

## COTTON INSECT LOSS ESTIMATES - 2003

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### Abstract

Arthropod pests reduced overall yield by 4.16% in 2003. There were 13.63 million acres of cotton planted in 2003, but only 12.11 million acres harvested. Oklahoma at 11.72% reported the greatest percentage loss to insects in 2003. The bollworm/budworm complex was the top pest of 2003 taking 1.39% of the 2003 crop. Almost 74% of the US crop was infested with the complex of which 86% were bollworms. No other pest exceeded 1% reduction. Fifty-three percent (53%) of US cotton acres was infested by *Lygus* which reduced yields by 0.897%. Stink bugs were third at 0.735% and cotton fleahoppers were fourth at 0.322% reduction. Thrips infested 92% of US cotton acres and reduced yields by 0.261%. Spider mites at 0.122% were 6<sup>th</sup> infesting 2.8 million acres. Aphids (0.094%) were 7<sup>th</sup> in the pest ranking and fall armyworms followed closely behind at 0.093% reduction. Boll weevils at 0.077% were 9<sup>th</sup> infesting 2.097 million acres. Silverleaf whitefly (0.053%), complete the top ten insect pests of 2003. Total cost of management and loss to insects to the 2003 crop was \$1.076 billion or \$85.51 per acre. Of those costs approximately \$59 are direct insect management costs.

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### 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.

Table 1. USDA Cotton Production. Cotton Insect Losses –2003.

State	Upland Cotton		Cotton yields in pounds lint per acre			
	Acres planted	Acres harvested	Est. Yield*	December	January	2002
Alabama	525,000	510,000	771	772	772	507
Arizona	215,000	213,000	1,225	1292	1262	1381
Arkansas	980,000	945,000	874	909	914	871
California	550,000	545,000	1,180	1341	1321	1469
Florida	94,000	92,000	780	654	678	401
Georgia	1,300,000	1,290,000	800	800	781	557
Kansas	90,000	80,000	700	637	600	539
Louisiana	525,000	510,000	955	895	955	717
Mississippi	1,110,000	1,090,000	914	916	925	808
Missouri	400,000	390,000	782	825	874	796
New Mexico	56,000	42,000	860	857	857	816
North Carolina	810,000	770,000	600	686	686	421
Oklahoma	180,000	170,000	630	565	593	557
South Carolina	220,000	218,000	800	730	727	314
Tennessee	560,000	530,000	768	772	792	741
Texas	5,600,000	4,400,000	466	458	464	538
Virginia	89,000	85,000	750	734	678	465
<b>total US</b>	<b>13,304,000</b>	<b>11,880,000</b>	<b>704</b>	<b>715</b>	<b>719</b>	<b>651</b>
<u>Pima</u>						
Arizona	3,000	3,000		1108	960	928
California	150,000	149,000		1312	1192	1,283
New Mexico	6,100	6,000		1040	880	969
Texas	20,000	20,000		985	1008	1,059
<b>total US</b>	<b>179,100</b>	<b>178,000</b>		<b>1260</b>	<b>1157</b>	<b>1,254</b>
<b>TOTAL US</b>	<b>13,483,000</b>	<b>12,058,000</b>		<b>723</b>	<b>725</b>	<b>705</b>

From: USDA-ERS Agricultural Statistical Services, January, 2004

\* Estimates from Cotton Losses Coordinators

Table 1a. USDA Cotton Production. Cotton Insect Losses –2003.

State	Area Planted			Area Harvested		
	2001	2002	2003	2001	2002	2003
<u>Upland</u>						
Alabama	610,000	590,000	525,000	605,000	585,000	510,000
Arizona	286,000	235,000	215,000	285,500	232,000	213,000
Arkansas	1,170,000	1,000,000	980,000	1,080,000	930,000	945,000
California	825,000	460,000	550,000	864,000	477,000	545,000
Florida	116,000	121,000	94,000	115,000	114,000	92,000
Georgia	1,600,000	1,450,000	1,300,000	1,490,000	1,430,000	1,290,000
Kansas	45,000	60,000	90,000	44,000	60,000	80,000
Louisiana	910,000	580,000	525,000	855,000	500,000	510,000
Mississippi	1,700,000	1,180,000	1,110,000	1,630,000	1,170,000	1,090,000
Missouri	400,000	390,000	400,000	395,000	385,000	390,000
New Mexico	82,000	60,000	56,000	77,000	56,000	42,000
North Carolina	1,060,000	980,000	810,000	975,000	945,000	770,000
Oklahoma	250,000	230,000	180,000	200,000	190,000	170,000
South Carolina	300,000	300,000	220,000	296,000	286,000	218,000
Tennessee	610,000	580,000	560,000	605,000	560,000	530,000
Texas	6,217,000	5,800,000	5,600,000	4,317,000	4,600,000	4,400,000
Virginia	105,000	100,000	89,000	104,000	100,000	85,000
<b>total US</b>	<b>16,286,000</b>	<b>14,116,000</b>	<b>13,304,000</b>	<b>13,053,000</b>	<b>12,620,000</b>	<b>11,880,000</b>
<u>Pima</u>						
Arizona	6,000	7,500	3,000	7,500	7,400	3,000
California	205,000	230,000	150,000	209,000	209,000	149,000
New Mexico	7,000	7,000	6,100	7,000	7,000	6,000
Texas	17,000	20,000	20,000	17,000	18,000	20,000
<b>total US</b>	<b>235,000</b>	<b>264,500</b>	<b>179,100</b>	<b>240,500</b>	<b>241,400</b>	<b>178,000</b>
<b>TOTAL US</b>	<b>16,521,000</b>	<b>14,380,500</b>	<b>13,483,000</b>	<b>13,293,500</b>	<b>12,861,400</b>	<b>12,058,000</b>

From: USDA-ERS Agricultural Statistical Services, January, 2004

Table 2. At Planting Insecticide Applications. Cotton Insect Losses –2003.

States	Acres treated	Cost/treated Acre	cost weighed over total acres	Total Cost
North Alabama	230,000	\$12.50	\$12.45	\$2,875,000
South Alabama	254,000	\$11.50	\$11.28	\$2,921,000
Central Alabama	79,000	\$12.50	\$12.34	\$987,500
Arizona - nonBt Cotton	5,690	\$7.95	\$0.84	\$45,236
Arizona - Bt Cotton	25,689	\$7.95	\$1.34	\$204,228
Southeast Arkansas	427,500	\$10.00	\$9.50	\$4,275,000
Northeast Arkansas	450,000	\$10.00	\$9.00	\$4,500,000
California	335,778	\$18.00	\$8.73	\$6,044,004
Florida	80,000	\$8.50	\$6.18	\$680,000
Georgia - Bt cotton	750,000	\$10.00	\$8.33	\$7,500,000
Georgia - nonBt cotton	300,000	\$10.00	\$7.69	\$3,000,000
Kansas	100,000	\$9.00	\$7.20	\$900,000
Louisiana -Bt cotton	342,888	\$9.36	\$7.35	\$3,209,432
Louisiana -nonBt cotton	65,312	\$9.37	\$7.36	\$611,973
Mississippi - Hills	320,000	\$9.70	\$7.76	\$3,104,000
Mississippi - Delta	620,000	\$10.25	\$9.08	\$6,355,000
Missouri	377,529	\$8.98	\$8.41	\$3,390,210
New Mexico	20,500	\$4.50	\$1.92	\$92,250
North Carolina- nonBt cotton	204,000	\$12.00	\$11.39	\$2,448,000
North Carolina - Bt Cotton	546,000	\$10.50	\$9.97	\$5,733,000
Oklahoma	45,000	\$9.00	\$2.44	\$405,000
South Carolina -Bt Cotton	150,000	\$16.00	\$15.38	\$2,400,000
South Carolina -nonBt Cotton	50,000	\$16.00	\$13.11	\$800,000
Tennessee - Bt cotton	416,460	\$9.40	\$8.47	\$3,914,724
Tennessee - nonBt cotton	73,440	\$9.40	\$8.46	\$690,336
Texas Lower Rio Grande Valley	30,000	\$8.50	\$1.27	\$255,000
Texas Northern Blacklands	94	\$7.00	\$0.01	\$658
Texas High Plains	610,000	\$10.00	\$2.71	\$6,100,000
Texas Southern Blacklands	68,000	\$7.00	\$4.86	\$476,000
Texas Far West	20,000	\$5.00	\$0.21	\$100,000
Texas Northern Rolling Planins	55,000	\$4.75	\$0.73	\$261,250
Texas Southern Rolling Plains	54,000	\$4.25	\$0.35	\$229,500
Texas Lower Coastal Bend	58,000	\$10.50	\$1.36	\$609,000
Texas Upper Coastal Bend	140,000	\$10.50	\$8.03	\$1,470,000
Virginia	84,000	\$12.00	\$12	\$1,008,000
<b>Allstates</b>	<b>7,387,880</b>	<b>\$6.18</b>	<b>\$3.64</b>	<b>\$45,657,098</b>

Table 3. Cotton Insect Eradication. Cotton Insect Losses –2003.

<b>State</b>	<b>Number Acres</b>	<b>Cost/treated Acre</b>	<b>Wt cost/ all acres</b>	<b>Total Cost</b>
North Alabama	231,000	\$5.00	\$5.00	\$1,155,000
South Alabama	259,000	\$5.00	\$5.00	\$1,295,000
Central Alabama	80,000	\$5.00	\$5.00	\$400,000
Arizona - nonBt Cotton	53,750	\$1.78	\$1.78	\$95,675
Arizona - Bt Cotton	152,500	\$1.78	\$1.78	\$271,450
Southeast Arkansas	450,000	\$35.00	\$35.00	\$15,750,000
Northeast Arkansas	500,000	\$18.00	\$18.00	\$9,000,000
California	0	\$0.00	\$0.00	\$0
Florida	110,000	\$6.00	\$6.00	\$660,000
Georgia - Bt cotton	900,000	\$3.75	\$3.75	\$3,375,000
Georgia - nonBt cotton	390,000	\$3.75	\$3.75	\$1,462,500
Kansas	0	\$0.00	\$0.00	\$0
Louisiana -Bt cotton	436,800	\$10.00	\$10.00	\$4,368,000
Louisiana -nonBt cotton	83,200	\$10.00	\$10.00	\$832,000
Mississippi - Hills	400,000	\$12.00	\$12.00	\$4,800,000
Mississippi - Delta	700,000	\$14.25	\$14.25	\$9,975,000
Missouri	403,214	\$12.50	\$12.50	\$5,040,175
New Mexico	48,172	\$18.00	\$18.00	\$867,096
North Carolina- nonBt cotton	215,000	\$3.75	\$3.75	\$806,250
North Carolina - Bt Cotton	575,000	\$3.75	\$3.75	\$2,156,250
Oklahoma	166,000	\$13.80	\$13.80	\$2,290,800
South Carolina -Bt Cotton	156,000	\$4.00	\$4.00	\$624,000
South Carolina -nonBt Cotton	61,000	\$4.00	\$4.00	\$244,000
Tennessee - Bt cotton	462,400	\$21.33	\$21.33	\$9,862,992
Tennessee - nonBt cotton	81,600	\$21.33	\$21.33	\$1,740,528
Texas Lower Rio Grande Valley	0	\$0.00	\$0.00	\$0
Texas Northern Blacklands	0	\$0.00	\$0.00	\$0
Texas High Plains	2,229,910	\$8.00	\$7.93	\$17,839,280
Texas Southern Blacklands	98,000	\$19.50	\$19.50	\$1,911,000
Texas Far West	360,000	\$10.83	\$8.04	\$3,898,800
Texas Northern Rolling Planins	360,000	\$10.30	\$10.30	\$3,708,000
Texas Southern Rolling Plains	653,000	\$9.50	\$9.50	\$6,203,500
Texas Lower Coastal Bend	446,684	\$23.14	\$23.14	\$10,336,268
Texas Upper Coastal Bend	182,988	\$20.20	\$20.20	\$3,696,358
Virginia	84,000	\$4.35	\$4.35	\$365,400
<b>Total US - Boll Weevil</b>	<b>11,329,218</b>	<b>\$9.96</b>	<b>\$8.98</b>	<b>\$112,810,363</b>
California Pink Bollworm	691,930	\$4.92	\$4.92	\$3,404,296
New Mexico Pink Bollworm	15,039	\$10.00	\$0.01	\$150,390
West Texas Pink Bollworm	60,000	\$20.00	\$0.10	\$1,200,000
<b>Total US - Pink Bollworm</b>	<b>766,969</b>	<b>\$6.20</b>	<b>\$0.38</b>	<b>\$4,754,686</b>
<b>Total US - Insect Eradication</b>	<b>12,096,187</b>	<b>\$9.72</b>	<b>\$9.36</b>	<b>\$117,565,049</b>

Table 4. Bt Cotton Cost. Cotton Insect Losses –2003.

State	Number acres	Bt cost/ Acre	Average/all Acres	Total Cost	% population Bollworm	Acres Bt cotton sprayed	Avg. # bworm appli to Bt cotton
Alabama, North	138,000	\$24.00	\$14.34	\$3,312,000	95	28,000	1.00
Alabama, South	194,000	\$25.00	\$18.73	\$4,850,000	85	25,000	1.00
Alabama, Central	56,000	\$28.00	\$19.60	\$1,568,000	95	2,000	1.00
Arizona, BT	152,500	\$31.90	\$23.59	\$4,864,750	80	141	0.10
Arizona, nonBt	0	\$0.00	\$0.00	\$0	80	0	0.00
Arkansas, Southeast	315,000	\$28.00	\$19.60	\$8,820,000	70	405,000	3.00
Arkansas, Northeast	400,000	\$22.00	\$17.60	\$8,800,000	80	350,000	1.50
California	7,400	\$9.00	\$0.10	\$66,600	0	0	0.00
Florida	71,500	\$27.00	\$17.55	\$1,930,500	75	100	1.00
Georgia, Bt	900,000	\$26.00	\$18.14	\$23,400,000	100	350,000	1.00
Georgia, non-Bt	0	\$0.00	\$0.00	\$0	70	0	0.00
Kansas	3	\$23.00	\$0.00	\$69	100	0	0.00
Louisiana, Bt	436,800	\$30.50	\$25.62	\$13,322,400	100	327,600	2.00
Louisiana - nonBt	0	\$0.00	\$0.00	\$0	100	0	0.00
Mississippi, Hills	340,000	\$28.00	\$23.80	\$9,520,000	95	160,000	0.50
Mississippi, Delta	595,000	\$28.00	\$23.80	\$16,660,000	93	410,000	1.00
Missouri	268,823	\$24.00	\$16.00	\$6,451,752	75	189,120	1.10
New Mexico	12,500	\$32.00	\$8.30	\$400,000	100	0	0.00
North Carolina, nonBt	0	\$0.00	\$0.00	\$0	88	0	0.00
North Carolina, Bt	575,000	\$19.10	\$13.90	\$10,982,500	100	402,500	1.10
Oklahoma	66,320	\$18.00	\$7.19	\$1,193,760	83	24,900	1.00
South Carolina, Bt	156,000	\$21.00	\$15.10	\$3,276,000	90	0	0.00
South Carolina, non-Bt	0	\$0.00	\$0.00	\$0	90	0	0.00
Tennessee, Bt	462,400	\$23.00	\$19.55	\$10,635,200	90	345,000	1.20
Tennessee, nonBt	0	\$0.00	\$0.00	\$0	90	0	0.00
Texas Lower Rio Grande Valley	8,000	\$18.00	\$0.72	\$144,000	100	0	0.00
Texas Northern Blacklands	18,000	\$21.00	\$5.82	\$378,000	85	0	0.00
Texas High Plains	292,690	\$20.00	\$2.60	\$5,853,800	100	0	1.00
Texas Southern Blacklands	76,000	\$20.00	\$15.51	\$1,520,000	80	3,000	0.20
Texas Far West	78,750	\$26.20	\$4.25	\$2,063,250	100	2,000	0.00
Texas Northern Rolling Planins	60,000	\$10.00	\$1.67	\$600,000	90	0	0.00
Texas Southern Rolling Plains	120,000	\$7.50	\$1.38	\$900,000	74	2,000	1.00
Texas Lower Coastal Bend	72,000	\$20.00	\$3.22	\$1,440,000	85	21,600	1.00
Texas Upper Coastal Bend	100,643	\$20.00	\$11.00	\$2,012,860	83	39,418	1.00
Virginia	67,200	\$12.00	\$9.60	\$806,400	99	60,000	1.00
<b>Total US</b>	<b>6,040,529</b>	<b>\$24.13</b>	<b>\$11.61</b>	<b>\$145,758,116</b>	<b>85.6</b>	<b>3,147,379</b>	<b>0.54</b>

Table 5. Application. Cotton Insect Losses –2003.

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, North	55	127,050	\$3.20	\$406,560	90	207,900	\$3.25	\$675,675
Alabama, South	25	64,750	\$3.75	\$242,813	75	194,250	\$2.50	\$485,625
Alabama, Central	20	16,000	\$3.75	\$60,000	70	56,000	\$2.50	\$140,000
Arizona, nonBT	96	51,600	\$5.02	\$259,032	13	6,988	\$6.75	\$47,166
Arizona, Bt	94	143,350	\$5.02	\$719,617	14	21,350	\$6.75	\$144,113
Arkansas, Southeast	90	405,000	\$4.00	\$1,620,000	75	337,500	\$3.00	\$1,012,500
Arkansas, Northeast	90	450,000	\$4.00	\$1,800,000	80	400,000	\$3.00	\$1,200,000
California	65	449,755	\$12.00	\$5,397,054	85	588,141	\$12.00	\$7,057,686
Florida	75	82,500	\$4.75	\$391,875	50	55,000	\$5.50	\$302,500
Georgia, Bt	55	495,000	\$3.50	\$1,732,500	75	675,000	\$3.00	\$2,025,000
Georgia, non-Bt	55	214,500	\$3.50	\$750,750	75	292,500	\$3.00	\$877,500
Kansas	10	12,500	\$19.00	\$237,500	90	112,500	\$16.00	\$1,800,000
Louisiana, Bt	90	393,120	\$3.63	\$1,427,026	55	240,240	\$3.00	\$720,720
Louisiana - nonBt	90	74,880	\$3.63	\$271,814	55	45,760	\$3.00	\$137,280
Mississippi, Hills	30	120,000	\$3.50	\$420,000	70	280,000	\$3.15	\$882,000
Mississippi, Delta	70	490,000	\$3.50	\$1,715,000	30	210,000	\$3.00	\$630,000
Missouri	47	188,624	\$4.50	\$848,806	84	338,700	\$3.20	\$1,083,839
New Mexico	94	45,282	\$14.00	\$633,944	4	1,927	\$7.00	\$13,488
North Carolina, nonBt	30	64,500	\$5.00	\$322,500	90	193,500	\$2.50	\$483,750
North Carolina, Bt	15	86,250	\$5.00	\$431,250	85	488,750	\$2.50	\$1,221,875
Oklahoma	80	132,800	\$4.00	\$531,200	45	74,700	\$3.00	\$224,100
South Carolina, Bt	15	23,400	\$5.00	\$117,000	90	140,400	\$4.00	\$561,600
South Carolina, non-Bt	15	9,150	\$5.00	\$45,750	90	54,900	\$4.00	\$219,600
Tennessee, Bt	25	115,600	\$3.50	\$404,600	85	393,040	\$3.25	\$1,277,380
Tennessee, nonBt	25	20,400	\$3.50	\$71,400	85	69,360	\$3.25	\$225,420
Texas Lower Rio Grande Valley	75	150,214	\$3.00	\$450,641	100	200,285	\$2.50	\$500,713
Texas Northern Blacklands	18	11,700	\$3.50	\$40,950	82	53,300	\$3.00	\$159,900
Texas High Plains	9	202,492	\$4.20	\$850,466	3	67,497	\$3.85	\$259,865
Texas Southern Blacklands	85	83,300	\$3.25	\$270,725	72	70,560	\$2.50	\$176,400
Texas Far West	84	409,340	\$4.42	\$1,809,283	23	111,550	\$2.51	\$279,991
Texas Northern Rolling Planins	2	7,200	\$3.50	\$25,200	10	36,000	\$3.50	\$126,000
Texas Southern Rolling Plains	3	19,590	\$4.00	\$78,360	15	97,950	\$4.00	\$391,800
Texas Lower Coastal Bend	28	125,072	\$3.50	\$437,750	72	321,612	\$2.50	\$804,031
Texas Upper Coastal Bend	30	54,896	\$3.60	\$197,627	70	128,092	\$2.50	\$320,229
Virginia	7	5,880	\$6.50	\$38,220	93	78,120	\$4.50	\$351,540
<b>Total US</b>	<b>43</b>	<b>5,349,040</b>	<b>\$2.00</b>	<b>\$10,719,003</b>	<b>53</b>	<b>6,663,459</b>	<b>\$2.14</b>	<b>\$14,259,802</b>

Table 6. Cotton Insect Monitoring Costs. Cotton Insect Losses –2003.

State	Acres Scouted	Times/wk Scouted	Wt Avg Cost over all acres	Cost: scouted acre	Total Cost
Alabama, North	200,000	1.30	\$2.58	\$5.40	\$1,080,000
Alabama, South	130,000	1.00	\$4.06	\$7.50	\$975,000
Alabama, Central	40,000	1.00	\$7.72	\$6.50	\$260,000
Arizona, nonBT	53,575	1.70	\$7.99	\$8.02	\$429,672
Arizona, Bt	144,489	1.70	\$7.38	\$7.79	\$1,125,569
Arkansas, Southeast	400,000	1.50	\$7.23	\$8.50	\$3,400,000
Arkansas, Northeast	450,000	1.20	\$6.75	\$7.00	\$3,150,000
California	600,000	1.20	\$8.26	\$9.00	\$5,400,000
Florida	90,000	1.20	\$7.65	\$9.25	\$832,500
Georgia, Bt	750,000	1.20	\$4.18	\$8.00	\$6,000,000
Georgia, non-Bt	350,000	1.50	\$6.16	\$8.50	\$2,975,000
Kansas	80,000	1.00	\$4.40	\$7.00	\$560,000
Louisiana, Bt	404,040	1.60	\$4.40	\$9.25	\$3,737,370
Louisiana – nonBt	76,960	1.60	\$7.16	\$9.25	\$711,880
Mississippi, Hills	300,000	1.50	\$7.51	\$7.00	\$2,100,000
Mississippi, Delta	650,000	1.50	\$4.97	\$7.00	\$4,550,000
Missouri	342,732	1.00	\$7.97	\$5.71	\$1,957,000
New Mexico	22,000	1.00	\$5.10	\$9.00	\$198,000
North Carolina, nonBt	183,000	1.40	\$2.81	\$7.50	\$1,372,500
North Carolina, Bt	460,000	0.70	\$5.58	\$7.50	\$3,450,000
Oklahoma	100,000	1.00	\$5.84	\$5.15	\$515,000
South Carolina, Bt	140,000	1.50	\$2.71	\$7.50	\$1,050,000
South Carolina, non-Bt	55,000	1.50	\$8.84	\$7.50	\$412,500
Tennessee, Bt	300,000	1.20	\$10.63	\$7.00	\$2,100,000
Tennessee, nonBt	53,000	1.20	\$5.00	\$7.00	\$371,000
Texas Lower Rio Grande Valley	150,000	0.50	\$4.59	\$5.00	\$750,000
Texas Northern Blacklands	49,000	1.00	\$4.03	\$4.50	\$220,500
Texas High Plains	500,000	1.10	\$2.12	\$4.75	\$2,375,000
Texas Southern Blacklands	60,000	1.00	\$2.86	\$5.25	\$315,000
Texas Far West	60,000	1.30	\$1.25	\$12.50	\$750,000
Texas Northern Rolling Planins	25,000	1.00	\$0.63	\$4.00	\$100,000
Texas Southern Rolling Plains	100,000	1.00	\$0.75	\$6.00	\$600,000
Texas Lower Coastal Bend	384,148	1.20	\$0.33	\$5.50	\$2,112,814
Texas Upper Coastal Bend	155,540	1.50	\$6.28	\$8.50	\$1,322,090
Virginia	5,000	1.50	\$4.88	\$8.50	\$42,500
<b>Total US</b>	<b>7,858,484</b>	<b>1.25</b>	<b>\$4.56</b>	<b>\$7.30</b>	<b>\$57,398,987</b>



Table 7. Summary All States. Cotton Insect Losses –2003.

<b>Pest</b>	<b>Acres infested</b>	<b>Acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	2,096,889	1,410,386	0.168	\$6.06	\$1.02	0.077	21,706
Bollworm/Budworm	9,241,324	5,119,257	0.764	\$8.98	\$6.86	1.394	391,772
Pink Bollworm	461,687	100,132	0.027	\$15.00	\$0.40	0.021	5,983
Cotton Fleahopper	5,190,820	1,294,553	0.168	\$6.42	\$1.08	0.322	90,573
Lygus	6,653,375	3,763,701	0.655	\$8.68	\$5.69	0.897	252,288
Cotton Leaf Perforator	220,173	13,151	0.001	\$8.80	\$0.01	0.000	47
Spider Mites	2,800,749	864,033	0.080	\$22.46	\$1.79	0.122	34,367
Thrips	11,504,430	3,418,043	0.290	\$6.34	\$1.84	0.261	73,408
Beet Armyworm	1,267,902	269,129	0.025	\$15.69	\$0.39	0.032	9,110
Fall Armyworm	2,091,205	839,113	0.085	\$9.87	\$0.84	0.093	26,235
European Cornborer	289,838	0	0.000	N/A	\$0.00	0.000	1
Stink Bugs	6,711,557	2,914,175	0.355	\$7.38	\$2.62	0.735	206,657
Grasshoppers	1,554,003	109,750	0.010	\$8.29	\$0.09	0.013	3,766
Saltmarsh Caterpillars	755,604	12,191	0.001	\$7.00	\$0.01	0.000	5
Aphids	8,735,232	1,482,796	0.121	\$10.17	\$1.23	0.094	26,539
Banded Winged Whitefly	1,403,154	30,045	0.002	\$9.63	\$0.02	0.007	1,972
Silverleaf Whitefly (Bemesia)	1,016,946	526,136	0.065	\$30.02	\$1.95	0.053	15,010
Loopers	1,492,581	137,128	0.010	\$8.78	\$0.09	0.007	1,895
Southern Armyworms	534,000	4,000	0.000	\$7.75	\$0.00	0.000	0
Other Insects	839,088	358,053	0.042	\$8.54	\$0.36	0.027	7,729
Cutworms	1,715,050	1,320,345	0.103	\$2.84	\$0.29	0.004	1,159

Percent Lost	4.16
Total Acres	12,556,433
Total Bales lost	1,170,223
Bales lost in dollars	\$337,024,194

Est. yield/acre	704
Spray applications	2.973
Cost + loss	\$1,076,350,071
Cost + loss/acre	\$85.72

	Cost/Acre
Foliar insecticide	\$26.57
At planting	\$6.18
Bt use fees	\$11.61
Eradication	\$9.96
Scouting	\$4.56
Total	\$58.88

Table 8. Alabama Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>Acres infested</b>	<b>Acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	570,000	120,000	0.221	\$7.30	\$1.61	2.57	33,949
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	90,000	0	0.000	N/A	0.00	0.00	0
Lygus	570,000	210,000	0.565	\$5.83	\$3.29	1.14	15,112
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	180,000	85,000	0.164	\$9.80	\$1.61	0.81	10,725
Thrips	570,000	95,000	0.182	\$4.34	\$0.79	0.00	0
Beet Armyworm	35,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	220,000	0	0.000	N/A	\$0.00	0.21	2,844
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	549,000	211,000	0.688	\$6.83	\$4.70	2.01	26,656
Grasshoppers	33,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	570,000	32,000	0.061	\$9.34	\$0.57	0.12	1,564
Banded Winged Whitefly	11,000	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	60,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	199,000	4,000	0.007	\$7.75	\$0.05	0.00	0
Leaf Footed Bug	50,000	0	0.000	N/A	\$0.00	0.00	0
Cutworms	45,000	78,000	0.137	\$3.37	\$0.46	0.00	0

Percent Lost	6.86
Total Acres	570,000
Total Bales lost	90,850
Bales lost in dollars	\$26,164,890

Est. yield/acre	771
Spray applications	2.025
Cost + loss	\$55,305,240
Cost + loss/acre	\$97.03

	Cost/ Acre
Foliar insecticide	\$13.09
At planting	\$11.90
Bt use fees	\$17.07
Eradication	\$5.00
Scouting	\$4.06
Total	\$51.12

Table 8a. Alabama North. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/Budworm	231,000	60,000	0.286	\$7.80	\$2.23	3.500	21,897
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	231,000	160,000	1.177	\$5.80	\$6.83	1.300	8,133
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	180,000	85,000	0.405	\$9.80	\$3.97	1.714	10,725
Thrips	231,000	90,000	0.429	\$4.30	\$1.84	0.000	0
Beet Armyworm	35,000	0	0.000	N/A	\$0.00	0.000	0
Fall Armyworm	210,000	0	0.000	N/A	\$0.00	0.455	2,844
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	210,000	0	0.000	N/A	\$0.00	0.000	0
Grasshoppers	3,000	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	231,000	30,000	0.143	\$9.30	\$1.33	0.250	1,564
Banded Winged Whitefly	10,000	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	50,000	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	35,000	60,000	0.260	\$3.50	\$0.91	0.000	0

Percent Lost	7.22
Total Acres	231,000
Total Bales lost	45,163
Bales lost in dollars	\$13,006,890

Est. yield/acre	790
Spray applications	2.699
Cost + loss	\$25,380,190
Cost + loss/acre	\$109.87

	Cost/ Acre
Foliar insecticide	\$17.11
At planting	\$12.45
Bt use fees	\$14.34
Eradication	\$5.00
Scouting	\$4.68
Total	\$53.56

Table 8b. Alabama Central. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/Budworm	80,000	10,000	0.125	\$6.75	\$0.84	2.500	3,958
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	80,000	30,000	0.375	\$5.50	\$2.06	1.000	1,583
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	3,000	0.038	\$4.75	\$0.18	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 Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	80,000	30,000	0.375	\$4.75	\$1.78	1.500	2,375
Grasshoppers	25,000	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	80,000	0	0.000	N/A	\$0.00	0.000	0
Banded Winged Whitefly	1,000	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	5,000	0	0.000	N/A	\$0.00	0.000	0
Southern Armyworms	5,000	0	0.000	N/A	\$0.00	0.000	0
Other Insects	0	0	0.000	N/A	\$0.00	0.000	0
Cutworms	5,000	10,000	0.125	\$2.00	\$0.25	0.000	0

Percent Lost	5.00
Total Acres	80,000
Harvested acres	
Total Bales lost	7,917
Bales lost in dollars	\$2,280,000

Est. yield/acre	750
Spray applications	1.038
Cost + loss	\$5,904,750
Cost + loss/acre	\$73.81

	Cost/ Acre
Foliar insecticide	\$5.12
At planting	\$12.34
Bt use fees	\$19.60
Eradication	\$5.00
Scouting	\$3.25
Total	\$45.31

Table 8c. Alabama South. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/Budworm	259,000	50,000	0.193	\$6.75	\$1.30	1.500	8,094
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.000	0
Cotton Fleahopper	50,000	0	0.000	N/A	\$0.00	0.000	0
Lygus	259,000	20,000	0.077	\$6.75	\$0.52	1.000	5,396
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	259,000	2,000	0.008	\$5.50	\$0.04	0.000	0
Beet Armyworm	0	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 Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	259,000	181,000	1.398	\$7.00	\$9.78	4.500	24,281
Grasshoppers	5,000	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.000	0
Aphids	259,000	2,000	0.008	\$10.00	\$0.08	0.000	0
Banded Winged Whitefly	0	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	5,000	0	0.000	N/A	\$0.00	0.000	0
Southern Armyworms	194,000	4,000	0.015	\$7.75	\$0.12	0.000	0
Leaf Footed Bug	50,000	0	0.000	N/A	\$0.00	0.000	0
Cutworms	5,000	8,000	0.031	\$4.10	\$0.13	0.000	0

Percent Lost	7.00
Total Acres	259,000
Total Bales lost	37,771
Bales lost in dollars	\$10,878,000

Est. yield/acre	760
Spray applications	1.730
Cost + loss	\$24,020,300
Cost + loss/acre	\$92.74

	Cost/ Acre
Foliar insecticide	\$11.97
At planting	\$11.28
Bt use fees	\$18.73
Eradication	\$5.00
Scouting	\$3.76
Total	\$50.74

Table 9. Arizona Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/Budworm	108,102	12,309	0.054	\$13.59	\$0.73	0.130	881
Pink Bollworm	185,312	36,113	0.420	\$15.31	\$6.43	0.610	4,145
Cotton Fleahopper	152,509	22,042	0.059	\$10.50	0.62	0.134	909
Lygus	199,024	177,997	1.962	\$17.40	\$34.15	3.475	23,602
Cotton Leaf Perforator	59,473	3,151	0.014	\$15.00	\$0.21	0.005	33
Spider Mites	55,139	22,186	0.102	\$17.95	\$1.83	0.037	251
Thrips	170,211	33,150	0.131	\$9.78	\$1.29	0.154	1,047
Beet Armyworm	99,313	17,040	0.068	\$12.36	\$0.84	0.060	405
Fall Armyworm	18,614	1,289	0.002	\$10.00	\$0.02	0.000	2
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	110,720	27,468	0.105	\$13.10	\$1.37	0.144	977
Grasshoppers	4,303	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	30,804	191	0.000	N/A	\$0.00	0.001	5
Aphids	13,281	774	0.004	\$12.00	\$0.05	0.000	3
Banded Winged Whitefly	77,567	2,578	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemisia)	199,839	169,858	1.318	\$27.53	\$36.28	0.991	6,732
Loopers	63,660	628	0.001	\$15.00	\$0.02	0.006	44
Western Yellowstriped Armyworm	2,628	293	0.000	\$15.00	\$0.01	0.000	0
Striped Flea Beetle	195,000	3,500	0.008	\$12.00	\$0.10	0.000	0
Darkling Beetles	4,000	1,000	0.002	\$12.00	\$0.03	0.000	0

Percent Lost	5.75
Total Acres	206,250
Total Bales lost	39,035
Bales lost in dollars	\$11,242,126

Est. yield/acre	1,225
Spray applications	4.251
Cost + loss	\$35,582,521
Cost + loss/acre	\$172.52

	Cost/ Acre
Foliar insecticide	\$83.96
At planting	\$1.21
Bt use fees	\$23.52
Eradication	\$1.78
Scouting	\$7.54
Total	\$118.01

Table 9a. Arizona Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/Budworm	75,583	1,938	0.013	\$10.50	\$0.13	0.069	346
Pink Bollworm	136,937	0	0.000	N/A	\$0.00	0.030	149
Cotton Fleahopper	115,052	17,065	0.062	\$10.50	0.65	0.137	686
Lygus	149,641	131,512	1.983	\$17.40	\$34.51	3.647	18,332
Cotton Leaf Perforator	41,620	0	0.000	N/A	\$0.00	0.000	0
Spider Mites	40,042	14,845	0.092	\$17.95	\$1.66	0.034	173
Thrips	124,859	24,344	0.129	\$9.14	\$1.18	0.138	695
Beet Armyworm	73,578	7,943	0.032	\$11.30	\$0.36	0.049	245
Fall Armyworm	14,247	953	0.000	N/A	\$0.00	0.000	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	81,381	20,021	0.102	\$12.94	\$1.33	0.143	719
Grasshoppers	3,319	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	22,374	191	0.000	N/A	\$0.00	0.000	0
Aphids	8,578	572	0.004	\$12.00	\$0.05	0.000	2
Banded Winged Whitefly	57,915	1,906	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemisia)	149,588	127,814	1.341	\$27.53	\$36.92	0.994	4,994
Loopers	46,887	191	0.000	\$15.00	\$0.00	0.000	0
Western Yellowstriped Armyworm	1,956	125	0.000	N/A	\$0.00	0.000	0
Striped Flea Beetle	145,000	2,500	0.008	\$12.00	\$0.10	0.000	0
Darkling Beetles	3,000	500	0.002	\$12.00	\$0.02	0.000	0

Percent Lost	5.24
Total Acres	152,500
Total Bales lost	26,342
Bales lost in dollars	\$7,586,441

Est. yield/acre	1,223
Spray applications	3.769
Cost + loss	\$25,766,922
Cost + loss/acre	\$168.96

	Cost/ Acre
Foliar insecticide	\$76.91
At planting	\$1.34
Bt use fees	\$31.81
Eradication	\$1.78
Scouting	\$7.38
Total	\$119.22

Table 9b. Arizona non-Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.000	0
Bollworm/Budworm	32,519	10,371	0.170	\$14.25	\$2.42	0.303	535
Pink Bollworm	48,375	36,113	1.612	\$15.31	\$24.69	2.264	3,996
Cotton Fleahopper	37,457	4,977	0.051	\$10.50	0.53	0.126	223
Lygus	49,383	46,485	1.903	\$17.40	\$33.11	2.986	5,270
Cotton Leaf Perforator	17,853	3,151	0.054	\$15.00	\$0.81	0.019	33
Spider Mites	15,097	7,341	0.130	\$17.95	\$2.33	0.044	78
Thrips	45,352	8,806	0.138	\$11.50	\$1.58	0.199	351
Beet Armyworm	25,735	9,097	0.169	\$12.94	\$2.19	0.090	160
Fall Armyworm	4,367	336	0.006	\$10.00	\$0.06	0.001	2
European Cornborer	0	0	0.000	N/A	\$0.00	0.000	0
Stink Bugs	29,339	7,447	0.112	\$13.50	\$1.52	0.146	258
Grasshoppers	984	0	0.000	N/A	\$0.00	0.000	0
Saltmarsh Caterpillars	8,430	0	0.000	N/A	\$0.00	0.003	5
Aphids	4,703	202	0.004	\$12.00	\$0.05	0.001	1
Banded Winged Whitefly	19,652	672	0.000	N/A	\$0.00	0.000	0
Silverleaf Whitefly (Bemesia)	50,251	42,044	1.252	\$27.53	\$34.45	0.984	1,737
Loopers	16,773	437	0.004	\$15.00	\$0.06	0.025	44
Western Yellowstriped Armyworm	672	168	0.002	\$15.00	\$0.02	0.000	0
Striped Flea Beetle	50,000	1,000	0.009	\$12.00	\$0.11	0.000	0
Darkling Beetles	1,000	500	0.005	\$12.00	\$0.06	0.000	0

Percent Lost	7.19
Total Acres	53,750
Total Bales lost	12,693
Bales lost in dollars	\$3,655,685

Est. yield/acre	1,229
Spray applications	5.620
Cost + loss	\$9,815,599
Cost + loss/acre	\$182.62

	Cost/ Acre
Foliar insecticide	\$103.99
At planting	\$0.84
Bt use fees	\$0.00
Eradication	\$1.78
Scouting	\$7.99
Total	\$114.60



Table 10. Arkansas Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	950,000	950,000	1.053	\$6.00	\$6.32	0.15	3,438
Bollworm/Budworm	950,000	870,000	2.716	\$9.75	\$26.48	2.51	58,073
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	350,000	20,000	0.021	\$7.50	0.16	0.01	310
Lygus	950,000	796,000	1.886	\$7.50	\$14.15	1.87	43,307
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	350,000	150,000	0.158	\$12.17	\$1.92	0.03	651
Thrips	950,000	902,000	1.084	\$6.00	\$6.51	0.20	4,609
Beet Armyworm	75,000	10,000	0.011	\$10.00	\$0.11	0.00	13
Fall Armyworm	800,000	500,000	0.726	\$10.00	\$7.26	0.37	8,658
European Cornborer	45,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	950,000	325,000	0.342	\$8.00	\$2.74	0.63	14,583
Grasshoppers	150,000	6,000	0.006	\$6.00	\$0.04	0.00	0
Saltmarsh Caterpillars	250,000	12,000	0.013	\$7.00	\$0.09	0.00	0
Aphids	600,000	200,000	0.211	\$9.00	\$1.89	0.00	0
Banded Winged Whitefly	350,000	12,000	0.013	\$9.00	\$0.11	0.00	0
Silverleaf Whitefly (Bemisia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	450,000	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	250,000	175,000	0.184	\$5.00	\$0.92	0.01	172

Percent Lost	5.77
Total Acres	950,000
Total Bales lost	133,814
Bales lost in dollars	\$38,538,450

Est. yield/acre	874
Spray applications	8.423
Cost + loss	\$161,487,050
Cost + loss/acre	\$169.99

	Cost/ Acre
Foliar insecticide	\$68.69
At planting	\$9.24
Bt use fees	\$18.55
Eradication	\$26.05
Scouting	\$6.89
Total	\$129.42

Table 10a. Arkansas Northeast. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	500,000	500,000	2.000	\$6.00	\$12.00	0.30	3,438
Bollworm/Budworm	500,000	450,000	1.800	\$9.75	\$17.55	2.00	22,917
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	100,000	20,000	0.040	\$7.50	0.30	0.01	115
Lygus	500,000	400,000	2.000	\$7.50	\$15.00	2.00	22,917
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	250,000	100,000	0.200	\$12.00	\$2.40	0.05	573
Thrips	500,000	475,000	0.950	\$6.00	\$5.70	0.30	3,438
Beet Armyworm	25,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	450,000	300,000	0.900	\$10.00	\$9.00	0.68	7,838
European Cornborer	20,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	500,000	100,000	0.200	\$8.00	\$1.60	0.25	2,865
Grasshoppers	50,000	1,000	0.002	\$6.00	\$0.01	0.00	0
Saltmarsh Caterpillars	100,000	5,000	0.010	\$7.00	\$0.07	0.00	0
Aphids	300,000	100,000	0.200	\$9.00	\$1.80	0.00	0
Banded Winged Whitefly	150,000	5,000	0.010	\$9.00	\$0.09	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	175,000	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	150,000	100,000	0.200	\$5.00	\$1.00	0.02	172

Percent Lost	5.61
Total Acres	500,000
Total Bales lost	64,270
Bales lost in dollars	\$18,509,700

Est. yield/acre	850
Spray applications	8.512
Cost + loss	\$77,220,700
Cost + loss/acre	\$154.44

	Cost/ Acre
Foliar insecticide	\$66.52
At planting	\$9.00
Bt use fees	\$17.60
Eradication	\$18.00
Scouting	\$6.30
Total	\$117.42

Table 10b. Arkansas Southeast. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	450,000	450,000	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	450,000	420,000	3.733	\$9.75	\$36.40	3.00	35,156
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	250,000	0	0.000	N/A	0.00	0.02	195
Lygus	450,000	396,000	1.760	\$7.50	\$13.20	1.74	20,391
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	100,000	50,000	0.111	\$12.50	\$1.39	0.01	78
Thrips	450,000	427,000	1.234	\$6.00	\$7.40	0.10	1,172
Beet Armyworm	50,000	10,000	0.022	\$10.00	\$0.22	0.00	13
Fall Armyworm	350,000	200,000	0.533	\$10.00	\$5.33	0.07	820
European Cornborer	25,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	450,000	225,000	0.500	\$8.00	\$4.00	1.00	11,719
Grasshoppers	100,000	5,000	0.011	\$6.00	\$0.07	0.00	0
Saltmarsh Caterpillars	150,000	7,000	0.016	\$7.00	\$0.11	0.00	0
Aphids	300,000	100,000	0.222	\$9.00	\$2.00	0.00	0
Banded Winged Whitefly	200,000	7,000	0.016	\$9.00	\$0.14	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	275,000	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	100,000	75,000	0.167	\$5.00	\$0.83	0.00	0

Percent Lost	5.93
Total Acres	450,000
Total Bales lost	69,544
Bales lost in dollars	\$20,028,750

Est. yield/acre	900
Spray applications	8.325
Cost + loss	\$84,266,350
Cost + loss/acre	\$187.26

	Cost/ Acre
Foliar insecticide	\$71.09
At planting	\$9.50
Bt use fees	\$19.60
Eradication	\$35.00
Scouting	\$7.56
Total	\$142.75

Table 11. California Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	0	0	0.000	N/A	\$0.00	0.00	0
Pink Bollworm	20,375	1,019	0.001	\$15.00	\$0.02	0.003	68
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.00	0
Lygus	537,244	268,222	0.465	\$25.00	\$11.63	1.16	26,862
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	604,400	470,089	0.815	\$30.00	\$24.46	0.35	8,059
Thrips	570,822	335,778	0.485	\$15.00	\$7.28	0.08	1,903
Beet Armyworm	470,089	167,889	0.315	\$18.00	\$5.68	0.27	6,268
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	604,400	335,778	0.485	\$18.00	\$8.73	0.35	8,059
Banded Winged Whitefly	50,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	570,822	335,778	0.728	\$33.00	\$24.02	0.33	7,611
Loopers	67,156	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	2.55
Total Acres	691,930
Total Bales lost	58,829
Bales lost in dollars	\$16,942,753

Est. yield/acre	1,180
Spray applications	3.296
Cost + loss	\$85,068,794
Cost + loss/acre	\$122.94

	Cost/ Acre
Foliar insecticide	\$81.82
At planting	\$8.73
Bt use fees	\$0.10
Eradication	\$0.00
Scouting	\$7.80
Total	\$98.46

Table 12. Florida Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	27,500	5,000	0.045	\$14.00	\$0.64	1.03	2,819
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	1,000	0	0.000	N/A	0.00	0.00	0
Lygus	20,000	7,000	0.064	\$7.00	\$0.45	0.40	1,100
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	500	0	0.000	N/A	\$0.00	0.00	0
Thrips	23,000	5,000	0.045	\$7.25	\$0.33	0.21	575
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	300	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	100,000	90,000	0.982	\$10.50	\$10.31	3.09	8,500
Grasshoppers	500	100	0.001	\$10.75	\$0.01	0.00	6
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	110,000	1,500	0.014	\$9.50	\$0.13	0.40	1,100
Banded Winged Whitefly	2,000	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	5,000	0	0.000	N/A	\$0.00	0.00	0
Clouded Plant Bugs	5,400	1,600	0.015	\$7.50	\$0.11	0.12	338
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	5.25
Total Acres	110,000
Total Bales lost	14,438
Bales lost in dollars	\$4,158,000

Est. yield/acre	780
Spray applications	1.165
Cost + loss	\$9,577,575
Cost + loss/acre	\$87.07

	Cost/ Acre
Foliar insecticide	\$11.97
At planting	\$6.18
Bt use fees	\$17.55
Eradication	\$6.00
Scouting	\$7.57
Total	\$49.27

Table 13. Georgia Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	1,050,000	550,000	0.814	\$8.71	\$7.09	1.36	36,458
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	275,000	140,000	0.140	\$6.00	\$0.84	0.04	1,146
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	1,150,000	65,000	0.050	\$5.00	\$0.25	0.09	2,396
Beet Armyworm	60,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	125,000	15,000	0.012	\$9.00	\$0.10	0.01	260
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	1,150,000	900,000	1.395	\$7.00	\$9.77	2.67	71,875
Grasshoppers	65,000	6,000	0.005	\$7.00	\$0.03	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	575,000	30,000	0.023	\$8.00	\$0.19	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	6,000	0	0.000	N/A	\$0.00	0.00	0
Loopers	65,000	6,500	0.005	\$10.00	\$0.05	0.00	0
Southern Armyworms	250,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	11,000	2,000	0.002	\$7.00	\$0.01	0.00	0

Percent Lost	4.17
Total Acres	1,290,000
Total Bales lost	112,135
Bales lost in dollars	\$32,295,000

Est. yield/acre	800
Spray applications	2.445
Cost + loss	\$103,658,500
Cost + loss/acre	\$80.36

	Cost/ Acre
Foliar insecticide	\$18.33
At planting	\$8.14
Bt use fees	\$18.14
Eradication	\$3.75
Scouting	\$6.96
Total	\$55.32

Table 13a. Georgia Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	700,000	300,000	0.333	\$8.00	\$2.67	0.78	14,583
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	100,000	0.156	\$6.00	\$0.93	0.04	833
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	800,000	50,000	0.056	\$5.00	\$0.28	0.09	1,667
Beet Armyworm	50,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	100,000	10,000	0.011	\$9.00	\$0.10	0.01	208
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	850,000	700,000	1.556	\$7.00	\$10.89	2.83	53,125
Grasshoppers	50,000	5,000	0.006	\$7.00	\$0.04	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	450,000	25,000	0.028	\$8.00	\$0.22	0.00	0
Banded Winged Whitefly	0	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	50,000	5,000	0.006	\$10.00	\$0.06	0.00	0
Southern Armyworms	200,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	9,000	1,000	0.001	\$7.00	\$0.01	0.00	0

Percent Lost	3.76
Total Acres	900,000
Total Bales lost	70,417
Bales lost in dollars	\$20,280,000

Est. yield/acre	800
Spray applications	2.151
Cost + loss	\$74,227,000
Cost + loss/acre	\$82.47

	Cost/ Acre
Foliar insecticide	\$15.19
At planting	\$8.33
Bt use fees	\$26.00
Eradication	\$3.75
Scouting	\$6.67
Total	\$59.94

Table 13b. Georgia non-Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	350,000	250,000	1.923	\$9.00	\$17.31	2.69	21,875
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	75,000	40,000	0.103	\$6.00	\$0.62	0.04	313
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	350,000	15,000	0.038	\$5.00	\$0.19	0.09	729
Beet Armyworm	10,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	25,000	5,000	0.013	\$9.00	\$0.12	0.01	52
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	300,000	200,000	1.026	\$7.00	\$7.18	2.31	18,750
Grasshoppers	15,000	1,000	0.003	\$7.00	\$0.02	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	125,000	5,000	0.013	\$8.00	\$0.10	0.00	0
Banded Winged Whitefly	0	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	15,000	1,500	0.004	\$10.00	\$0.04	0.00	0
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	2,000	1,000	0.003	\$7.00	\$0.02	0.00	0

Percent Lost	5.13
Total Acres	390,000
Total Bales lost	41,719
Bales lost in dollars	\$12,015,000

Est. yield/acre	800
Spray applications	3.124
Cost + loss	\$29,431,500
Cost + loss/acre	\$75.47

	Cost/ Acre
Foliar insecticide	\$25.59
At planting	\$7.69
Bt use fees	\$0.00
Eradication	\$3.75
Scouting	\$7.63
Total	\$44.66



Table 14. Kansas Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	10,000	5,000	0.040	\$16.00	\$0.64	0.40	833
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	100,000	10,000	0.080	\$8.00	0.64	4.00	8333
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	70,000	20,000	0.160	\$8.00	\$1.28	1.12	2333
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	5.52
Total Acres	125,000
Total Bales lost	11,500
Bales lost in dollars	\$3,312,000

Est. yield/acre	700
Spray applications	0.280
Cost + loss	\$5,092,069
Cost + loss/acre	\$40.74

	Cost/ Acre
Foliar insecticide	\$2.56
At planting	\$7.20
Bt use fees	\$0.00
Eradication	\$0.00
Scouting	\$4.48
Total	\$14.24

Table 15. Louisiana Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	117000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	450,320	390,000	1.560	\$7.53	\$11.74	1.25	15,285
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	104,000	104,000	0.020	\$3.13	0.06	0.01	123
Lygus	491,400	439,400	2.535	\$6.13	\$15.54	2.08	25,495
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	65,000	32,500	0.084	\$16.00	\$1.35	0.01	77
Thrips	559,000	247,000	0.475	\$4.63	\$2.20	0.16	1,977
Beet Armyworm	54,600	13,000	0.013	\$3.50	\$0.04	0.00	0
Fall Armyworm	83,200	18,200	0.026	\$8.35	\$0.22	0.03	392
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	364,000	234,000	0.720	\$6.88	\$4.95	0.91	11,208
Grasshoppers	2,600	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	5,200	0	0.000	N/A	\$0.00	0.00	0
Aphids	358,800	208,000	0.400	\$6.13	\$2.45	0.03	423
Banded Winged Whitefly	26,000	2,600	0.003	\$3.50	\$0.01	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	158,600	52,000	0.075	\$8.46	\$0.63	0.05	561
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	67,184	63,336	0.061	\$1.50	\$0.09	0.00	0

Percent Lost	4.53
Total Acres	520,000
Total Bales lost	55,540
Bales lost in dollars	\$15,995,637

Est. yield/acre	955
Spray applications	5.971
Cost + loss	\$63,221,863
Cost + loss/acre	\$121.58

	Cost/ Acre
Foliar insecticide	\$39.29
At planting	\$7.35
Bt use fees	\$25.62
Eradication	\$10.00
Scouting	\$8.56
Total	\$90.82

Table 15a. Louisiana Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	98280	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	371,280	327,600	1.500	\$6.95	\$10.43	0.92	9,515
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	87,360	87,360	0.020	\$3.13	0.06	0.01	104
Lygus	412,776	369,096	2.535	\$6.13	\$15.54	2.08	21,549
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	54,600	27,300	0.094	\$16.00	\$1.50	0.01	65
Thrips	469,560	207,480	0.475	\$4.63	\$2.20	0.16	1,671
Beet Armyworm	45,864	10,920	0.013	\$3.50	\$0.04	0.00	0
Fall Armyworm	69,888	15,288	0.026	\$9.37	\$0.25	0.03	332
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	305,760	196,560	0.720	\$6.88	\$4.95	0.93	9,613
Grasshoppers	2,184	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	4,368	0	0.000	N/A	\$0.00	0.00	0
Aphids	301,392	174,720	0.400	\$6.13	\$2.45	0.03	358
Banded Winged Whitefly	21,840	2,184	0.003	\$3.50	\$0.01	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	133,224	43,680	0.075	\$9.50	\$0.71	0.05	474
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	56,784	54,600	0.063	\$1.50	\$0.09	0.00	0

Percent Lost	4.21
Total Acres	436,800
Total Bales lost	43,680
Bales lost in dollars	\$12,579,921

Est. yield/acre	965
Spray applications	5.923
Cost + loss	\$53,918,918
Cost + loss/acre	\$123.44

	Cost/ Acre
Foliar insecticide	\$38.24
At planting	\$7.35
Bt use fees	\$30.50
Eradication	\$10.00
Scouting	\$8.56
Total	\$94.64

Table 15b. Louisiana non-Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	18720	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	79,040	62,400	1.875	\$9.95	\$18.66	3.04	5,770
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	16,640	16,640	0.020	\$3.13	0.06	0.01	19
Lygus	78,624	70,304	2.535	\$6.13	\$15.54	2.08	3,946
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	10,400	5,200	0.034	\$16.00	\$0.55	0.01	12
Thrips	89,440	39,520	0.475	\$4.63	\$2.20	0.16	306
Beet Armyworm	8,736	2,080	0.013	\$3.50	\$0.04	0.00	0
Fall Armyworm	13,312	2,912	0.026	\$3.00	\$0.08	0.03	61
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	58,240	37,440	0.720	\$6.88	\$4.95	0.84	1,594
Grasshoppers	416	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	832	0	0.000	N/A	\$0.00	0.00	0
Aphids	57,408	33,280	0.400	\$6.13	\$2.45	0.03	65
Banded Winged Whitefly	4,160	416	0.003	\$3.50	\$0.01	0.00	0
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	25,376	8,320	0.075	\$3.00	\$0.23	0.05	87
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	10,400	8,736	0.053	\$1.50	\$0.08	0.00	0

Percent Lost	6.25
Total Acres	83,200
Total Bales lost	11,860
Bales lost in dollars	\$3,415,717

Est. yield/acre	900
Spray applications	6.228
Cost + loss	\$9,302,945
Cost + loss/acre	\$111.81

	Cost/ Acre
Foliar insecticide	\$44.85
At planting	\$7.36
Bt use fees	\$0.00
Eradication	\$10.00
Scouting	\$8.56
Total	\$70.76

Table 16. Mississippi Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	1,100,000	780,000	1.035	\$9.00	\$9.31	1.90	57,917
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	75,000	500	0.000	\$7.50	0.00	0.01	375
Lygus	1,030,000	830,000	2.181	\$8.21	\$17.90	1.79	54,425
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	1,000,000	45,000	0.055	\$12.36	\$0.68	0.36	10,958
Thrips	1,100,000	400,000	0.414	\$4.72	\$1.95	0.27	8,125
Beet Armyworm	100,000	26,200	0.024	\$9.00	\$0.21	0.08	2,350
Fall Armyworm	280,000	150,000	0.169	\$9.04	\$1.53	0.27	8,188
European Cornborer	5,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	1,100,000	410,000	0.465	\$7.30	\$3.39	0.87	26,363
Grasshoppers	70,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	63,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	1,100,000	240,000	0.258	\$8.92	\$2.30	0.20	5,975
Banded Winged Whitefly	620,000	12,000	0.015	\$10.60	\$0.16	0.02	729
Silverleaf Whitefly (Bemesia)	10,000	500	0.001	\$9.50	\$0.01	0.02	625
Loopers	270,000	68,000	0.062	\$8.84	\$0.55	0.04	1,290
Southern Armyworms	80,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	430,000	380,000	0.345	\$1.97	\$0.68	0.03	987

Percent Lost	5.86
Total Acres	1,100,000
Total Bales lost	178,306
Bales lost in dollars	\$51,352,080

Est. yield/acre	914
Spray applications	5.024
Cost + loss	\$150,967,285
Cost + loss/acre	\$137.24

	Cost/ Acre
Foliar insecticide	\$38.68
At planting	\$8.60
Bt use fees	\$23.80
Eradication	\$13.43
Scouting	\$6.05
Total	\$90.56

Table 16a. Mississippi Delta. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	700,000	560,000	1.280	\$9.00	\$11.52	2.20	44,917
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	45,000	0	0.000	N/A	0.00	0.00	0
Lygus	700,000	660,000	3.111	\$8.25	\$25.67	2.10	42,875
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	700,000	25,000	0.046	\$12.75	\$0.59	0.50	10,208
Thrips	700,000	250,000	0.393	\$4.60	\$1.81	0.30	6,125
Beet Armyworm	60,000	25,000	0.036	\$9.00	\$0.32	0.09	1,750
Fall Armyworm	150,000	90,000	0.154	\$9.00	\$1.39	0.32	6,563
European Cornborer	5,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	700,000	220,000	0.377	\$7.20	\$2.72	0.63	12,863
Grasshoppers	70,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	43,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	700,000	220,000	0.377	\$9.00	\$3.39	0.18	3,675
Banded Winged Whitefly	500,000	12,000	0.024	\$10.60	\$0.25	0.04	729
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	180,000	60,000	0.086	\$8.80	\$0.75	0.04	840
Southern Armyworms	30,000	0	0.000	N/A	\$0.00	0.00	0
Other Insects	0	0	0.000	N/A	\$0.00	0.00	0
Cutworms	230,000	280,000	0.400	\$2.00	\$0.80	0.03	537

Percent Lost	6.42
Total Acres	700,000
Total Bales lost	131,081
Bales lost in dollars	\$37,751,280

Est. yield/acre	950
Spray applications	6.285
Cost + loss	\$109,743,035
Cost + loss/acre	\$156.78

	Cost/ Acre
Foliar insecticide	\$49.22
At planting	\$9.08
Bt use fees	\$23.80
Eradication	\$14.25
Scouting	\$6.50
Total	\$102.85

Table 16b. Mississippi Hills. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	400,000	220,000	0.605	\$9.00	\$5.45	1.30	13,000
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	30,000	500	0.001	\$7.50	0.01	0.04	375
Lygus	330,000	170,000	0.553	\$7.80	\$4.31	1.16	11,550
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	300,000	20,000	0.070	\$11.90	\$0.83	0.08	750
Thrips	400,000	150,000	0.450	\$4.90	\$2.21	0.20	2,000
Beet Armyworm	40,000	1,200	0.003	\$9.00	\$0.03	0.06	600
Fall Armyworm	130,000	60,000	0.195	\$9.10	\$1.77	0.16	1,625
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	400,000	190,000	0.618	\$7.40	\$4.57	1.35	13,500
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	20,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	400,000	20,000	0.050	\$7.90	\$0.40	0.23	2,300
Banded Winged Whitefly	120,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	10,000	500	0.003	\$9.50	\$0.02	0.06	625
Loopers	90,000	8,000	0.020	\$9.10	\$0.18	0.05	450
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	200,000	100,000	0.250	\$1.90	\$0.48	0.05	450

Percent Lost	4.72
Total Acres	400,000
Total Bales lost	47,225
Bales lost in dollars	\$13,600,800

Est. yield/acre	850
Spray applications	2.817
Cost + loss	\$41,224,250
Cost + loss/acre	\$103.06

	Cost/ Acre
Foliar insecticide	\$20.25
At planting	\$7.76
Bt use fees	\$23.80
Eradication	\$12.00
Scouting	\$5.25
Total	\$69.06

Table 17. Missouri Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	1,301	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	367,445	243,879	1.149	\$12.38	\$14.23	2.87	25,030
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	113,594	14,741	0.037	\$6.50	\$0.24	0.28	2,456
Lygus	390,207	346,417	1.804	\$8.29	\$14.96	3.65	31,812
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	104,110	29,918	0.089	\$17.17	\$1.53	0.41	3,535
Thrips	403,214	66,813	0.166	\$3.19	\$0.53	1.51	13,166
Beet Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	171,691	84,544	0.231	\$11.00	\$2.54	0.50	4,344
European Cornborer	9,538	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	147,845	867	0.002	\$6.50	\$0.01	0.52	4,540
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	1,300	0	0.000	N/A	\$0.00	0.00	0
Aphids	149,146	66,335	0.165	\$8.33	\$1.37	0.40	3,483
Banded Winged Whitefly	112,987	867	0.001	\$8.00	\$0.01	0.14	1,222
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	26,880	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	200,306	125,299	0.311	\$3.33	\$1.03	0.00	0

Percent Lost	10.27
Total Acres	403,214
Total Bales lost	89,589
Bales lost in dollars	\$25,801,492

Est. yield/acre	782
Spray applications	3.954
Cost + loss	\$57,335,208
Cost + loss/acre	\$142.20

	Cost/ Acre
Foliar insecticide	\$36.44
At planting	\$8.41
Bt use fees	\$16.00
Eradication	\$12.50
Scouting	\$4.85
Total	\$78.21



Table 18. New Mexico Summary. Cotton Insect Losses –2003.

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	26,000	8,000	0.166	\$18.00	\$2.99	0.54	520
Pink Bollworm	4,000	0	0.000	N/A	\$0.00	0.25	240
Cotton Fleahopper	0	0	0.000	N/A	0.00	0.00	0
Lygus	11,000	2,300	0.048	\$7.00	\$0.33	0.18	176
Cotton Leaf Perforator	700	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips	7,000	0	0.000	N/A	\$0.00	0.02	22
Beet Armyworm	600	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	9,000	300	0.006	\$18.00	\$0.11	0.19	180
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	900	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	1.18
Total Acres	48,172
Total Bales lost	1,138
Bales lost in dollars	\$327,658

Est. yield/acre	860
Spray applications	0.220
Cost + loss	\$2,050,504
Cost + loss/acre	\$42.57

	Cost/ Acre
Foliar insecticide	\$3.44
At planting	\$1.92
Bt use fees	\$8.30
Eradication	\$18.00
Scouting	\$4.11
Total	\$35.76

Table 19. North Carolina Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	790,000	689,000	1.474	\$6.97	\$10.27	2.02	37,707
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	430,000	0	0.000	N/A	0.00	0.00	0
Lygus	790,000	30,000	0.038	\$5.90	\$0.22	0.96	17,794
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	40,000	400	0.001	\$13.00	\$0.01	0.00	0
Thrips	790,000	469,000	0.594	\$4.89	\$2.90	0.16	3,048
Beet Armyworm	8,000	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	214,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	790,000	20,000	0.025	\$6.25	\$0.16	0.89	16,603
Grasshoppers	130,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	395,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	790,000	38,500	0.036	\$7.50	\$0.27	0.00	0
Banded Winged Whitefly	29,000	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	4,000	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	80,000	40,000	0.051	\$3.50	\$0.18	0.00	0

Percent Lost	4.03
Total Acres	790,000
Total Bales lost	75,152
Bales lost in dollars	\$21,643,727

Est. yield/acre	600
Spray applications	2.218
Cost + loss	\$59,661,452
Cost + loss/acre	\$75.52

	Cost/ Acre
Foliar insecticide	\$14.01
At planting	\$10.36
Bt use fees	\$13.90
Eradication	\$3.75
Scouting	\$6.10
Total	\$48.12

Table 19b. North Carolina Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	575,000	475,000	0.909	\$6.75	\$6.13	1.30	17,629
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	215,000	0	0.000	N/A	0.00	0.00	0
Lygus	575,000	15,000	0.026	\$5.90	\$0.15	1.20	16,273
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	20,000	200	0.000	\$13.00	\$0.00	0.00	0
Thrips	575,000	340,000	0.591	\$4.50	\$2.66	0.15	2,034
Beet Armyworm	6,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	8,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	107,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	575,000	20,000	0.035	\$6.25	\$0.22	1.00	13,560
Grasshoppers	120,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	280,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	575,000	28,500	0.050	\$7.50	\$0.37	0.00	0
Banded Winged Whitefly	21,000	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	3,000	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	60,000	30,000	0.052	\$3.50	\$0.18	0.00	0

Percent Lost	3.65
Total Acres	575,000
Total Bales lost	49,496
Bales lost in dollars	\$14,254,710

Est. yield/acre	610
Spray applications	1.663
Cost + loss	\$42,168,185
Cost + loss/acre	\$73.34

	Cost/ Acre
Foliar insecticide	\$9.72
At planting	\$9.97
Bt use fees	\$19.10
Eradication	\$3.75
Scouting	\$6.00
Total	\$48.55

Table 19b. North Carolina non-Bt. Cotton Insect Losses –2003.

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	215,000	214,000	2.986	\$7.15	\$21.35	3.96	20,079
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	215,000	0	0.000	N/A	0.00	0.00	0
Lygus	215,000	15,000	0.070	\$5.90	\$0.41	0.30	1,521
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	20,000	200	0.001	\$13.00	\$0.01	0.00	0
Thrips	215,000	129,000	0.600	\$5.90	\$3.54	0.20	1,014
Beet Armyworm	2,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	3,000	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	107,000	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	215,000	0	0.000	N/A	\$0.00	0.60	3,042
Grasshoppers	10,000	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	115,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	215,000	10,000	0.000	N/A	\$0.00	0.00	0
Banded Winged Whitefly	8,000	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	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	20,000	10,000	0.047	\$3.50	\$0.16	0.00	0

Percent Lost	5.06
Total Acres	215,000
Total Bales lost	25,656
Bales lost in dollars	\$7,389,017

Est. yield/acre	575
Spray applications	3.703
Cost + loss	\$17,493,267
Cost + loss/acre	\$81.36

	Cost/ Acre
Foliar insecticide	\$25.48
At planting	\$11.39
Bt use fees	\$0.00
Eradication	\$3.75
Scouting	\$6.38
Total	\$47.00

Table 20. Oklahoma Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	166,000	19,256	0.174	\$9.75	\$1.70	2.66	6,899
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	166,000	154,380	1.767	\$6.00	\$10.60	5.66	14,681
Lygus	41,500	16,600	0.100	\$7.50	\$0.75	0.25	648
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	16,600	0	0.000	N/A	\$0.00	0.00	0
Thrips	166,000	144,200	1.129	\$6.00	\$6.78	2.67	6,925
Beet Armyworm	16,600	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	8,300	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	67,728	7,470	0.045	\$9.00	\$0.41	0.34	878
Grasshoppers	16,600	4,150	0.008	\$7.00	\$0.06	0.08	215
Saltmarsh Caterpillars	8,300	0	0.000	N/A	\$0.00	0.00	0
Aphids	19,920	2,656	0.016	\$8.50	\$0.14	0.06	156
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	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	83,000	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	11.72
Total Acres	166,000
Total Bales lost	30,403
Bales lost in dollars	\$8,756,065

Est. yield/acre	630
Spray applications	3.240
Cost + loss	\$16,550,829
Cost + loss/acre	\$99.70

	Cost/ Acre
Foliar insecticide	\$20.42
At planting	\$2.44
Bt use fees	\$7.19
Eradication	\$13.80
Scouting	\$3.10
Total	\$46.96

Table 21. South Carolina Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	217,000	170,000	1.777	\$8.00	\$14.22	4.41	19,917
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	21,000	0	0.000	N/A	0.00	0.00	0
Lygus	100,000	10,000	0.046	\$8.00	\$0.37	0.65	2,917
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	12,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	205,000	28,000	0.129	\$6.00	\$0.77	0.00	0
Beet Armyworm	5,000	500	0.004	\$13.00	\$0.05	0.00	0
Fall Armyworm	2,800	300	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	150,000	140,000	1.290	\$8.50	\$10.97	3.04	13,750
Grasshoppers	14,000	1,200	0.011	\$8.00	\$0.09	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	100,000	5,000	0.023	\$10.00	\$0.23	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	3,000	150	0.000	\$8.00	\$0.00	0.00	0

Percent Lost	8.09
Total Acres	217,000
Total Bales lost	36,583
Bales lost in dollars	\$10,536,000

Est. yield/acre	800
Spray applications	3.281
Cost + loss	\$25,136,100
Cost + loss/acre	\$115.83

	Cost/ Acre
Foliar insecticide	\$26.70
At planting	\$14.75
Bt use fees	\$15.10
Eradication	\$4.00
Scouting	\$6.74
Total	\$67.28

Table 21a. South Carolina Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	156,000	109,000	0.908	\$8.00	\$7.27	3.00	9,750
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	15,000	0	0.000	N/A	0.00	0.00	0
Lygus	70,000	10,000	0.064	\$8.00	\$0.51	0.90	2,917
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	150,000	20,000	0.128	\$6.00	\$0.77	0.00	0
Beet Armyworm	3,000	200	0.001	\$13.00	\$0.02	0.00	0
Fall Armyworm	2,000	200	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	120,000	130,000	1.667	\$8.50	\$14.17	3.85	12,500
Grasshoppers	10,000	1,000	0.013	\$8.00	\$0.10	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	70,000	3,000	0.019	\$10.00	\$0.19	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	2,000	100	0.000	N/A	\$0.00	0.00	0

Percent Lost	7.74
Total Acres	156,000
Total Bales lost	25,167
Bales lost in dollars	\$7,248,000

Est. yield/acre	800
Spray applications	2.801
Cost + loss	\$18,190,200
Cost + loss/acre	\$116.60

	Cost/ Acre
Foliar insecticide	\$23.03
At planting	\$15.38
Bt use fees	\$21.00
Eradication	\$4.00
Scouting	\$6.73
Total	\$70.14

Table 21b. South Carolina non-Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	61,000	61,000	4.000	\$8.00	\$32.00	8.00	10,167
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	6,000	0	0.000	N/A	0.00	0.00	0
Lygus	30,000	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	2,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	55,000	8,000	0.131	\$6.00	\$0.79	0.00	0
Beet Armyworm	2,000	300	0.010	\$13.00	\$0.13	0.00	0
Fall Armyworm	800	100	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	30,000	10,000	0.328	\$8.50	\$2.79	0.98	1,250
Grasshoppers	4,000	200	0.007	\$8.00	\$0.05	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	30,000	2,000	0.033	\$10.00	\$0.33	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	1,000	50	0.001	\$8.00	\$0.01	0.00	0

Percent Lost	8.98
Total Acres	61,000
Total Bales lost	11,417
Bales lost in dollars	\$3,288,000

Est. yield/acre	800
Spray applications	4.509
Cost + loss	\$6,945,900
Cost + loss/acre	\$113.87

	Cost/ Acre
Foliar insecticide	\$36.09
At planting	\$13.11
Bt use fees	\$0.00
Eradication	\$4.00
Scouting	\$6.76
Total	\$59.97



Table 22. Tennessee Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	544,000	406,200	0.919	\$8.42	\$7.74	2.62	25,263
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	11,760	0	0.000	N/A	0.00	0.00	0
Lygus	544,000	411,765	1.060	\$8.25	\$8.74	0.50	4,817
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	206,000	17,640	0.036	\$12.40	\$0.44	0.01	109
Thrips	544,000	188,160	0.346	\$5.95	\$2.06	0.50	4,817
Beet Armyworm	15,500	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	270,800	35,280	0.065	\$9.00	\$0.58	0.16	1,547
European Cornborer	1,300	0	0.000	N/A	\$0.00	0.00	1
Stink Bugs	544,000	352,800	0.769	\$8.00	\$6.15	1.09	10,452
Grasshoppers	23,500	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	412,000	2,350	0.004	\$8.20	\$0.04	0.01	73
Banded Winged Whitefly	117,600	0	0.000	N/A	\$0.00	0.00	21
Silverleaf Whitefly (Bemisia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	47,000	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	370,400	341,000	0.931	\$8.50	\$7.91	0.74	7,117
Cutworms	23,560	364,560	0.670	\$1.25	\$0.84	0.00	0

Percent Lost	5.63
Total Acres	544,000
Total Bales lost	54,217
Bales lost in dollars	\$15,614,573

Est. yield/acre	768
Spray applications	4.799
Cost + loss	\$63,694,970
Cost + loss/acre	\$117.09

	Cost/ Acre
Foliar insecticide	\$34.50
At planting	\$8.47
Bt use fees	\$19.55
Eradication	\$21.33
Scouting	\$4.54
Total	\$88.38

Table 22a. Tennessee Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	462,400	345,000	0.895	\$8.25	\$7.39	2.00	16,377
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	462,400	350,000	1.060	\$8.25	\$8.74	0.50	4,094
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	175,000	15,000	0.036	\$12.40	\$0.44	0.01	93
Thrips	462,400	160,000	0.346	\$5.95	\$2.06	0.50	4,094
Beet Armyworm	13,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	230,000	30,000	0.065	\$9.00	\$0.58	0.15	1,222
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	462,400	300,000	0.779	\$8.00	\$6.23	1.10	9,007
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	2,000	0.004	\$8.20	\$0.04	0.01	62
Banded Winged Whitefly	100,000	0	0.000	N/A	\$0.00	0.00	18
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	40,000	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	315,000	290,000	0.941	\$8.50	\$8.00	0.75	6,136
Cutworms	20,000	310,000	0.670	\$1.25	\$0.84	0.00	0

Percent Lost	5.02
Total Acres	462,400
Total Bales lost	41,103
Bales lost in dollars	\$11,837,559

Est. yield/acre	773
Spray applications	4.796
Cost + loss	\$54,216,475
Cost + loss/acre	\$117.25

	Cost/ Acre
Foliar insecticide	\$34.31
At planting	\$8.47
Bt use fees	\$23.00
Eradication	\$21.33
Scouting	\$4.54
Total	\$91.65

Table 22b. Tennessee non-Bt. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	81,600	61,200	1.050	\$9.25	\$9.71	6.15	8,887
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	1,760	0	0.000	N/A	0.00	0.00	0
Lygus	81,600	61,765	1.060	\$8.25	\$8.74	0.50	723
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	31,000	2,640	0.036	\$12.40	\$0.44	0.01	16
Thrips	81,600	28,160	0.345	\$5.95	\$2.05	0.50	723
Beet Armyworm	2,500	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	40,800	5,280	0.065	\$9.00	\$0.58	0.23	325
European Cornborer	1,300	0	0.000	N/A	\$0.00	0.00	1
Stink Bugs	81,600	52,800	0.712	\$8.00	\$5.69	1.00	1,445
Grasshoppers	3,500	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	62,000	350	0.004	\$8.20	\$0.04	0.01	11
Banded Winged Whitefly	17,600	0	0.000	N/A	\$0.00	0.00	3
Silverleaf Whitefly (Bemesia)	0	0	0.000	N/A	\$0.00	0.00	0
Loopers	7,000	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	55,400	51,000	0.875	\$8.50	\$7.44	0.68	981
Cutworms	3,560	54,560	0.669	\$1.25	\$0.84	0.00	0

Percent Lost	9.08
Total Acres	81,600
Total Bales lost	13,115
Bales lost in dollars	\$3,777,014

Est. yield/acre	739
Spray applications	4.815
Cost + loss	\$9,478,495
Cost + loss/acre	\$116.16

	Cost/ Acre
Foliar insecticide	\$35.53
At planting	\$8.46
Bt use fees	\$0.00
Eradication	\$21.33
Scouting	\$4.55
Total	\$69.87

Table 23. Texas Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	1,028,588	460,386	0.234	\$6.11	\$1.43	0.19	18,268
Bollworm/Budworm	2,784,957	775,013	0.255	\$9.77	\$2.49	0.70	67,140
Pink Bollworm	252,000	63,000	0.052	\$14.89	\$0.77	0.02	1,530
Cotton Fleahopper	3,575,957	968,890	0.369	\$6.46	\$2.38	0.66	63,386
Lygus	644,000	71,500	0.025	\$7.77	\$0.19	0.01	766
Cotton Leaf Perforator	160,000	10,000	0.002	\$7.00	\$0.01	0.00	14
Spider Mites	167,000	11,300	0.002	\$9.12	\$0.02	0.00	3
Thrips	4,142,183	348,942	0.074	\$5.79	\$0.43	0.22	20,847
Beet Armyworm	328,200	34,500	0.008	\$11.74	\$0.09	0.00	75
Fall Armyworm	99,500	34,500	0.007	\$10.62	\$0.08	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	674,264	195,270	0.041	\$6.95	\$0.29	0.00	92
Grasshoppers	1,044,500	92,300	0.024	\$8.50	\$0.20	0.04	3,545
Saltmarsh Caterpillars	2,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	3,326,785	319,903	0.067	\$7.37	\$0.50	0.06	5,703
Banded Winged Whitefly	7,000	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemisia)	230,285	20,000	0.008	\$10.00	\$0.08	0.00	43
Loopers	279,285	10,000	0.002	\$8.70	\$0.02	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Darkling Beetle	211,660	10,660	0.002	\$8.64	\$0.02	0.00	275
Cutworms	522,000	92,000	0.019	\$7.55	\$0.15	0.00	0

Percent Lost	1.90
Total Acres	4,740,867
Total Bales lost	181,687
Bales lost in dollars	\$52,325,726

Est. yield/acre	466
Spray applications	1.192
Cost + loss	\$176,267,080
Cost + loss/acre	\$37.18

	Cost/ Acre
Foliar insecticide	\$9.15
At planting	\$2.00
Bt use fees	\$3.15
Eradication	\$10.04
Scouting	\$1.80
Total	\$26.14

Table 23a. Texas Upper Coastal Bend. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	182,988	60,386	0.495	\$7.50	\$3.71	1.00	4,575
Bollworm/Budworm	182,988	81,500	0.668	\$10.40	\$6.95	3.00	13,724
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	182,988	155,540	1.700	\$6.39	\$10.86	2.00	9,149
Lygus	65,000	31,000	0.169	\$7.00	\$1.19	0.00	0
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	32,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	182,988	118,942	0.650	\$5.90	\$3.83	1.00	4,575
Beet Armyworm	95,000	18,000	0.098	\$12.00	\$1.18	0.00	0
Fall Armyworm	64,000	31,000	0.169	\$10.75	\$1.82	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	182,988	92,000	0.503	\$7.00	\$3.52	0.00	0
Grasshoppers	0	0	0.000	N/A	\$0.00	0.00	0
Saltmarsh Caterpillars	2,000	0	0.000	N/A	\$0.00	0.00	0
Aphids	100,000	26,000	0.142	\$7.55	\$1.07	0.00	0
Banded Winged Whitefly	4,000	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	36,000	10,000	0.055	\$8.70	\$0.48	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	90,000	20,000	0.109	\$7.50	\$0.82	0.00	0

Percent Lost	7.00
Total Acres	182,988
Total Bales lost	32,023
Bales lost in dollars	\$9,222,595

Est. yield/acre	672
Spray applications	4.759
Cost + loss	\$24,207,754
Cost + loss/acre	\$132.29

	Cost/ Acre
Foliar insecticide	\$35.43
At planting	\$8.03
Bt use fees	\$11.00
Eradication	\$20.20
Scouting	\$7.23
Total	\$81.89

Table 23b. Texas Lower Coastal Bend. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	15,000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	446,684	348,413	1.560	\$10.20	\$15.91	3.00	27,918
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	446,684	424,350	2.185	\$6.39	\$13.96	2.00	18,612
Lygus	29,000	5,000	0.011	\$7.00	\$0.08	0.00	0
Cotton Leaf Perforator	50,000	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	223,000	0	0.000	N/A	\$0.00	0.00	0
Beet Armyworm	24,000	5,000	0.011	\$12.00	\$0.13	0.00	0
Fall Armyworm	34,000	2,000	0.004	\$9.00	\$0.04	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	245,676	98,270	0.220	\$7.00	\$1.54	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	375,000	80,403	0.180	\$7.55	\$1.36	0.00	0
Banded Winged Whitefly	3,000	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	402,000	67,000	0.150	\$7.50	\$1.12	0.00	0

Percent Lost	5.00
Total Acres	446,684
Total Bales lost	46,530
Bales lost in dollars	\$13,400,520

Est. yield/acre	789
Spray applications	4.322
Cost + loss	\$43,153,332
Cost + loss/acre	\$96.61

	Cost/ Acre
Foliar insecticide	\$34.15
At planting	\$1.36
Bt use fees	\$3.22
Eradication	\$23.14
Scouting	\$4.73
Total	\$66.61

Table 23c. Texas North Rolling Plain. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	150,000	7,000	0.019	\$10.25	\$0.20	0.08	313
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	340,000	10,000	0.028	\$6.50	\$0.18	1.70	6,375
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	360,000	6,000	0.017	\$4.50	\$0.08	0.10	375
Beet Armyworm	5,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	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	200,000	25,000	0.097	\$7.75	\$0.75	0.14	521
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	250,000	2,000	0.006	\$7.75	\$0.04	0.07	260
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
Darkling Beetles	1,500	500	0.001	\$7.00	\$0.01	0.00	2
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	2.09
Total Acres	360,000
Total Bales lost	7,845
Bales lost in dollars	\$2,259,450

Est. yield/acre	285
Spray applications	0.168
Cost + loss	\$7,382,700
Cost + loss/acre	\$20.51

	Cost/ Acre
Foliar insecticide	\$1.26
At planting	\$0.73
Bt use fees	\$1.67
Eradication	\$10.30
Scouting	\$0.28
Total	\$14.23

Table 23d. Texas High Plains. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	371,000	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	1,080,000	150,000	0.067	\$9.00	\$0.60	0.19	11,250
Pink Bollworm	170,000	30,000	0.053	\$10.75	\$0.57	0.02	885
Cotton Fleahopper	1,500,000	65,000	0.029	\$5.50	\$0.16	0.20	11,719
Lygus	500,000	5,000	0.002	\$9.75	\$0.02	0.01	651
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	3,000	0	0.000	N/A	\$0.00	0.00	0
Thrips	2,249,910	70,000	0.031	\$5.25	\$0.16	0.20	11,718
Beet Armyworm	115,000	6,000	0.003	\$11.75	\$0.03	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	675,000	35,000	0.017	\$9.50	\$0.16	0.05	2,637
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	1,700,000	55,000	0.024	\$9.25	\$0.23	0.08	4,427
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	40,000	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Darkling Beetle	210,000	10,000	0.004	\$8.75	\$0.04	0.00	273
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	0.74
Total Acres	2,249,910
Total Bales lost	43,561
Bales lost in dollars	\$12,545,490

Est. yield/acre	449
Spray applications	0.231
Cost + loss	\$49,159,820
Cost + loss/acre	\$21.85

	Cost/ Acre
Foliar insecticide	\$1.98
At planting	\$2.71
Bt use fees	\$2.60
Eradication	\$7.93
Scouting	\$1.06
Total	\$16.27



Table 23e. Texas Far West. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	35,600	20,000	0.062	\$7.00	\$0.43	0.06	429
Bollworm/Budworm	190,000	70,100	0.202	\$6.50	\$1.32	0.63	4,310
Pink Bollworm	77,000	33,000	0.259	\$18.85	\$4.87	0.09	644
Cotton Fleahopper	145,000	8,000	0.016	\$5.13	\$0.08	0.30	2,056
Lygus	30,000	30,000	0.155	\$8.00	\$1.24	0.01	85
Cotton Leaf Perforator	20,000	10,000	0.021	\$7.00	\$0.14	0.00	14
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips	160,000	0	0.000	N/A	\$0.00	0.03	204
Beet Armyworm	200	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	5,000	0.010	\$5.00	\$0.05	0.01	87
Grasshoppers	2,500	1,500	0.007	\$5.30	\$0.04	0.00	4
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	31,500	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)	30,000	20,000	0.082	\$10.00	\$0.82	0.01	43
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	485,000
Total Bales lost	7,876
Bales lost in dollars	\$2,268,268

Est. yield/acre	413
Spray applications	0.815
Cost + loss	\$13,450,843
Cost + loss/acre	\$27.73

	Cost/ Acre
Foliar insecticide	\$9.01
At planting	\$0.21
Bt use fees	\$4.25
Eradication	\$8.04
Scouting	\$1.55
Total	\$23.06

Texas 23f. Texas Lower Rio Grande Valley. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	185,000	150,000	2,247	\$7.00	\$15.73	3.23	11,466
Bollworm/Budworm	200,285	75,000	0.374	\$8.00	\$3.00	0.75	2,660
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	200,285	65,000	0.325	\$4.50	\$1.46	0.25	887
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	50,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	100,000	10,000	0.050	\$8.50	\$0.42	0.00	0
Thrips	200,285	0	0.000	N/A	\$0.00	0.00	0
Beet Armyworm	25,000	3,500	0.026	\$9.00	\$0.24	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	200,285	140,000	0.699	\$6.50	\$4.54	0.00	0
Banded Winged Whitefly	0	0	0.000	N/A	\$0.00	0.00	0
Silverleaf Whitefly (Bemesia)	200,285	0	0.000	N/A	\$0.00	0.00	0
Loopers	200,285	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	30,000	5,000	0.025	\$8.50	\$0.21	0.00	0

Percent Lost	4.23
Total Acres	200,285
Total Bales lost	15,013
Bales lost in dollars	\$4,323,704

Est. yield/acre	575
Spray applications	3.746
Cost + loss	\$10,599,954
Cost + loss/acre	\$52.92

	Cost/ Acre
Foliar insecticide	\$25.60
At planting	\$1.27
Bt use fees	\$0.72
Eradication	\$0.00
Scouting	\$3.74
Total	\$31.34

Table 23g. Texas Southern Rolling Plains. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	90,000	90,000	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	483,000	23,000	0.035	\$10.00	\$0.35	0.74	4,528
Pink Bollworm	5,000	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	603,000	95,000	0.145	\$7.50	\$1.09	1.39	8,480
Lygus	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Leaf Perforator	40,000	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	0	0	0.000	N/A	\$0.00	0.00	0
Thrips	603,000	20,000	0.031	\$5.00	\$0.15	0.00	0
Beet Armyworm	60,000	0	0.000	N/A	\$0.00	0.00	0
Fall Armyworm	0	0	0.000	N/A	\$0.00	0.00	0
European Cornborer	0	0	0.000	N/A	\$0.00	0.00	0
Stink Bugs	200,000	0	0.000	N/A	\$0.00	0.00	0
Grasshoppers	160,000	30,000	0.055	\$8.50	\$0.47	0.06	375
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	653,000	8,000	0.012	\$7.00	\$0.09	0.15	918
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	0	0	0.000	N/A	\$0.00	0.00	0
Southern Armyworms	0	0	0.000	N/A	\$0.00	0.00	0
Darkling Beetles	160	160	0.000	\$7.00	\$0.00	0.00	0
Cutworms	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	2.34
Total Acres	653,000
Total Bales lost	14,301
Bales lost in dollars	\$4,118,719

Est. yield/acre	314
Spray applications	0.279
Cost + loss	\$13,457,339
Cost + loss/acre	\$20.61

	Cost/ Acre
Foliar insecticide	\$2.15
At planting	\$0.35
Bt use fees	\$1.38
Eradication	\$9.50
Scouting	\$0.92
Total	\$14.30

Table 23h. Texas Northern Blacklands. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	51,000	50,000	1.385	\$8.00	\$11.08	1.65	1,339
Bollworm/Budworm	30,000	3,000	0.046	\$10.00	\$0.46	0.97	788
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	60,000	57,000	1.315	\$5.50	\$7.23	2.77	2,250
Lygus	12,000	0	0.000	N/A	\$0.00	0.02	15
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	2,000	1,000	0.015	\$11.50	\$0.18	0.00	3
Thrips	65,000	64,000	0.985	\$5.75	\$5.66	1.50	1,219
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	4,000	0	0.000	N/A	\$0.00	0.01	5
Grasshoppers	7,000	800	0.012	\$7.00	\$0.09	0.01	9
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	9,000	3,000	0.046	\$7.00	\$0.32	0.03	23
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	6.95
Total Acres	65,000
Total Bales lost	5,649
Bales lost in dollars	\$1,626,840

Est. yield/acre	500
Spray applications	3.805
Cost + loss	\$3,852,348
Cost + loss/acre	\$59.27

	Cost/ Acre
Foliar insecticide	\$25.02
At planting	\$0.01
Bt use fees	\$5.82
Eradication	\$0.00
Scouting	\$3.39
Total	\$34.24

Table 23i. Texas Southern Blacklands. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	98,000	90,000	4.592	\$4.50	\$20.66	0.25	459
Bollworm/Budworm	22,000	17,000	0.347	\$15.00	\$5.20	0.90	1,650
Pink Bollworm	0	0	0.000	N/A	\$0.00	0.00	0
Cotton Fleahopper	98,000	89,000	1.362	\$8.50	\$11.58	2.10	3,859
Lygus	8,000	500	0.005	\$10.00	\$0.05	0.01	15
Cotton Leaf Perforator	0	0	0.000	N/A	\$0.00	0.00	0
Spider Mites	5,000	300	0.003	\$22.00	\$0.07	0.00	0
Thrips	98,000	70,000	0.714	\$6.50	\$4.64	1.50	2,756
Beet Armyworm	4,000	2,000	0.020	\$16.00	\$0.33	0.04	75
Fall Armyworm	1,500	1,500	0.015	\$10.00	\$0.15	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	8,000	5,000	0.051	\$7.50	\$0.38	0.04	75
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	3,000	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	0	0	0.000	N/A	\$0.00	0.00	0

Percent Lost	4.84
Total Acres	98,000
Total Bales lost	8,889
Bales lost in dollars	\$2,560,140

Est. yield/acre	695
Spray applications	7.110
Cost + loss	\$11,002,990
Cost + loss/acre	\$112.28

	Cost/ Acre
Foliar insecticide	\$43.07
At planting	\$4.86
Bt use fees	\$15.51
Eradication	\$19.50
Scouting	\$3.21
Total	\$86.15

Table 24. Virginia Summary. Cotton Insect Losses –2003.

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b># insect appls</b>	<b>Cost of 1 applic</b>	<b>cost/ acre</b>	<b>% red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.000	N/A	\$0.00	0.00	0
Bollworm/Budworm	80,000	75,600	1.350	\$8.00	\$10.80	2.34	3,080
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	60,000	6,500	0.077	\$7.50	\$0.58	1.76	2,310
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	84,000	70,000	0.833	\$6.50	\$5.42	1.23	1,617
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	15,000	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
Saltmarsh Caterpillars	0	0	0.000	N/A	\$0.00	0.00	0
Aphids	5,000	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	5.33
Total Acres	84,000
Total Bales lost	7,007
Bales lost in dollars	\$2,018,016

Est. yield/acre	750
Spray applications	2.261
Cost + loss	\$5,651,266
Cost + loss/acre	\$67.28

	Cost/ Acre
Foliar insecticide	\$16.80
At planting	\$12.00
Bt use fees	\$9.60
Eradication	\$4.35
Scouting	\$0.51
Total	\$43.25

## Acknowledgements

### **State Coordinators**

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Arizona	–	Dr. Peter Ellsworth
California	–	Dr. Peter Goodell
Florida	–	Dr. R. K. Sprenkel
Georgia	–	Dr. Phillip Roberts
Kansas	–	Dr. Stuart Duncan
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Missouri	–	Dr. Michael Boyd
New Mexico	–	Dr. Jane Pierce
North Carolina	–	Dr. Jack Bachelier
Oklahoma	–	Dr. Miles Karner
South Carolina	–	Dr. Mitchell Roof
Tennessee	–	Dr. Scott Stewart
Texas	–	Dr. James Leser
Virginia	–	Dr. Ames Herbert

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