	247,067	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	1,793,000	750,000	0.318	\$9.00	\$2.86	0.57	30,257
Pink Bollworm	3,500	675	0.001	\$10.50	\$0.01	0.00	7
Cotton Fleahopper	900,000	9,000	0.003	\$5.50	\$0.02	0.03	1,688
Lygus	775,000	30,000	0.013	\$9.75	\$0.12	0.03	1,453
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	15,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	2,830,000	150,000	0.058	\$5.50	\$0.32	0.60	31,838
Beet Armyworm	780,000	200,000	0.085	\$12.75	\$1.08	0.08	4,388
Fall Armyworm	475,000	75,000	0.027	\$12.75	\$0.34	0.02	891
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	5,000	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	950,000	175,000	0.080	\$9.75	\$0.78	0.03	1,781
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	1,850,000	160,000	0.057	\$9.00	\$0.51	0.07	3,469
Banded Winged Whitefly	450,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	1.43
Total Acres	2,830,000
Total Bales lost	75,770
Bales lost in dollars	\$21,821,670

Est. yield/acre	545
Spray applications	0.641
Cost + loss	\$69,484,640
Cost + loss/acre	\$24.55

	Cost/ Acre
Foliar insecticide	\$6.04
At planting	\$1.94
Bt use fees	\$0.96
Eradication	\$6.64
Scouting	\$1.25
Total	\$16.84

Table 23e. Texas, Far West. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll Weevil	2,000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	152,500	52,000	0.131	\$8.15	\$1.07	0.80	4,274
Pink Bollworm	46,000	22,000	0.161	\$18.82	\$3.02	0.04	204
Cotton Fleahopper	70,000	3,000	0.008	\$5.33	\$0.04	0.00	9
Lygus	10,000	10,000	0.050	\$10.00	\$0.50	0.01	27
Cotton Leaf Perforator	20,000	2,000	0.005	\$11.00	\$0.06	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips	160,000	0	0.000	N/A	\$0.00	0.04	193
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 Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	26,600	2,500	0.009	\$5.00	\$0.05	0.02	118
Grasshoppers	1,000	1,000	0.008	\$4.00	\$0.03	0.00	1
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	24,500	500	0.001	\$9.00	\$0.01	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	10,000	5,000	0.019	\$11.00	\$0.21	0.00	13
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	0.91
Total Acres	397,500
Total Bales lost	4,840
Bales lost in dollars	\$1,393,802

Est. yield/acre	423
Spray applications	0.391
Cost + loss	\$8,544,108
Cost + loss/acre	\$21.49

	Cost/ Acre
Foliar insecticide	\$4.98
At planting	\$0.60
Bt use fees	\$3.62
Eradication	\$8.03
Scouting	\$0.75
Total	\$17.99

Table 23f. Texas, Lower Rio Grande Valley. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect apps	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	223,245	75,000	1.344	\$7.75	\$10.41	1.75	6,511
Bollworm/Budworm	223,245	30,000	0.269	\$10.50	\$2.82	0.20	744
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	200,000	50,000	0.224	\$6.50	\$1.46	0.04	167
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	50,000	10,000	0.045	\$9.00	\$0.40	0.00	0
Thrips	150,000	10,000	0.045	\$6.50	\$0.29	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 Cornborer	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
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	223,245	40,000	0.179	\$8.50	\$1.52	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	175,000	5,000	0.022	\$12.50	\$0.28	0.00	0
Loopers	150,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	223,245	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	1.99
Total Acres	223,245
Total Bales lost	7,422
Bales lost in dollars	\$2,137,573

Est. yield/acre	203
Spray applications	2.128
Cost + loss	\$7,400,073
Cost + loss/acre	\$33.15

	Cost/ Acre
Foliar insecticide	\$17.19
At planting	\$1.68
Bt use fees	\$0.67
Eradication	\$0.00
Scouting	\$4.03
Total	\$23.57

Table 23g. Texas, Southern Rolling Plains. Cotton Insect Losses 2002.

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	474,000	40,000	0.063	\$10.50	\$0.67	2.26	13,331
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	610,000	60,000	0.095	\$5.00	\$0.48	0.97	5,719
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	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	630,000	5,000	0.008	\$4.50	\$0.04	0.00	0
Beet Armyworm	1,000	100	0.000	\$12.00	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	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	400,000	50,000	0.119	\$7.50	\$0.89	0.63	3,750
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	630,000	15,000	0.024	\$7.00	\$0.17	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	630,000
Total Bales lost	22,800
Bales lost in dollars	\$6,566,400

Est. yield/acre	391
Spray applications	0.310
Cost + loss	\$14,961,100
Cost + loss/acre	\$23.75

	Cost/ Acre
Foliar insecticide	\$2.24
At planting	\$0.08
Bt use fees	\$0.87
Eradication	\$9.50
Scouting	\$0.63
Total	\$13.32

Table 23h. Texas, Northern Blacklands. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	60,000	45,000	1.071	\$8.00	\$8.57	0.95	875
Bollworm/Budworm	40,000	14,000	0.222	\$15.00	\$3.33	2.54	2,333
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	56,000	47,000	0.746	\$4.50	\$3.36	3.11	2,858
Lygus	3,000	100	0.002	\$6.50	\$0.01	0.00	2
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	1,000	100	0.002	\$14.00	\$0.02	0.00	4
Thrips	56,000	25,000	0.397	\$4.50	\$1.79	1.78	1,633
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 Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	5,000	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	17,000	4,000	0.095	\$6.50	\$0.62	0.13	124
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	13,000	800	0.013	\$7.00	\$0.09	0.05	47
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	8.57
Total Acres	63,000
Total Bales lost	7,877
Bales lost in dollars	\$2,268,630

Est. yield/acre	600
Spray applications	2.548
Cost + loss	\$4,204,780
Cost + loss/acre	\$66.74

	Cost/ Acre
Foliar insecticide	\$17.79
At planting	\$6.33
Bt use fees	\$3.75
Eradication	\$0.00
Scouting	\$2.86
Total	\$30.73

Table 23i. Texas, Southern Blacklands. Cotton Insect Losses 2002.

Pest	Acres infested	Acres treated	# insect apps	Cost of 1 applic	cost/acre	% red	Bales lost
Boll Weevil	62,000	62,000	11.000	\$4.25	\$46.75	0.30	291
Bollworm/Budworm	12,000	8,000	0.323	\$14.00	\$4.52	0.68	656
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	58,000	55,000	1.331	\$6.00	\$7.98	2.15	2,084
Lygus	6,000	650	0.010	\$7.00	\$0.07	0.02	19
Cotton Leaf Perforator	6,000	0	0.000	N/A	\$0.00	0.01	9
Spider Mites	3,500	250	0.004	\$12.00	\$0.05	0.01	11
Thrips	56,000	54,000	1.306	\$3.50	\$4.57	0.72	700
Beet Armyworm	5,000	1,500	0.048	\$18.00	\$0.87	0.01	8
Fall Armyworm	1,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	1,500	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	2,500	1,500	0.048	\$6.50	\$0.31	0.00	4
Saltmarsh Caterpillars	500	0	0.000	N/A	\$0.00	0.00	1
Aphids	56,000	22,000	0.355	\$7.00	\$2.48	0.36	350
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	12,000	0	0.000	N/A	\$0.00	0.02	19
Southern Armyworms	12,000	0	0.000	N/A	\$0.00	0.02	19
Other Insects	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	4.30
Total Acres	62,000
Total Bales lost	4,170
Bales lost in dollars	\$1,201,050

Est. yield/acre	624
Spray applications	14.426
Cost + loss	\$7,912,350
Cost + loss/acre	\$127.62

	Cost/ Acre
Foliar insecticide	\$67.61
At planting	\$5.08
Bt use fees	\$13.94
Eradication	\$19.50
Scouting	\$2.12
Total	\$108.25

Table 24. Virginia Summary. Cotton Insect Losses 2002.

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	101,000	101,000	2.451	\$8.00	\$19.61	0.82	972
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	80,000	1,000	0.010	\$8.00	\$0.08	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	12,000	1,000	0.010	\$13.00	\$0.13	0.00	0
Thrips	103,000	103,000	1.500	\$5.50	\$8.25	2.51	2,974
Beet Armyworm	50,000	10,000	0.097	\$13.50	\$1.31	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	39,000	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	80,000	100	0.001	\$8.00	\$0.01	0.00	0
Banded Winged Whitefly	70,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Other Insects	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	3.33
Total Acres	103,000
Total Bales lost	3,946
Bales lost in dollars	\$1,136,520

Est. yield/acre	550
Spray applications	4.069
Cost + loss	\$6,659,120
Cost + loss/acre	\$64.65

	Cost/ Acre
Foliar insecticide	\$29.38
At planting	\$12.00
Bt use fees	\$7.81
Eradication	\$3.85
Scouting	\$0.58
Total	\$53.62

Background and Explanation of Tables

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 had an 8% loss on 25 of those 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.

The Cotton Insect Losses Estimates are a simple attempt to arrive at the average cost of control of cotton arthropod pests. We attempt to arrive at the most accurate estimate possible for spray activities, but have also added 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,' in addition 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.

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