

COTTON INSECT LOSSES 2001

This report is sponsored by a grant from the Cotton Foundation.

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Abstract

Arthropod pests reduced overall yield by 4.53% in 2001. Acreage and yields were up in most of the cotton production areas in the US. Alabama at 9.19% reported the greatest percentage loss to insects in 2001. The bollworm/budworm complex was the top pest of 2001 taking 1.228% of the crop. About 64% of the US crop was infested with the complex of which 72% were bollworms. No other pest exceeded 1% reduction. Fifty-five percent (55%) of US cotton acres was infested by *Lygus* which reduced yields by 0.982%. Stink bugs, a heavy hitter in the east, was fourth at 0.768% reduction. These pests continue to expand. They infested 42% of the US crop in 2001. Thrips at 0.795% loss was 3rd and aphids at 0.275% were 5th. Cotton fleahoppers (0.126%) were 6th in the pest loss rankings. Boll weevil at 0.097% were almost a non player infesting 2.69 million acres. Silverleaf whitefly (0.08%), pink bollworm (0.39%), and beet armyworm (0.031%) complete the the top ten insect pests of 2001. Total cost of management and loss to insects to the 2001 crop was \$1.158 billion or \$78.60 per acre. Of those costs approximately \$52 are direct insect management costs.

Introduction

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. Bales are calculated at 480 pounds, and a cost of \$0.65 per pound of lint is used in figuring costs.

Explanation of Tables

In an attempt to include as many of the costs of insect management as possible, the Cotton Insect Losses estimates have changed in the last few years. They were begun as a simple attempt to arrive at the 'average cost of spraying insecticide' for control of cotton arthropod pests. We still attempt to arrive at the most accurate estimate possible for spray activities, but have also added some of the other costs which are incurred in cotton insect pest management. These 'additional' costs increase the bottom line of expenditures for arthropod pest management - but also more accurately reflect true expenditures. Included are USDA cotton planting and yield estimates (Table 1,1a) '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)(Table 2); 'eradication costs'(which include the maintenance fee in those states which have eradicated the boll weevil and other eradication projects)(Table 3); 'Bt cotton costs,'(an estimate of the technology fee)(Table 4); and 'scouting costs,'(Table 6) in addition to the traditional 'foliar insecticide costs.'(Table 5). The 'Summary of All States is given in Table 7. Subsequent Tables 1-24 give cotton producing state summaries. Some states are subdivided and these tables follow the state summary table with the same number but have letters added. 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.

Acknowledgements

Each year cotton entomologists from across the cotton belt contribute time, effort and money to developing the Cotton Losses Estimates. We gratefully Acknowledge the contribution of Dr. Ron Smith, Alabama; Dr. Don Johnson, Arkansas; Dr. Peter Ellsworth, Arizona; Dr. Peter Goodell; California; Dr. Richard Sprenkel, Florida; Dr. Phillip Roberts, Georgia; Dr. Stuart Duncan, Kansas; Dr. Ralph Bagwell, Louisiana; Dr. Blake Layton, Mississippi; Dr. Michael Boyd, Missouri; Dr. Jane Pierce, New Mexico; Dr. Jack Bachelier, North Carolina; Dr. Miles Karner, Oklahoma; Dr. Mitchell Roof, South Carolina; Dr. Gary Lentz, Tennessee; Dr. James Leser, Texas; and Dr. Ames Herbert, Virginia. These coordinators enlist the help of fellow professionals in their states and produce outstanding numbers. We also appreciate the assistance of Mr. Gene Burris, Dr. Dick Hardee, Dr. Frank Carter and Ms Debbie Richter for their work in editing what can at times be a tremendous headache. We thank the Cotton Foundation for their continued support of this effort.

Table 1. USDA Cotton Production. Cotton Insect Losses 2001.

State	Upland Cotton		Cotton yields in pounds lint per acre			
	Acres planted	Acres harvested	Est. Yield*	December	January	2000
Alabama	610,000	605,000	775	706	706	492
Arizona	286,000	285,500	1,285	1,260	1,142	1,354
Arkansas	1,170,000	1,080,000	793	811	823	720
California	825,000	864,000	1,339	1,356	1,361	1,342
Florida	116,000	115,000	670	584	654	480
Georgia	1,600,000	1,490,000	740	709	709	591
Kansas	45,000	44,000	350	584	298	288
Louisiana	910,000	855,000	600	578	578	629
Mississippi	1,700,000	1,630,000	747	727	708	642
Missouri	400,000	395,000	871	863	864	668
New Mexico	82,000	77,000	888	823	823	713
North Carolina	1,060,000	975,000	736	763	806	742
Oklahoma	250,000	200,000	575	504	504	503
South Carolina	300,000	296,000	643	665	689	627
Tennessee	610,000	605,000	699	762	761	603
Texas	6,217,000	4,317,000	445	458	474	432
Virginia	105,000	104,000	900	854	918	738
total US	15,517,200	13,053,000	683	681	687	632
<u>Pima</u>						
Arizona	6,000	7,500		960	960	705
California	205,000	209,000		1,309	1,300	1,154
New Mexico		7,000		686	800	539
Texas	17,000	17,000		932	960	930
total US	235,000	240,500		1,253	1,257	1,105
TOTAL US	15,752,200	13,293,500				

From USDA/NASS, January, 2002.

Agricultural Statistics Service

*estimates from losses coordinators

Table 1a. USDA Cotton Production Estimates. Cotton Insect Losses 2001.

State	Area Planted			Area Harvested		
	1999	2000	2001	1999	2000	2001
<u>Upland</u>						
Alabama	561,000	590,000	610,000	561,000	540,000	605,000
Arizona	269,000	280,000	286,000	269,000	279,000	285,500
Arkansas	960,000	960,000	1,170,000	960,000	950,000	1,080,000
California	605,000	775,000	825,000	605,000	765,000	864,000
Florida	107,000	130,000	116,000	106,000	106,000	115,000
Georgia	1,300,000	1,500,000	1,600,000	1,300,000	1,300,000	1,490,000
Kansas	33,000	40,000	45,000	28,000	37,000	44,000
Louisiana	610,000	710,000	910,000	610,000	700,000	855,000
Mississippi	1,180,000	1,300,000	1,700,000	1,180,000	1,280,000	1,630,000
Missouri	377,000	400,000	400,000	377,000	400,000	395,000
New Mexico	79,000	72,000	82,000	79,000	85,000	77,000
North Carolina	825,000	930,000	1,060,000	825,000	930,000	975,000
Oklahoma	150,000	280,000	250,000	150,000	200,000	200,000
South Carolina	315,000	300,000	300,000	315,000	310,000	296,000
Tennessee	565,000	570,000	610,000	565,000	570,000	605,000
Texas	5,100,000	6,400,000	6,217,000	5,100,000	4,800,000	4,317,000
Virginia	108,000	110,000	105,000	108,000	109,000	104,000
total US	13,144,000	15,347,000	15,517,200	13,004,000	13,218,000	13,053,000
<u>Pima</u>						
Arizona	8,900	5,000	6,000	8,900	4,900	7,500
California	239,000	145,000	205,000	239,000	144,000	209,000
New Mexico		4,200	7,000	7,000	4,100	7,000
Texas	32,000	16,000	17,000	32,000	16,000	17,000
total US	286,900	170,200	235,000	286,900	169,000	240,500
TOTAL US	13,430,900	15,517,200	15,752,200	13,290,900	13,387,000	13,293,500

From USDA/NASS, January, 2002.

Agricultural Statistics Service

Table 2. At planting insecticide applications. Cotton Insect Losses 2001.

State	Number acres	Weighted Avg Cost	Cost/Treated Acre	Total Cost
Alabama, South	230,000	\$9.73	\$11.00	\$2,530,000
Alabama, Central	80,000	\$10.35	\$11.00	\$880,000
Alabama, North	275,000	\$12.75	\$13.00	\$3,575,000
Arizona Bt	4725.00	\$0.23	\$9.33	\$44,084
Arizona Conv	10000.00	\$0.93	\$9.33	\$93,300
Arkansas, Northeast	500000.00	\$10.00	\$11.00	\$5,500,000
Arkansas, Southeast	440,000	\$10.76	\$11.00	\$4,840,000
California, San Joaquin Valley	180000.00	\$3.31	\$15.00	\$2,700,000
Florida	100,000	\$6.52	\$7.50	\$750,000
Georgia	1,250,000	\$8.39	\$10.00	\$12,500,000
Kansas	25,000	\$4.55	\$8.00	\$200,000
Louisiana Conv	128,770	\$6.96	\$8.81	\$1,134,464
Louisiana Bt	693,000	\$8.81	\$8.81	\$6,105,330
Mississippi Delta	736,000	\$6.93	\$10.50	\$7,728,000
Mississippi Hills	393,000	\$7.45	\$10.50	\$4,126,500
Missouri	355,500	\$8.78	\$9.75	\$3,466,125
New Mexico	13,000	\$0.93	\$4.50	\$58,500
North Carolina Bt	575,000	\$10.65	\$11.50	\$6,612,500
North Carolina Conv	309,000	\$10.64	\$11.50	\$3,553,500
Oklahoma	32,000	\$2.02	\$12.00	\$384,000
South Carolina	280,000	\$15.45	\$16.00	\$4,480,000
Tennessee	400,293	\$5.16	\$7.83	\$3,135,021
Texas, Upper Gulf Coast	145,750	\$6.35	\$11.55	\$1,683,413
Texas, Lower Gulf Coast	44510.00	\$1.05	\$10.56	\$470,026
Texas, Northern Rolling Plains	25000.00	\$0.25	\$5.25	\$131,250
Texas, High Plains	350000.00	\$1.38	\$10.00	\$3,500,000
Texas, Far West	20000.00	\$0.49	\$12.00	\$240,000
Texas, Lower Rio Grande Valley	50,000	\$1.63	\$7.00	\$350,000
Texas, Southern Rolling Plains	200	\$0.00	\$7.50	\$1,500
Texas, Northern Blacklands	65,000	\$4.88	\$6.00	\$390,000
Texas, Southern Blacklands	60000.00	\$4.00	\$6.00	\$360,000
Virginia	103,000	\$12.00	\$12.00	\$1,236,000
Total US	7,873,748	\$5.62	\$10.51	\$82,758,512

Table 3. Cotton insect eradication. Cotton Insect Losses 2001.

State	Number Acres	Cost/Acre	Wt cost/acre	Total Cost
Alabama, South	260,000	\$5.00	\$5.00	\$1,300,000
Alabama, Central	85,000	\$5.00	\$5.00	\$425,000
Alabama, North	280,500	\$5.00	\$5.00	\$1,402,500
Arizona Bt	189,000	\$1.78	\$1.78	\$336,420
Arizona Conv	100,000	\$1.78	\$1.78	\$178,000
Arkansas, Northeast	330,000	\$27.50	\$16.50	\$9,075,000
Arkansas, Southeast	450,000	\$35.00	\$35.00	\$15,750,000
California, San Joaquin Valley	0	\$0.00	\$0.00	\$0
Florida	115,000	\$6.00	\$6.00	\$690,000
Georgia	1,490,000	\$4.25	\$4.25	\$6,332,500
Kansas	0	\$0.00	\$0.00	\$0
Louisiana Conv	163,000	\$35.00	\$35.00	\$5,705,000
Louisiana Bt	693,000	\$35.00	\$35.00	\$24,255,000
Mississippi Delta	1,115,000	\$22.00	\$22.00	\$24,530,000
Mississippi Hills	554,000	\$23.00	\$23.00	\$12,742,000
Missouri	395,000	\$10.00	\$10.00	\$3,950,000
New Mexico	62,833	\$22.00	\$22.00	\$1,382,326
North Carolina Bt	621,000	\$3.85	\$3.85	\$2,390,850
North Carolina Conv	334,000	\$3.85	\$3.85	\$1,285,900
Oklahoma	190,000	\$13.75	\$13.75	\$2,612,500
South Carolina	290,000	\$5.20	\$5.20	\$1,508,000
Tennessee	536,739	\$19.23	\$16.98	\$10,323,331
Texas, Upper Gulf Coast	0	\$0.00	\$0.00	\$0
Texas, Lower Gulf Coast	449,593	\$23.14	\$23.14	\$10,403,582
Texas, Northern Rolling Plains	520,000	\$10.30	\$10.30	\$5,356,000
Texas, High Plains	2,535,000	\$8.00	\$8.00	\$20,280,000
Texas, Far West	347,500	\$9.33	\$6.65	\$3,242,175
Texas, Lower Rio Grande Valley	0	\$0.00	\$0.00	\$0
Texas, Southern Rolling Plains	600,000	\$9.96	\$10.30	\$5,976,000
Texas, Northern Blacklands	0	\$0.00	\$0.00	\$0
Texas, Southern Blacklands	90,000	\$19.50	\$19.50	\$1,755,000
Virginia	103,000	\$3.85	\$3.85	\$396,550
Total US - BOLL WEEVIL	12,899,165	\$11.79	\$10.32	\$152,017,052
California, San Joaquin Valley Pink Bollworm	814,800	\$5.58	\$0.31	\$4,546,584
Total US - Insect Eradication	13,713,965	\$11.42	\$10.63	\$156,563,636

Table 4. Bt cotton costs by state. Cotton Insect Losses 2001.

State	Number acres	Bt cost/Acre	Average/ all Acres	Total Cost	% population Bollworm	Acres Bt cotton sprayed	Avg. # bworm appli to Bt cotton	
Alabama, South	130,000	\$25.00	\$12.50	\$3,250,000	45	0	0.00	45
Alabama, Central	42,500	\$28.00	\$14.00	\$1,190,000	60	0	0.00	60
Alabama, North	112,200	\$25.00	\$10.00	\$2,805,000	50	0	0.00	50
Arizona	189,000	\$31.90	\$20.86	\$6,029,100	63	378	1.00	63
Arkansas, Northeast	220,000	\$22.00	\$8.80	\$4,840,000	80	150,000	1.00	80
Arkansas, Southeast	300,000	\$22.00	\$14.67	\$6,600,000	60	270,000	1.00	60
California, San Joaquin Valley	2,000	\$12.00	\$0.03	\$24,000	0	0	0.00	0
Florida	71,000	\$26.50	\$16.36	\$1,881,500	65	350	1.00	65
Georgia	700,000	\$26.00	\$12.21	\$18,200,000	50	100,000	1.00	50
Kansas	600	\$23.00	\$0.31	\$13,800	0	0	0.00	0
Louisiana	693,000	\$29.75	\$24.08	\$20,616,750	100	613,042	1.30	100
Mississippi Delta	947,000	\$26.00	\$22.08	\$24,622,000	90	757,600	1.30	90
Mississippi Hills	388,000	\$26.00	\$18.21	\$10,088,000	90	77,600	1.10	90
Missouri	60,355	\$24.50	\$3.74	\$1,478,698	99	2,200	1.00	99
New Mexico	8,035	\$32.00	\$4.09	\$257,120	100	0	0.00	100
North Carolina	605,000	\$19.25	\$12.20	\$11,646,250	85	423,000	0.90	85
Oklahoma	107,000	\$20.00	\$11.26	\$2,140,000	78	26,000	1.00	78
South Carolina	220,000	\$22.50	\$17.07	\$4,950,000	85	109,000	1.50	85
Tennessee	485,057	\$23.79	\$18.98	\$11,541,340	42	128,035	1.65	42
Texas, Upper Gulf Coast	113,950	\$20.10	\$8.64	\$2,290,395	70	14,814	1.00	70
Texas, Lower Gulf Coast	76,431	\$19.82	\$3.37	\$1,514,862	60	3,000	1.00	60
Texas, Northern Rolling Plains	40,000	\$23.00	\$1.77	\$920,000	92	0	0.00	92
Texas, High Plains	70,000	\$20.00	\$0.55	\$1,400,000	99	0	0.00	99
Texas, Far West	81,000	\$17.62	\$2.93	\$1,427,220	0	0	0.00	0
Texas, Lower Rio Grande Valley	21,494	\$30.00	\$3.00	\$644,820	99	0	0.00	99
Texas, Southern Rolling Plains	64,625	\$14.40	\$1.60	\$930,600	90	0	0.00	90
Texas, Northern Blacklands	9,000	\$21.50	\$2.42	\$193,500	80	0	0.00	80
Texas, Southern Blacklands	32,000	\$18.00	\$6.40	\$576,000	70	640	0.10	70
Virginia	51,500	\$12.00	\$6.00	\$618,000	75	51,500	1.20	75
Total US	5,840,747	\$24.43	\$9.69	\$142,688,954	72	2,727,159	0.42	72.00

Table 5. Insecticide application type and cost. Cotton Insect Losses 2001.

State	% Acres treated by air	Acres treated by air	Cost/ Acre by air	Total cost Application air	% Acres treated by ground	Acres treated by ground	Cost/ Acre by ground	Total cost application ground		
Alabama, South	10	26,000	\$3.75	\$97,500	2	5,200	\$2.50	\$13,000	1.00	1.50
Alabama, Central	10	8,500	\$3.25	\$27,625	30	25,500	\$2.50	\$63,750	1.00	0.50
Alabama, North	40	112,200	\$3.10	\$347,820	60	168,300	\$3.40	\$572,220	1.50	2.00
Arizona Bt	70	132,300	\$4.00	\$529,200	20	37,800	\$5.94	\$224,532	2.38	0.70
Arizona Conv	70	70,000	\$3.58	\$250,600	30	29,600	\$2.64	\$78,144	2.50	1.50
Arkansas, Northeast	90	495,000	\$4.00	\$1,980,000	60	330,000	\$3.00	\$990,000	2.00	2.00
Arkansas, Southeast	100	450,000	\$4.00	\$1,800,000	90	405,000	\$3.00	\$1,215,000	4.00	2.00
California, San Joaquin Valley	45	366,660	\$12.50	\$4,583,250	55	448,140	\$10.00	\$4,481,400	1.00	1.00
Florida	21	24,150	\$4.75	\$114,713	79	90,850	\$5.50	\$499,675	0.20	0.50
Georgia	35	521,500	\$3.50	\$1,825,250	80	1,192,000	\$3.00	\$3,576,000	1.50	1.50
Kansas	3	1,320	\$17.00	\$22,440	0	0	\$0.00	\$0	1.00	0.00
Louisiana Conv	91	148,330	\$3.91	\$579,970	86	140,180	\$3.10	\$434,558	4.20	2.40
Louisiana Bt	91	630,630	\$3.91	\$2,465,763	86	595,980	\$3.10	\$1,847,538	4.20	2.40
Mississippi Delta	80	892,000	\$2.60	\$2,319,200	80	892,000	\$1.65	\$1,471,800	5.00	5.00
Mississippi Hills	30	166,200	\$2.60	\$432,120	80	443,200	\$1.65	\$731,280	1.00	1.40
Missouri	15	59,250	\$4.00	\$237,000	54	213,300	\$3.38	\$720,954	1.00	3.00
New Mexico	95	59,691	\$14.00	\$835,679	3	1,885	\$7.00	\$13,195	4.00	2.50
North Carolina Bt	20	124,200	\$4.50	\$558,900	90	558,900	\$2.50	\$1,397,250	2.00	2.40
North Carolina Conv	20	66,800	\$4.50	\$300,600	90	300,600	\$2.50	\$751,500	2.00	2.40
Oklahoma	80	152,000	\$3.50	\$532,000	60	114,000	\$3.00	\$342,000	3.00	2.00
South Carolina	45	130,500	\$3.75	\$489,375	80	232,000	\$3.50	\$812,000	1.50	2.00
Tennessee	45	275,154	\$1.70	\$466,812	74	449,018	\$2.55	\$1,146,857	1.81	2.40
Texas, Upper Gulf Coast	50	132,500	\$3.30	\$437,250	55	145,750	\$2.75	\$400,813	2.60	3.10
Texas, Lower Gulf Coast	35	157,358	\$3.30	\$519,280	70	314,715	\$2.75	\$865,467	1.00	2.00
Texas, Northern Rolling Plains	42	216,840	\$3.50	\$758,940	14	72,800	\$1.50	\$109,200	1.30	1.00
Texas, High Plains	15	380,250	\$4.25	\$1,616,063	25	633,750	\$3.75	\$2,376,563	1.00	1.00
Texas, Far West	91	445	\$3.65	\$1,624	10	49	\$2.06	\$101	1.60	4.10
Texas, Lower Rio Grande Valley	50	107,469	\$3.00	\$322,406	100	214,937	\$2.50	\$537,343	2.00	3.00
Texas, Southern Rolling Plains	1	5,800	\$3.50	\$20,300	5	29,000	\$3.50	\$101,500	0.50	1.00
Texas, Northern Blacklands	12	9,600	\$3.00	\$28,800	88	70,400	\$3.00	\$211,200	1.00	2.50
Texas, Southern Blacklands	98	392	\$3.00	\$1,176	85	340	\$2.00	\$680	6.00	2.00
Virginia	5	5,150	\$6.50	\$33,475	95	97,850	\$3.50	\$342,475	0.14	2.70
US AVERAGE		5,928,188	\$1.79	\$24,535,130		8,253,044	\$1.80	\$26,327,993	1.2	1.3

Table 6. Cotton insect monitoring costs. Cotton Insect Losses 2001.

State	Acres Scouted	Times per week Scouted	wt Avg Cost over all acres	Cost/scouted acre	Total Cost
Alabama, South	150,000	1.20	\$4.04	\$7.00	\$1,050,000
Alabama, Central	60,000	1.30	\$4.24	\$6.00	\$360,000
Alabama, North	250,000	1.30	\$4.68	\$5.25	\$1,312,500
Arizona Bt	170,100	1.85	\$8.10	\$9.00	\$1,530,900
Arizona Conv	99,000	1.81	\$8.80	\$8.89	\$880,110
Arkansas, Northeast	500,000	1.00	\$6.36	\$7.00	\$3,500,000
Arkansas, Southeast	400,000	1.70	\$8.00	\$9.00	\$3,600,000
California, San Joaquin Valley	800,000	1.20	\$9.82	\$10.00	\$8,000,000
Florida	94,000	1.20	\$7.56	\$9.25	\$869,500
Georgia	1,200,000	1.20	\$5.84	\$7.25	\$8,700,000
Kansas	35,000	1.00	\$4.77	\$6.00	\$210,000
Louisiana Conv	147,637	1.60	\$9.37	\$10.34	\$1,526,567
Louisiana Bt	663,200	1.60	\$9.90	\$10.34	\$6,857,488
Mississippi Delta	1,059,000	1.70	\$7.60	\$8.00	\$8,472,000
Mississippi Hills	450,000	1.50	\$6.50	\$8.00	\$3,600,000
Missouri	323,900	1.00	\$4.21	\$5.13	\$1,661,607
New Mexico	34,000	1.00	\$4.87	\$9.00	\$306,000
North Carolina Bt	424,000	0.70	\$5.12	\$7.50	\$3,180,000
North Carolina Conv	260,000	1.20	\$5.84	\$7.50	\$1,950,000
Oklahoma	110,000	1.50	\$3.42	\$5.90	\$649,000
South Carolina	240,000	1.20	\$4.76	\$5.75	\$1,380,000
Tennessee	338,802	1.00	\$3.24	\$5.82	\$1,970,295
Texas, Upper Gulf Coast	238,500	1.00	\$5.40	\$6.00	\$1,431,000
Texas, Lower Gulf Coast	360,000	1.00	\$4.80	\$6.00	\$2,160,000
Texas, Northern Rolling Plains	30,000	1.50	\$0.25	\$4.29	\$128,700
Texas, High Plains	750,000	1.20	\$1.55	\$5.25	\$3,937,500
Texas, Far West	4,000	1.00	\$0.04	\$5.00	\$20,000
Texas, Lower Rio Grande Valley	200,000	0.30	\$4.61	\$4.95	\$990,000
Texas, Southern Rolling Plains	60,000	1.00	\$0.52	\$5.00	\$300,000
Texas, Northern Blacklands	60,000	1.00	\$3.38	\$4.50	\$270,000
Texas, Southern Blacklands	30,000	1.30	\$1.75	\$5.25	\$157,500
Virginia	20,000	1.50	\$1.65	\$8.50	\$170,000
Total US	9,561,139	1.27	\$4.83	\$7.44	\$71,130,666

Table 7. Summary of All State. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/acre	% red	Bales lost
Boll weevil	2692770	1191321	0.144	\$7.24	\$1.04	0.097	28864
Bollworm/budworm	9,414,800	5,160,144	0.580	\$9.70	\$5.63	1.228	364446
Pink Bollworm	326,610	88,200	0.014	\$14.66	\$0.20	0.039	11494
Cotton Fleahopper	6,059,642	1,442,834	0.132	\$5.73	0.76	0.126	37465
Lygus	8,111,090	4,276,916	0.624	\$8.45	\$5.27	0.982	291224
Cotton Leafperforator	153,450	9,000	0.001	\$12.00	\$0.01	0.000	31
Spider Mites	2,210,135	748,359	0.047	\$22.37	\$1.06	0.027	8029
Thrips, early season	13,755,469	2,816,802	0.197	\$5.09	\$1.00	0.795	235966
Beet Armyworm	3,271,953	301,938	0.019	\$15.19	\$0.29	0.031	9116
Fall Armyworm	642,624	61,587	0.002	\$11.34	\$0.02	0.022	6420
European Corn Borer	28,755	500	0.000	\$0.00	\$0.00	0.000	2
Stink Bugs	6,180,966	2,733,955	0.272	\$7.77	\$2.11	0.768	227921
Grasshoppers	1,516,854	208,553	0.015	\$8.26	\$0.12	0.026	7633
Salt-marsh Caterpillars	2,030,034	405,945	0.026	\$8.52	\$0.22	0.013	3838
Aphids	8,590,542	1,465,025	0.099	\$10.94	\$1.09	0.275	81649
Bandedwinged Whitefly	3,766,565	90,484	0.006	\$10.85	\$0.07	0.002	602
Silverleaf Whitefly	704,110	328,450	0.028	\$30.97	\$0.88	0.080	23684
Soybean Loopers	830,675	289,961	0.016	\$10.49	\$0.16	0.008	2313
Cabbage Loopers	1,086,340	122,420	0.008	\$18.00	\$0.15	0.000	21
Western Flower Thrips	2,543,523	376,149	0.015	\$10.38	\$0.16	0.006	1730
Cutworms	1,478,908	747,544	0.035	\$4.57	\$0.16	0.004	1134

Percent Lost	4.53
Total Acres	14,729,163
Total Bales lost	1,343,580
Bales lost in dollars	\$386,951,091

Est. yield/acre	673
Spray applications	2.281
Cost + loss	\$1,157,711,069
Cost + loss/acre	\$78.60

	Cost/ Acre
Foliar insecticide	\$20.41
At planting	\$5.62
Bt use fees	\$9.69
Eradication	\$11.79
Scouting	\$4.83
Total	\$52.33

Table 8. Alabama Summary. Cotton Insect Losses 2001.

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	570,500	105,000	0.180	\$7.13	\$1.28	1.091	15730
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	40,000	0	0.000	N/A	0.00	0.000	0
Lygus	550,500	220,000	0.564	\$5.65	\$3.19	2.812	40561
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	100,000	8,000	0.013	\$11.75	\$0.15	0.094	1354
Thrips, early season	625,500	100,000	0.160	\$4.23	\$0.68	1.711	24681
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	345,000	130,000	0.288	\$6.21	\$1.79	3.087	44531
Grasshoppers	15,000	7,500	0.012	\$9.47	\$0.11	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	625,500	22,000	0.035	\$10.77	\$0.38	0.395	5698
Bandedwinged Whitefly	12,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	5,000	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	150,000	0	0.000	N/A	\$0.00	0.000	0
Cutworms	120,000	98,500	0.157	\$2.87	\$0.45	0.000	0

Percent Lost	9.19
Total Acres	625,500
Total Bales lost	132,556
Bales lost in dollars	\$38,175,990

Est. yield/acre	775
Spray applications	1.409
Cost + loss	\$63,277,040
Cost + loss/acre	\$101.16

	Cost/ Acre
Foliar insecticide	\$8.03
At planting	\$11.17
Bt use fees	\$11.58
Eradication	\$5.00
Scouting	\$4.35
Total	\$40.13

Table 8a. North Alabama. Cotton Insect Losses 2001.

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	280,500	75,000	0.294	\$7.00	\$2.06	1.250	9496
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.000	0
Lygus	280,500	190,000	1.152	\$5.60	\$6.45	3.750	28488
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	100,000	8,000	0.029	\$11.75	\$0.34	0.178	1354
Thrips, early season	280,500	90,000	0.321	\$4.20	\$1.35	2.350	17853
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	280,500	15,000	0.053	\$11.00	\$0.59	0.750	5698
Bandedwinged Whitefly	10,000	0	0.000	N/A	\$0.00	0.000	0
Sweetpotato Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	150,000	0	0.000	N/A	\$0.00	0.000	0
Cutworms	110,000	95,000	0.339	\$2.75	\$0.93	0.000	0

Percent Lost	8.28
Total Acres	280,500
Total Bales lost	62,889
Bales lost in dollars	\$18,111,990

Est. yield/acre	790
Spray applications	2.187
Cost + loss	\$30,491,540
Cost + loss/acre	\$108.70

	Cost/ Acre
Foliar insecticide	\$11.71
At planting	\$12.75
Bt use fees	\$10.00
Eradication	\$5.00
Scouting	\$4.68
Total	\$44.13

Table 8b. Central Alabama. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	50,000	10,000	0.118	\$7.50	\$0.88	0.882	1484
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	20,000	0	0.000	N/A	0.00	0.000	0
Lygus	70,000	20,000	0.235	\$6.00	\$1.41	2.471	4156
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	85,000	5,000	0.059	\$5.00	\$0.29	1.000	1682
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	85,000	30,000	0.353	\$6.00	\$2.12	2.000	3365
Grasshoppers	10,000	7,000	0.082	\$9.50	\$0.78	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	85,000	5,000	0.059	\$10.00	\$0.59	0.000	0
Bandedwinged Whitefly	2,000	0	0.000	N/A	\$0.00	0.000	0
Sweetpotato Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	5,000	3,000	0.035	\$6.00	\$0.21	0.000	0

Percent Lost	6.35
Total Acres	85,000
Harvested acres	
Total Bales lost	10,688
Bales lost in dollars	\$3,078,000

Est. yield/acre	800
Spray applications	0.941
Cost + loss	\$6,467,500
Cost + loss/acre	\$76.09

	Cost/ Acre
Foliar insecticide	\$6.29
At planting	\$10.35
Bt use fees	\$14.00
Eradication	\$5.00
Scouting	\$4.24
Total	\$39.88

Table 8c. South Alabama. Cotton Insect Losses 2001.

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	240,000	20,000	0.077	\$7.50	\$0.58	0.923	4750
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	20,000	0	0.000	N/A	0.00	0.000	0
Lygus	200,000	10,000	0.038	\$6.50	\$0.25	1.538	7917
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	260,000	5,000	0.019	\$4.00	\$0.08	1.000	5146
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	260,000	100,000	0.577	\$6.25	\$3.61	8.000	41167
Grasshoppers	5,000	500	0.002	\$9.00	\$0.02	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	260,000	2,000	0.008	\$11.00	\$0.08	0.000	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Sweetpotato Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	5,000	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	5,000	500	0.002	\$6.00	\$0.01	0.000	0

Percent Lost	11.46
Total Acres	260,000
Total Bales lost	58,979
Bales lost in dollars	\$16,986,000

Est. yield/acre	750
Spray applications	0.723
Cost + loss	\$26,318,000
Cost + loss/acre	\$101.22

	Cost/ Acre
Foliar insecticide	\$4.62
At planting	\$9.73
Bt use fees	\$12.50
Eradication	\$5.00
Scouting	\$4.04
Total	\$35.89

Table 9. Arizona Summary. Cotton Insect Losses 2001.

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	78,400	21,738	0.078	\$15.00	\$1.17	0.050	462
Pink Bollworm	275,220	53,400	0.425	\$13.83	\$5.87	1.233	11,425
Cotton Fleahopper	106,200	3,670	0.007	\$6.00	0.04	0.014	129
Lygus	275,220	208,500	1.417	\$15.61	\$22.11	4.614	42,752
Cotton Leafperforator	41,700	178	0.000	\$8.00	\$0.00	0.003	27
Spider Mites	46,150	3,670	0.013	\$17.50	\$0.23	0.014	129
Thrips, early season	278,000	11,120	0.040	\$11.67	\$0.47	0.006	53
Beet Armyworm	41,700	12,345	0.034	\$10.21	\$0.35	0.006	51
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	27,800	4,170	0.015	\$13.96	\$0.21	0.004	34
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	10,120	0	0.000	N/A	\$0.00	0.000	0
Aphids	3,725	0	0.000	N/A	\$0.00	0.000	0
Bandedwinged Whitefly	83,400	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	275,220	176,250	1.059	\$30.16	\$31.93	1.497	13,872
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	6,005	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	166,800	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	7.44
Total Acres	278,000
Total Bales lost	68,933
Bales lost in dollars	\$19,852,582

Est. yield/acre	1,143
Spray applications	3.087
Cost + loss	\$46,020,079
Cost + loss/acre	\$165.54

	Cost/ Acre
Foliar insecticide	\$62.39
At planting	\$0.17
Bt use fees	\$21.69
Eradication	\$1.78
Scouting	\$8.10
Total	\$94.13

Table 9a. Arizona Bt. Cotton Insect Losses 2001.

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	47,250	378	0.002	\$15.00	\$0.03	0.007	46
Pink Bollworm	187,110	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	66,150	1,890	0.005	\$6.00	0.03	0.008	49
Lygus	187,110	141,750	1.395	\$15.48	\$21.59	4.455	28,067
Cotton Leafperforator	28,350	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	28,350	1,890	0.010	\$17.50	\$0.18	0.011	69
Thrips, early season	189,000	7,560	0.040	\$11.67	\$0.47	0.004	23
Beet Armyworm	28,350	5,670	0.015	\$6.00	\$0.09	0.001	7
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	18,900	2,835	0.015	\$13.96	\$0.21	0.001	5
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	5,670	0	0.000	N/A	\$0.00	0.000	0
Aphids	2,835	0	0.000	N/A	\$0.00	0.000	0
Bandedwinged Whitefly	56,700	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	187,110	122,850	1.086	\$30.16	\$32.74	1.386	8,732
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	3,780	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	113,400	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	5.87
Total Acres	189,000
Total Bales lost	36,998
Bales lost in dollars	\$10,655,307

Est. yield/acre	1,174
Spray applications	2.568
Cost + loss	\$29,054,028
Cost + loss/acre	\$153.73

	Cost/ Acre
Foliar insecticide	\$55.33
At planting	\$0.23
Bt use fees	\$31.90
Eradication	\$1.78
Scouting	\$8.10
Total	\$97.35

Table 9b. Arizona Conventional Varieties. Cotton Insect Losses 2001.

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	31,150	21,360	0.240	\$15.00	\$3.60	0.140	415
Pink Bollworm	88,110	53,400	1.326	\$13.83	\$18.34	3.851	11,425
Cotton Fleahopper	40,050	1,780	0.010	\$6.00	0.06	0.027	80
Lygus	88,110	66,750	1.463	\$15.87	\$23.21	4.950	14,685
Cotton Leafperforator	13,350	178	0.001	\$8.00	\$0.01	0.009	27
Spider Mites	17,800	1,780	0.020	\$17.50	\$0.35	0.020	59
Thrips, early season	89,000	3,560	0.040	\$11.67	\$0.47	0.010	30
Beet Armyworm	13,350	6,675	0.075	\$12.00	\$0.90	0.015	45
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	8,900	1,335	0.015	\$13.96	\$0.21	0.010	30
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	4,450	0	0.000	N/A	\$0.00	0.000	0
Aphids	890	0	0.000	N/A	\$0.00	0.000	0
Bandedwinged Whitefly	26,700	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	88,110	53,400	1.002	\$30.16	\$30.22	1.733	5,140
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	2,225	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	53,400	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	10.76
Total Acres	89,000
Total Bales lost	31,935
Bales lost in dollars	\$9,197,274

Est. yield/acre	1,078
Spray applications	4.192
Cost + loss	\$16,966,051
Cost + loss/acre	\$190.63

	Cost/ Acre
Foliar insecticide	\$77.36
At planting	\$0.05
Bt use fees	\$0.00
Eradication	\$1.78
Scouting	\$8.10
Total	\$87.29

Table 10. Arkansas Summary. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	1000000	50000	0.100	\$8.00	\$0.80	0.055	1203
Bollworm/budworm	1,000,000	900,000	1.550	\$10.29	\$15.95	1.225	26797
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	405,000	200,000	0.200	\$7.00	1.40	0.040	875
Lygus	1,000,000	720,000	0.870	\$7.48	\$6.51	0.245	5359
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	400,000	150,000	0.150	\$10.67	\$1.60	0.025	547
Thrips, early season	1,000,000	150,000	0.150	\$6.00	\$0.90	0.100	2188
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	200,000	6,000	0.006	\$10.33	\$0.06	0.008	164
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	1,000,000	250,000	0.350	\$8.86	\$3.10	0.560	12250
Grasshoppers	300,000	75,000	0.075	\$8.00	\$0.60	0.015	328
Salt-marsh Caterpillars	600,000	150,000	0.150	\$9.00	\$1.35	0.010	223
Aphids	1,000,000	110,000	0.110	\$7.91	\$0.87	0.023	492
Bandedwinged Whitefly	650,000	55,000	0.055	\$10.00	\$0.55	0.023	492
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	100,000	11,000	0.011	\$5.27	\$0.06	0.000	0

Percent Lost	2.33
Total Acres	1,000,000
Total Bales lost	50,918
Bales lost in dollars	\$14,664,510

Est. yield/acre	793
Spray applications	3.777
Cost + loss	\$102,119,510
Cost + loss/acre	\$102.12

	Cost/ Acre
Foliar insecticide	\$33.75
At planting	\$10.34
Bt use fees	\$11.44
Eradication	\$24.83
Scouting	\$7.10
Total	\$87.46

Table 10a. Northeast Arkansas. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	550000	50000	0.182	\$8.00	\$1.45	0.100	1203
Bollworm/budworm	550,000	500,000	1.364	\$9.00	\$12.27	1.000	12031
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	400,000	200,000	0.364	\$7.00	2.55	0.073	875
Lygus	550,000	300,000	0.818	\$7.00	\$5.73	0.200	2406
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	300,000	100,000	0.182	\$10.00	\$1.82	0.027	328
Thrips, early season	550,000	50,000	0.091	\$6.00	\$0.55	0.100	1203
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	150,000	5,000	0.009	\$10.00	\$0.09	0.014	164
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	550,000	50,000	0.091	\$8.00	\$0.73	0.200	2406
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	400,000	50,000	0.091	\$9.00	\$0.82	0.000	4
Aphids	550,000	10,000	0.018	\$7.00	\$0.13	0.000	0
Bandedwinged Whitefly	200,000	5,000	0.009	\$10.00	\$0.09	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	50,000	10,000	0.018	\$5.00	\$0.09	0.000	0

Percent Lost	1.71
Total Acres	550,000
Total Bales lost	20,622
Bales lost in dollars	\$5,939,010

Est. yield/acre	890
Spray applications	3.236
Cost + loss	\$43,324,010
Cost + loss/acre	\$78.77

	Cost/ Acre
Foliar insecticide	\$26.31
At planting	\$10.00
Bt use fees	\$8.80
Eradication	\$16.50
Scouting	\$6.36
Total	\$67.97

Table 10b. Southeast Arkansas. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	450000	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	450,000	400,000	1.778	\$11.50	\$20.44	1.500	14766
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	5,000	0	0.000	N/A	0.00	0.000	0
Lygus	450,000	420,000	0.933	\$8.00	\$7.47	0.300	2953
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	100,000	50,000	0.111	\$12.00	\$1.33	0.022	219
Thrips, early season	450,000	100,000	0.222	\$6.00	\$1.33	0.100	984
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	50,000	1,000	0.002	\$12.00	\$0.03	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	450,000	200,000	0.667	\$9.00	\$6.00	1.000	9844
Grasshoppers	300,000	75,000	0.167	\$8.00	\$1.33	0.033	328
Salt-marsh Caterpillars	200,000	100,000	0.222	\$9.00	\$2.00	0.022	219
Aphids	450,000	100,000	0.222	\$8.00	\$1.78	0.050	492
Bandedwinged Whitefly	450,000	50,000	0.111	\$10.00	\$1.11	0.050	492
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	50,000	1,000	0.002	\$8.00	\$0.02	0.000	0

Percent Lost	3.08
Total Acres	450,000
Total Bales lost	30,297
Bales lost in dollars	\$8,725,500

Est. yield/acre	675
Spray applications	4.438
Cost + loss	\$58,795,500
Cost + loss/acre	\$130.66

	Cost/ Acre
Foliar insecticide	\$42.84
At planting	\$10.76
Bt use fees	\$14.67
Eradication	\$35.00
Scouting	\$8.00
Total	\$111.27

Table 11. California San Joaquin Valley. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	0	0	0.000	N/A	\$0.00	0.000	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.000	0
Lygus	407,400	244,440	0.300	\$27.00	\$8.10	0.375	10185
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	733,320	407,400	0.500	\$30.00	\$15.00	0.045	1222
Thrips, early season	0	0	0.000	N/A	\$0.00	0.000	0
Beet Armyworm	651,840	122,220	0.150	\$18.00	\$2.70	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	733,320	325,920	0.600	\$18.00	\$10.80	0.900	24444
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	407,400	162,960	0.200	\$33.00	\$6.60	0.500	13580
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	651,840	122,220	0.150	\$18.00	\$2.70	0.000	0
Western Flower Thrips	806,652	180,000	0.221	\$12.00	\$2.65	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	1.82
Total Acres	814,800
Total Bales lost	49,431
Bales lost in dollars	\$14,236,186

Est. yield/acre	1,339
Spray applications	2.121
Cost + loss	\$64,519,506
Cost + loss/acre	\$79.18

	Cost/ Acre
Foliar insecticide	\$48.55
At planting	\$3.31
Bt use fees	\$0.03
Eradication	\$0.00
Scouting	\$9.82
Total	\$61.71

Table 12. Florida. Cotton Insect Losses 2001.

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	20,000	6,000	0.063	\$13.70	\$0.86	0.522	1375
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	1,000	0	0.000	N/A	0.00	0.000	0
Lygus	40,000	6,500	0.057	\$6.75	\$0.38	0.522	1375
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	250	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	100,000	24,000	0.209	\$7.30	\$1.52	0.435	1146
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	300	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	100	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	110,000	95,000	0.991	\$7.50	\$7.43	2.965	7815
Grasshoppers	15,000	900	0.008	\$9.50	\$0.07	0.052	138
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	115,000	2,500	0.022	\$7.75	\$0.17	0.800	2108
Bandedwinged Whitefly	12,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	5,000	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	8,000	500	0.004	\$9.50	\$0.04	0.014	37
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	2,000	0	0.000	N/A	\$0.00	0.000	0
Cutworms	1,000	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	5.31
Total Acres	115,000
Total Bales lost	13,993
Bales lost in dollars	\$4,029,960

Est. yield/acre	670
Spray applications	1.353
Cost + loss	\$9,816,850
Cost + loss/acre	\$85.36

	Cost/ Acre
Foliar insecticide	\$10.48
At planting	\$6.52
Bt use fees	\$19.76
Eradication	\$6.00
Scouting	\$7.56
Total	\$50.32

Table 13. Georgia. Cotton Insect Losses 2001.

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	900,000	600,000	1.007	\$10.00	\$10.07	1.812	56250
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.000	0
Lygus	300,000	70,000	0.047	\$6.00	\$0.28	0.000	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	10,000	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	1,200,000	125,000	0.084	\$5.00	\$0.42	0.000	0
Beet Armyworm	10,000	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	10,000	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	1,000,000	800,000	0.805	\$7.00	\$5.64	1.342	41667
Grasshoppers	20,000	1,000	0.001	\$8.00	\$0.01	0.013	417
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	100,000	5,000	0.003	\$9.00	\$0.03	0.000	0
Bandedwinged Whitefly	10,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	10,000	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	10,000	2,000	0.001	\$11.00	\$0.01	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	10,000	5,000	0.003	\$6.00	\$0.02	0.000	0

Percent Lost	3.17
Total Acres	1,490,000
Total Bales lost	98,333
Bales lost in dollars	\$28,320,000

Est. yield/acre	740
Spray applications	1.952
Cost + loss	\$98,602,500
Cost + loss/acre	\$66.18

	Cost/ Acre
Foliar insecticide	\$16.48
At planting	\$8.39
Bt use fees	\$12.21
Eradication	\$4.25
Scouting	\$5.84
Total	\$47.17

Table 14. Kansas. Cotton Insect Losses 2001.

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	3,000	100	0.002	\$15.00	\$0.03	0.000	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.000	0
Lygus	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	1,000	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	2,000	500	0.011	\$11.00	\$0.13	0.000	0
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	0	0	0.000	N/A	\$0.00	0.000	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	500	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	0.00
Total Acres	44,000
Total Bales lost	0
Bales lost in dollars	\$0

Est. yield/acre	350
Spray applications	0.014
Cost + loss	\$430,800
Cost + loss/acre	\$9.79

	Cost/ Acre
Foliar insecticide	\$0.16
At planting	\$4.55
Bt use fees	\$0.31
Eradication	\$0.00
Scouting	\$4.77
Total	\$9.79

Table 15. Louisiana Summary. Cotton Insect Losses 2001.

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	755,044	566,848	1.178	\$11.15	\$13.14	1.501	26699
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	211,503	22,950	0.005	\$8.41	0.04	0.001	16
Lygus	747,711	640,422	2.305	\$7.71	\$17.78	1.448	25746
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	109,839	23,032	0.016	\$12.91	\$0.21	0.000	6
Thrips, early season	765,136	292,459	0.273	\$5.25	\$1.43	0.259	4610
Beet Armyworm	148,363	28,548	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	87,224	6,587	0.003	\$13.41	\$0.04	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	700,467	599,901	1.472	\$8.08	\$11.90	1.490	26490
Grasshoppers	210,196	2,853	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	260,727	50,095	0.000	N/A	\$0.00	0.000	0
Aphids	573,673	200,212	0.164	\$8.74	\$1.43	0.064	1141
Bandedwinged Whitefly	207,628	3,484	0.000	\$12.91	\$0.00	0.000	3
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	359,775	147,461	0.104	\$11.41	\$1.18	0.033	589
Cabbage Loopers	38,633	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	250,634	3,149	0.000	\$9.71	\$0.00	0.002	34
Cutworms	285,952	42,661	0.019	\$6.41	\$0.12	0.001	11

Percent Lost	4.80
Total Acres	856,000
Total Bales lost	85,344
Bales lost in dollars	\$24,579,188

Est. yield/acre	600
Spray applications	5.540
Cost + loss	\$131,257,495
Cost + loss/acre	\$153.34

	Cost/ Acre
Foliar insecticide	\$47.29
At planting	\$8.46
Bt use fees	\$24.08
Eradication	\$35.00
Scouting	\$9.79
Total	\$124.62

Table15a. Louisiana Conventional Varieties. Cotton Insect Losses 2001.

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	142,002	113,210	2.292	\$14.34	\$32.87	2.918	9891
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	39,112	4,244	0.004	\$8.41	0.04	0.001	3
Lygus	138,272	118,432	2.180	\$7.71	\$16.81	1.247	4226
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	21,978	5,092	0.019	\$12.91	\$0.24	0.000	1
Thrips, early season	141,495	52,418	0.257	\$5.25	\$1.35	0.252	853
Beet Armyworm	27,436	5,279	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	15,012	1,693	0.004	\$13.41	\$0.06	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	129,536	110,938	1.429	\$7.71	\$11.02	1.518	5144
Grasshoppers	38,038	527	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	49,048	9,261	0.000	N/A	\$0.00	0.000	0
Aphids	106,088	37,024	0.159	\$8.74	\$1.39	0.059	199
Bandedwinged Whitefly	38,396	644	0.000	\$12.91	\$0.00	0.001	3
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	64,866	27,270	0.102	\$11.41	\$1.16	0.031	105
Cabbage Loopers	7,144	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	46,349	582	0.000	\$9.71	\$0.00	0.005	17
Cutworms	52,880	7,889	0.018	\$6.41	\$0.12	0.000	1

Percent Lost	6.03
Total Acres	163,000
Total Bales lost	20,444
Bales lost in dollars	\$5,887,744

Est. yield/acre	589
Spray applications	6.465
Cost + loss	\$24,857,526
Cost + loss/acre	\$152.50

	Cost/ Acre
Foliar insecticide	\$65.05
At planting	\$6.96
Bt use fees	\$0.00
Eradication	\$35.00
Scouting	\$9.37
Total	\$116.38

Table 15b. Louisiana *Bt* Varieties. Cotton Insect Losses 2001.

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	613,042	453,638	0.916	\$9.28	\$8.50	1.168	16808
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	172,391	18,706	0.005	\$8.41	0.05	0.001	13
Lygus	609,439	521,990	2.335	\$7.71	\$18.00	1.495	21520
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	87,861	17,940	0.016	\$12.91	\$0.20	0.000	5
Thrips, early season	623,641	240,041	0.277	\$5.25	\$1.45	0.261	3757
Beet Armyworm	120,927	23,269	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	72,212	4,894	0.003	\$13.41	\$0.04	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	570,931	488,963	1.482	\$8.17	\$12.11	1.483	21346
Grasshoppers	172,158	2,326	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	211,679	40,834	0.000	N/A	\$0.00	0.000	0
Aphids	467,585	163,188	0.165	\$8.74	\$1.44	0.065	942
Bandedwinged Whitefly	169,232	2,840	0.000	\$12.91	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	294,909	120,191	0.104	\$11.41	\$1.19	0.034	484
Cabbage Loopers	31,489	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	204,285	2,567	0.000	\$9.71	\$0.00	0.001	17
Cutworms	233,072	34,772	0.019	\$6.41	\$0.12	0.001	10

Percent Lost	4.51
Total Acres	693,000
Total Bales lost	64,901
Bales lost in dollars	\$18,691,444

Est. yield/acre	602
Spray applications	5.323
Cost + loss	\$106,399,969
Cost + loss/acre	\$153.54

	Cost/ Acre
Foliar insecticide	\$43.11
At planting	\$8.81
Bt use fees	\$29.75
Eradication	\$35.00
Scouting	\$9.90
Total	\$126.56

Table 16. Mississippi Summary. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	1,669,000	1,130,000	1.257	\$9.80	\$12.32	3.320	111614
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	30,000	1,000	0.001	\$6.80	0.00	0.018	604
Lygus	1,669,000	1,391,000	2.586	\$7.56	\$19.56	3.435	115467
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	175,000	66,000	0.043	\$13.90	\$0.60	0.106	3552
Thrips, early season	1,669,000	419,000	0.251	\$4.60	\$1.15	0.100	3362
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	255,000	20,000	0.012	\$11.80	\$0.14	0.185	6229
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	800,000	160,000	0.096	\$7.20	\$0.69	0.418	14063
Grasshoppers	70,000	2,800	0.002	\$7.60	\$0.01	0.026	885
Salt-marsh Caterpillars	510,000	190,000	0.132	\$8.20	\$1.08	0.105	3531
Aphids	473,000	153,000	0.092	\$6.90	\$0.63	0.057	1913
Bandedwinged Whitefly	80,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	3,000	0	0.000	N/A	\$0.00	0.000	9
Soybean Loopers	280,000	140,000	0.084	\$9.90	\$0.83	0.050	1688
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	350,000	266,000	0.159	\$5.60	\$0.89	0.026	868

Percent Lost	7.85
Total Acres	1,669,000
Total Bales lost	263,785
Bales lost in dollars	\$75,970,020

Est. yield/acre	747
Spray applications	4.714
Cost + loss	\$235,166,060
Cost + loss/acre	\$140.90

	Cost/ Acre
Foliar insecticide	\$37.92
At planting	\$7.10
Bt use fees	\$20.80
Eradication	\$22.33
Scouting	\$7.23
Total	\$95.38

Table 16a. Mississippi Delta. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/budworm	1,115,000	950,000	1.704	\$9.80	\$16.70	4.000	92917
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	20,000	500	0.000	\$6.80	0.00	0.018	417
Lygus	1,115,000	1,059,000	3.514	\$7.60	\$26.71	4.300	99885
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	130,000	60,000	0.054	\$13.90	\$0.75	0.117	2708
Thrips, early season	1,115,000	279,000	0.250	\$4.60	\$1.15	0.100	2323
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	200,000	20,000	0.018	\$11.80	\$0.21	0.179	4167
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	450,000	70,000	0.063	\$7.20	\$0.45	0.323	7500
Grasshoppers	20,000	2,000	0.002	\$7.60	\$0.01	0.018	417
Salt-marsh Caterpillars	400,000	150,000	0.161	\$8.20	\$1.32	0.108	2500
Aphids	335,000	123,000	0.110	\$6.90	\$0.76	0.060	1396
Bandedwinged Whitefly	50,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	2,000	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	150,000	80,000	0.072	\$9.90	\$0.71	0.020	469
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	267,000	211,000	0.189	\$5.60	\$1.06	0.024	556

Percent Lost	9.27
Total Acres	1,115,000
Total Bales lost	215,254
Bales lost in dollars	\$61,993,200

Est. yield/acre	740
Spray applications	6.138
Cost + loss	\$182,918,580
Cost + loss/acre	\$164.05

	Cost/ Acre
Foliar insecticide	\$49.84
At planting	\$6.93
Bt use fees	\$22.08
Eradication	\$22.00
Scouting	\$7.60
Total	\$108.45

Table 16b. Mississippi Hills. Cotton Insect Losses 2001.

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	554,000	180,000	0.357	\$9.80	\$3.50	1.800	18698
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	10,000	500	0.001	\$6.80	0.01	0.018	188
Lygus	554,000	332,000	0.719	\$7.20	\$5.18	1.500	15581
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	45,000	6,000	0.022	\$13.90	\$0.30	0.081	844
Thrips, early season	554,000	140,000	0.253	\$4.60	\$1.16	0.100	1039
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	55,000	0	0.000	N/A	\$0.00	0.199	2063
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	350,000	90,000	0.162	\$7.20	\$1.17	0.632	6563
Grasshoppers	50,000	800	0.001	\$7.60	\$0.01	0.045	469
Salt-marsh Caterpillars	110,000	40,000	0.072	\$8.20	\$0.59	0.099	1031
Aphids	138,000	30,000	0.054	\$6.90	\$0.37	0.050	518
Bandedwinged Whitefly	30,000	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	1,000	0	0.000	N/A	\$0.00	0.001	9
Soybean Loopers	130,000	60,000	0.108	\$9.90	\$1.07	0.117	1219
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	83,000	55,000	0.099	\$5.60	\$0.56	0.030	311

Percent Lost	4.67
Total Acres	554,000
Total Bales lost	48,531
Bales lost in dollars	\$13,976,820

Est. yield/acre	760
Spray applications	1.850
Cost + loss	\$52,247,480
Cost + loss/acre	\$94.31

	Cost/ Acre
Foliar insecticide	\$13.92
At planting	\$7.45
Bt use fees	\$18.21
Eradication	\$23.00
Scouting	\$6.50
Total	\$69.08

Table 17. Missouri. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	47421	19399	0.098	\$6.50	\$0.64	0.132	1087
Bollworm/budworm	153,042	109,931	0.417	\$7.50	\$3.13	0.271	2232
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	213,396	172,442	0.873	\$8.37	7.31	0.648	5335
Lygus	334,106	212,319	1.075	\$8.90	\$9.57	2.453	20186
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	27,526	12,437	0.031	\$13.25	\$0.42	0.023	189
Thrips, early season	395,000	39,500	0.100	\$3.50	\$0.35	0.300	2469
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	96,999	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	126,098	31,793	0.080	\$9.75	\$0.78	0.105	867
Bandedwinged Whitefly	96,999	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	23,170	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	3.93
Total Acres	395,000
Total Bales lost	32,364
Bales lost in dollars	\$9,320,826

Est. yield/acre	871
Spray applications	2.676
Cost + loss	\$28,645,146
Cost + loss/acre	\$72.52

	Cost/ Acre
Foliar insecticide	\$22.20
At planting	\$8.78
Bt use fees	\$3.74
Eradication	\$10.00
Scouting	\$4.21
Total	\$48.92

Table 18. New Mexico. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	42504	42504	0.609	\$18.00	\$10.96	0.541	714
Bollworm/budworm	22,785	7,250	0.115	\$18.00	\$2.08	0.363	478
Pink Bollworm	14,500	12,000	0.191	\$18.00	\$3.44	0.069	91
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.000	0
Lygus	12,000	0	0.000	N/A	\$0.00	0.000	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.000	0
Thrips, early season	14,000	0	0.000	N/A	\$0.00	0.000	0
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.000	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.000	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	8,000	200	0.003	\$21.00	\$0.07	0.000	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.000	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.000	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	0	0	0.000	N/A	\$0.00	0.000	0

Percent Lost	0.97
Total Acres	62,833
Total Bales lost	1,284
Bales lost in dollars	\$369,764

Est. yield/acre	888
Spray applications	0.918
Cost + loss	\$3,412,975
Cost + loss/acre	\$54.32

	Cost/ Acre
Foliar insecticide	\$16.54
At planting	\$0.93
Bt use fees	\$4.09
Eradication	\$22.00
Scouting	\$4.87
Total	\$48.43

Table 19. North Carolina Summary. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	20	20	0.000	\$6.50	\$0.00	0.00	0
Bollworm/budworm	955,000	732,000	1.046	\$7.80	\$8.16	3.83	61,647
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	955,000	0	0.000	N/A	0.00	0.00	0
Lygus	955,000	86,000	0.097	\$4.00	\$0.39	0.30	4,755
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	9,050	300	0.000	\$13.00	\$0.00	0.00	0
Thrips, early season	955,000	503,000	0.685	\$4.80	\$3.29	0.60	9,669
Beet Armyworm	1,900	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	9,500	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	19,375	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	955,000	91,150	0.124	\$8.25	\$1.02	3.29	53,078
Grasshoppers	50,000	1,500	0.002	\$6.00	\$0.01	0.00	25
Salt-marsh Caterpillars	44,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	955,000	18,900	0.020	\$12.00	\$0.24	0.00	0
Bandedwinged Whitefly	22,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	14,000	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	475,500	12,000	0.013	\$6.00	\$0.08	0.10	1,605
Cutworms	232,000	35,000	0.037	\$4.75	\$0.17	0.00	0

Percent Lost	8.12
Total Acres	955,000
Total Bales lost	130,780
Bales lost in dollars	\$37,664,757

Est. yield/acre	810
Spray applications	2.022
Cost + loss	\$81,037,417
Cost + loss/acre	\$84.86

	Cost/ Acre
Foliar insecticide	\$13.35
At planting	\$10.65
Bt use fees	\$12.20
Eradication	\$3.85
Scouting	\$5.37
Total	\$45.42

Table 19a. North Carolina *Bt* Varieties. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	20	20	0.000	\$6.50	\$0.00	0.00	0
Bollworm/budworm	621,000	423,000	0.613	\$7.80	\$4.78	1.58	16,557
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	621,000	0	0.000	N/A	0.00	0.00	0
Lygus	621,000	64,000	0.113	\$4.00	\$0.45	0.40	4,192
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	6,050	200	0.000	\$13.00	\$0.01	0.00	0
Thrips, early season	621,000	327,000	0.685	\$4.80	\$3.29	0.60	6,288
Beet Armyworm	1,250	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	6,250	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	3,125	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	621,000	90,750	0.190	\$8.25	\$1.57	4.07	42,651
Grasshoppers	32,500	1,200	0.002	\$6.00	\$0.01	0.00	16
Salt-marsh Caterpillars	30,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	621,000	14,400	0.023	\$12.00	\$0.28	0.00	0
Bandedwinged Whitefly	15,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	9,000	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	312,500	7,500	0.012	\$6.00	\$0.07	0.10	1,055
Cutworms	151,000	23,000	0.037	\$4.75	\$0.18	0.00	0

Percent Lost	6.75
Total Acres	621,000
Total Bales lost	70,759
Bales lost in dollars	\$20,378,588

Est. yield/acre	810
Spray applications	1.676
Cost + loss	\$50,810,547
Cost + loss/acre	\$81.82

	Cost/ Acre
Foliar insecticide	\$10.63
At planting	\$10.65
Bt use fees	\$18.75
Eradication	\$3.85
Scouting	\$5.12
Total	\$49.00

Table 19b. North Carolina Conventional Varieties. Cotton Insect Losses 2001.

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	334,000	309,000	1.850	\$7.80	\$14.43	8.00	45,090
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	334,000	0	0.000	N/A	0.00	0.00	0
Lygus	334,000	22,000	0.066	\$4.00	\$0.26	0.10	564
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	3,000	100	0.000	\$13.00	\$0.00	0.00	0
Thrips, early season	334,000	176,000	0.685	\$4.80	\$3.29	0.60	3,382
Beet Armyworm	650	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	3,250	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	16,250	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	334,000	400	0.001	\$8.25	\$0.01	1.86	10,483
Grasshoppers	17,500	300	0.001	\$6.00	\$0.01	0.00	9
Salt-marsh Caterpillars	14,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	334,000	4,500	0.013	\$12.00	\$0.16	0.00	0
Bandedwinged Whitefly	7,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	5,000	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	163,000	4,500	0.013	\$6.00	\$0.08	0.10	550
Cutworms	81,000	12,000	0.036	\$4.75	\$0.17	0.00	0

Percent Lost	10.66
Total Acres	334,000
Total Bales lost	60,078
Bales lost in dollars	\$17,302,402

Est. yield/acre	810
Spray applications	2.667
Cost + loss	\$30,243,102
Cost + loss/acre	\$90.55

	Cost/ Acre
Foliar insecticide	\$18.42
At planting	\$10.64
Bt use fees	\$0.00
Eradication	\$3.85
Scouting	\$5.84
Total	\$38.74

Table 20. Oklahoma. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	100000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	190,000	60,000	0.316	\$10.50	\$3.32	2.00	6,230
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	190,000	135,000	0.853	\$6.00	5.12	3.00	9,346
Lygus	15,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	10,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	3,000	500	0.003	\$11.75	\$0.03	0.00	12
Thrips, early season	190,000	100,000	0.526	\$6.00	\$3.16	0.75	2,336
Beet Armyworm	2,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	1,000	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	150,000	7,350	0.039	\$8.00	\$0.31	0.79	2,459
Grasshoppers	100,000	1,000	0.005	\$8.00	\$0.04	0.13	410
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	100,000	15,000	0.079	\$7.75	\$0.61	0.39	1,230
Bandedwinged Whitefly	100,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	190,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	30,000	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	7.07
Total Acres	190,000
Total Bales lost	22,024
Bales lost in dollars	\$6,342,827

Est. yield/acre	575
Spray applications	1.820
Cost + loss	\$14,519,252
Cost + loss/acre	\$76.42

	Cost/ Acre
Foliar insecticide	\$12.58
At planting	\$2.02
Bt use fees	\$11.26
Eradication	\$13.75
Scouting	\$3.42
Total	\$43.03

Table 21. South Carolina. Cotton Insect Losses 2001.

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	280,000	190,000	0.983	\$9.00	\$8.84	2.90	16,415
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	25,000	5,000	0.017	\$8.50	\$0.15	0.17	977
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	15,000	750	0.004	\$13.00	\$0.05	0.16	879
Thrips, early season	250,000	55,000	0.228	\$5.00	\$1.14	1.72	9,771
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	115,000	100,000	0.517	\$9.00	\$4.66	0.79	4,495
Grasshoppers	25,000	15,000	0.103	\$10.00	\$1.03	0.17	977
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	150,000	20,000	0.083	\$10.00	\$0.83	1.03	5,863
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	1,000	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	50,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	10,000	1,000	0.003	\$10.00	\$0.03	0.03	195

Percent Lost	6.98
Total Acres	290,000
Total Bales lost	39,572
Bales lost in dollars	\$11,396,700

Est. yield/acre	643
Spray applications	1.938
Cost + loss	\$28,566,825
Cost + loss/acre	\$98.51

	Cost/ Acre
Foliar insecticide	\$16.73
At planting	\$15.45
Bt use fees	\$17.07
Eradication	\$5.20
Scouting	\$4.76
Total	\$59.21

Table 22. Tennessee. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	470888	530888	0.704	\$7.28	\$5.12	0.20	2,253
Bollworm/budworm	465,649	93,800	0.154	\$11.24	\$1.73	0.55	6,262
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	10,000	2,000	0.002	\$9.00	0.01	0.01	89
Lygus	536,303	373,185	0.932	\$8.94	\$8.33	0.93	10,507
Cotton Leafperforator	10,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	271,000	53,250	0.088	\$12.27	\$1.07	0.00	50
Thrips, early season	536,303	467,203	0.768	\$6.76	\$5.19	0.22	2,549
Beet Armyworm	5,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	79,600	29,000	0.027	\$14.23	\$0.39	0.00	27
European Corn Borer	9,080	500	0.000	\$12.00	\$0.00	0.00	2
Stink Bugs	526,846	406,869	0.899	\$9.64	\$8.67	1.33	15,093
Grasshoppers	122,387	20,000	0.016	\$8.00	\$0.13	0.00	17
Salt-marsh Caterpillars	73,637	200	0.000	\$11.00	\$0.00	0.01	83
Aphids	486,679	152,300	0.250	\$12.20	\$3.06	0.01	98
Bandedwinged Whitefly	205,238	0	0.000	N/A	\$0.00	0.00	17
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	120,000	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	135,550	0	0.000	N/A	\$0.00	0.00	1
Western Flower Thrips	200,800	180,000	0.148	\$10.25	\$1.52	0.01	80
Cutworms	188,786	273,883	0.245	\$6.77	\$1.66	0.01	60

Percent Lost	3.28
Total Acres	608,000
Total Bales lost	37,187
Bales lost in dollars	\$10,709,900

Est. yield/acre	762
Spray applications	4.235
Cost + loss	\$63,032,616
Cost + loss/acre	\$103.67

	Cost/ Acre
Foliar insecticide	\$36.90
At planting	\$7.79
Bt use fees	\$18.98
Eradication	\$19.14
Scouting	\$3.24
Total	\$86.06

Table 23. Texas Summary. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	831937	458500	0.308	\$7.35	\$2.26	0.27	23,157
Bollworm/budworm	2,189,530	507,837	0.111	\$9.19	\$1.02	0.36	30,273
Pink Bollworm	2,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	3,739,593	811,477	0.207	\$4.52	0.94	0.18	14,952
Lygus	1,167,960	115,300	0.030	\$9.29	\$0.28	0.16	13,833
Cotton Leafperforator	80,100	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	300,800	19,200	0.004	\$9.55	\$0.04	0.00	77
Thrips, early season	5,583,530	382,500	0.097	\$5.17	\$0.50	2.00	170,925
Beet Armyworm	2,342,000	95,000	0.022	\$14.15	\$0.31	0.10	8,888
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	283,154	87,850	0.019	\$6.69	\$0.13	0.06	5,462
Grasshoppers	524,271	69,000	0.019	\$7.82	\$0.15	0.05	4,339
Salt-marsh Caterpillars	516,000	12,650	0.003	\$6.97	\$0.02	0.00	0
Aphids	3,065,437	404,200	0.089	\$6.62	\$0.59	0.44	37,687
Bandedwinged Whitefly	2,254,000	30,000	0.008	\$11.92	\$0.10	0.00	83
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	32,900	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	254,537	200	0.000	\$15.40	\$0.00	0.00	20
Western Flower Thrips	254,537	1,000	0.000	\$9.00	\$0.00	0.00	10
Cutworms	127,500	14,500	0.003	\$6.80	\$0.02	0.00	0

Percent Lost	3.63
Total Acres	4,644,530
Total Bales lost	309,707
Bales lost in dollars	\$89,195,735

Est. yield/acre	445
Spray applications	0.919
Cost + loss	\$184,341,305
Cost + loss/acre	\$39.69

	Cost/ Acre
Foliar insecticide	\$6.35
At planting	\$1.41
Bt use fees	\$1.70
Eradication	\$9.05
Scouting	\$1.98
Total	\$20.49

Table 23a. Texas Upper Coastal Bend. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	265000	238500	3.150	\$7.24	\$22.81	2.00	13,250
Bollworm/budworm	265,000	185,000	0.698	\$8.87	\$6.19	2.00	13,250
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	265,000	198,750	0.750	\$3.91	2.93	0.00	0
Lygus	265,000	31,800	0.120	\$8.21	\$0.99	0.00	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	25,000	1,000	0.004	\$8.75	\$0.03	0.00	0
Thrips, early season	265,000	132,500	0.750	\$5.44	\$4.08	1.00	6,625
Beet Armyworm	79,500	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	106,000	66,250	0.250	\$6.67	\$1.67	0.60	3,975
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	200,000	2,650	0.010	\$6.97	\$0.07	0.00	0
Aphids	132,500	47,700	0.180	\$6.31	\$1.14	0.50	3,313
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	7,500	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	7,500	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	11,600	0	0.000	N/A	\$0.00	0.00	0
Cutworms	26,500	3,000	0.011	\$6.43	\$0.07	0.00	0

Percent Lost	6.10
Total Acres	265,000
Total Bales lost	40,413
Bales lost in dollars	\$11,638,800

Est. yield/acre	734
Spray applications	5.923
Cost + loss	\$27,636,923
Cost + loss/acre	\$104.29

	Cost/ Acre
Foliar insecticide	\$39.97
At planting	\$6.35
Bt use fees	\$8.64
Eradication	\$0.00
Scouting	\$5.40
Total	\$60.37

Table 23b. Texas Lower Coastal Bend. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	126000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/budworm	449,593	179,837	0.400	\$8.77	\$3.51	1.00	9,835
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	449,593	301,227	0.871	\$3.91	3.41	0.00	0
Lygus	44,960	8,000	0.018	\$8.21	\$0.15	0.00	0
Cotton Leafperforator	15,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	135,000	3,000	0.007	\$8.75	\$0.06	0.00	0
Thrips, early season	449,593	90,000	0.200	\$5.44	\$1.09	0.00	0
Beet Armyworm	25,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	54,000	21,000	0.047	\$6.67	\$0.31	0.12	1,181
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	314,000	10,000	0.022	\$6.97	\$0.16	0.00	0
Aphids	390,000	220,000	0.489	\$6.31	\$3.09	2.60	25,594
Bandedwinged Whitefly	24,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	25,400	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	15,600	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	20,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	51,000	6,500	0.014	\$6.43	\$0.09	0.00	0

Percent Lost	3.72
Total Acres	449,593
Total Bales lost	36,610
Bales lost in dollars	\$10,543,636

Est. yield/acre	587
Spray applications	2.068
Cost + loss	\$30,421,708
Cost + loss/acre	\$67.66

	Cost/ Acre
Foliar insecticide	\$11.85
At planting	\$1.05
Bt use fees	\$3.37
Eradication	\$23.14
Scouting	\$4.80
Total	\$44.21

Table 23c. Texas Northern Rolling Plains. Cotton Insect Losses 2001.

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	420,000	50,000	0.106	\$10.25	\$1.08	0.48	3,150
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	520,000	80,000	0.154	\$5.90	0.91	0.50	3,250
Lygus	4,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	15,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	15,000	5,000	0.010	\$9.10	\$0.09	0.01	75
Thrips, early season	200,000	40,000	0.077	\$4.10	\$0.32	0.00	25
Beet Armyworm	80,000	40,000	0.092	\$15.00	\$1.38	0.09	600
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	6,000	600	0.001	\$9.50	\$0.01	0.00	30
Grasshoppers	63,000	28,000	0.059	\$7.00	\$0.41	0.18	1,181
Salt-marsh Caterpillars	2,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	80,000	15,000	0.043	\$8.32	\$0.36	0.05	300
Bandedwinged Whitefly	30,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	4,000	200	0.000	\$15.40	\$0.01	0.00	20
Western Flower Thrips	8,000	1,000	0.002	\$9.00	\$0.02	0.00	10
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	1.33
Total Acres	520,000
Total Bales lost	8,641
Bales lost in dollars	\$2,488,680

Est. yield/acre	220
Spray applications	0.544
Cost + loss	\$11,410,460
Cost + loss/acre	\$21.94

	Cost/ Acre
Foliar insecticide	\$4.59
At planting	\$0.25
Bt use fees	\$1.77
Eradication	\$10.30
Scouting	\$0.25
Total	\$17.16

Table 23d. Texas High Plains. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	150000	15000	0.006	\$7.85	\$0.05	0.02	914
Bollworm/budworm	220,000	50,000	0.020	\$10.75	\$0.21	0.02	894
Pink Bollworm	2,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	1,650,000	15,000	0.006	\$5.50	0.03	0.13	6,703
Lygus	850,000	75,000	0.038	\$9.75	\$0.38	0.27	13,813
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	25,000	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	3,800,000	85,000	0.034	\$5.00	\$0.17	3.15	162,094
Beet Armyworm	2,040,000	50,000	0.020	\$13.75	\$0.27	0.16	8,288
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	15,000	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	250,000	20,000	0.008	\$9.00	\$0.07	0.02	1,016
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	2,000,000	60,000	0.024	\$8.00	\$0.19	0.16	8,125
Bandedwinged Whitefly	2,100,000	20,000	0.009	\$12.50	\$0.12	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	3.92
Total Acres	2,535,000
Total Bales lost	201,845
Bales lost in dollars	\$58,131,450

Est. yield/acre	489
Spray applications	0.164
Cost + loss	\$91,009,825
Cost + loss/acre	\$35.90

	Cost/ Acre
Foliar insecticide	\$1.48
At planting	\$1.38
Bt use fees	\$0.55
Eradication	\$8.00
Scouting	\$1.55
Total	\$12.97

Table 23e. Texas Far West. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	110,000	10	0.000	\$5.00	\$0.00	0.00	0
Bollworm/budworm	21,000	1,000	0.004	\$10.00	\$0.04	0.02	100
Pink Bollworm	38,000	16,200	0.073	\$9.44	\$0.69	0.04	225
Cotton Fleahopper	38,000	5,075	0.011	\$6.39	\$0.07	0.09	541
Lygus	2,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	3,000	80	0.000	\$6.00	\$0.00	0.00	0
Beet Armyworm	2,500	500	0.001	\$12.00	\$0.01	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	58,600	0	0.000	N/A	\$0.00	0.06	347
Grasshoppers	50,000	2,000	0.008	\$8.00	\$0.07	0.01	59
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	0	0	0.000	N/A	\$0.00	0.00	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	6,600	2,640	0.005	\$24.00	\$0.13	0.01	39
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	0.23
Total Acres	487,500
Total Bales lost	1,311
Bales lost in dollars	\$377,711

Est. yield/acre	233
Spray applications	0.103
Cost + loss	\$5,801,110
Cost + loss/acre	\$11.90

	Cost/ Acre
Foliar insecticide	\$1.01
At planting	\$0.49
Bt use fees	\$2.93
Eradication	\$6.65
Scouting	\$0.04
Total	\$11.12

Table 23f. Texas Lower Rio Grande Valley. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	214937	150000	2.443	\$7.50	\$18.32	2.40	8,597
Bollworm/budworm	214,937	35,000	0.163	\$8.00	\$1.30	0.30	1,075
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	200,000	150,000	0.698	\$6.00	4.19	0.19	667
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	50,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	100,000	10,000	0.047	\$10.00	\$0.47	0.00	0
Thrips, early season	214,937	0	0.000	N/A	\$0.00	0.00	0
Beet Armyworm	100,000	5,000	0.023	\$10.00	\$0.23	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	214,937	60,000	0.279	\$6.00	\$1.67	0.05	179
Bandedwinged Whitefly	100,000	10,000	0.070	\$11.00	\$0.77	0.02	83
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	214,937	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	214,937	0	0.000	N/A	\$0.00	0.00	0
Cutworms	50,000	5,000	0.023	\$7.50	\$0.17	0.00	0

Percent Lost	2.96
Total Acres	214,937
Total Bales lost	10,601
Bales lost in dollars	\$3,053,168

Est. yield/acre	314
Spray applications	3.745
Cost + loss	\$10,867,988
Cost + loss/acre	\$50.56

	Cost/ Acre
Foliar insecticide	\$27.12
At planting	\$1.63
Bt use fees	\$3.00
Eradication	\$0.00
Scouting	\$4.61
Total	\$36.36

Table 23g. Texas Southern Rolling Plains. Cotton Insect Losses 2001.

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	600,000	1,000	0.003	\$9.50	\$0.02	0.26	1,653
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	580,000	6,500	0.011	\$7.00	0.08	0.25	1,598
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leafperforator	100	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	580,000	5,000	0.009	\$5.00	\$0.04	0.10	639
Beet Armyworm	17,500	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	100,154	0	0.000	N/A	\$0.00	0.04	276
Grasshoppers	179,271	13,000	0.045	\$8.50	\$0.38	0.31	1,976
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	180,000	0	0.000	N/A	\$0.00	0.00	0
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	12,500	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	0.96
Total Acres	580,000
Total Bales lost	6,142
Bales lost in dollars	\$1,768,900

Est. yield/acre	267
Spray applications	0.067
Cost + loss	\$9,282,750
Cost + loss/acre	\$16.00

	Cost/ Acre
Foliar insecticide	\$0.53
At planting	\$0.00
Bt use fees	\$1.60
Eradication	\$10.30
Scouting	\$0.52
Total	\$12.95

Table 23h. Texas Northern Blacklands. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	76000	55000	0.688	\$7.50	\$5.16	0.48	396
Bollworm/budworm	20,000	7,000	0.088	\$15.00	\$1.31	0.50	417
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	75,000	60,000	1.500	\$4.50	6.75	3.28	2,734
Lygus	4,000	500	0.006	\$6.50	\$0.04	0.03	21
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	800	200	0.003	\$14.00	\$0.04	0.00	2
Thrips, early season	74,000	30,000	0.375	\$4.50	\$1.69	1.85	1,542
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	2,000	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	32,000	8,000	0.150	\$6.50	\$0.98	0.20	167
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	68,000	1,500	0.019	\$7.00	\$0.13	0.21	177
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	6.55
Total Acres	80,000
Total Bales lost	5,455
Bales lost in dollars	\$1,571,100

Est. yield/acre	400
Spray applications	2.828
Cost + loss	\$3,711,650
Cost + loss/acre	\$46.40

	Cost/ Acre
Foliar insecticide	\$16.09
At planting	\$4.88
Bt use fees	\$2.42
Eradication	\$0.00
Scouting	\$3.38
Total	\$26.76

Table 23i. Texas Southern Blacklands. Cotton Insect Losses 2001.

Pest	acres infested	acres treated	# insect appls	Cost of 1 applic	cost/ acre	% red	Bales lost
Boll weevil	90,000	90,000	1.500	\$8.50	\$12.75	0.40	450
Bollworm/budworm	22,000	14,000	0.233	\$7.50	\$1.75	0.20	220
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	90,000	88,000	2.933	\$5.50	\$16.13	4.60	5,175
Lygus	12,000	2,000	0.022	\$6.00	\$0.13	0.03	30
Cotton Leafperforator	10,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips, early season	75,000	40,000	0.444	\$5.00	\$2.22	0.33	375
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	0	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	15,000	10,000	0.089	\$9.00	\$0.80	0.03	38
Salt-marsh Caterpillars	5,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	20,000	3,000	0.033	\$6.00	\$0.20	0.09	100
Bandedwinged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	5.68
Total Acres	90,000
Total Bales lost	6,388
Bales lost in dollars	\$1,839,600

Est. yield/acre	470
Spray applications	5.256
Cost + loss	\$7,747,100
Cost + loss/acre	\$86.08

	Cost/ Acre
Foliar insecticide	\$33.99
At planting	\$4.00
Bt use fees	\$6.40
Eradication	\$19.50
Scouting	\$1.75
Total	\$65.64

Table 24. Virginia. Cotton Insect Losses 2001.

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	1.569	\$8.00	\$12.55	0.00	0
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.00	0
Lygus	50,000	1,000	0.010	\$8.00	\$0.08	0.25	481
Cotton Leafperforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	1,000	600	0.006	\$12.00	\$0.07	0.00	0
Thrips, early season	103,000	103,000	1.200	\$5.50	\$6.60	0.82	1,586
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Corn Borer	200	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	0	0	0.000	N/A	\$0.00	0.00	0
Salt-marsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	50,000	0	0.000	N/A	\$0.00	0.00	0
Bandedwinged Whitefly	10,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Soybean Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Cabbage Loopers	0	0	0.000	N/A	\$0.00	0.00	0
Western Flower Thrips	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	1.07
Total Acres	103,000
Total Bales lost	2,067
Bales lost in dollars	\$595,426

Est. yield/acre	900
Spray applications	2.784
Cost + loss	\$5,003,776
Cost + loss/acre	\$48.58

	Cost/ Acre
Foliar insecticide	\$19.30
At planting	\$12.00
Bt use fees	\$6.00
Eradication	\$3.85
Scouting	\$1.65
Total	\$42.80