

# Cotton Insect Losses - 2010

Compiled for  
Cotton Foundation

Michael R. Williams  
Chairman

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Send comments to  
Michael R. Williams  
232 CR 235  
Abbeville, MS 38601-9710  
[mwilliams@entomology.msstate.edu](mailto:mwilliams@entomology.msstate.edu)

COTTON INSECT LOSSES 2010

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Michael R. Williams, Chairman  
Extension Entomologist Emeritus  
Cooperative Extension Service  
Mississippi State University  
Mississippi State, MS 39762

**State Coordinators**

**Alabama --- Dr. Timothy Reed**

**Arkansas --- Dr. Gus Lorenz**

**Arizona --- Dr. Peter Ellsworth**

**California --- Dr. Peter Goodell**

**Florida --- Dr. Clyde Smith**

**Georgia --- Dr. Phillip Roberts**

**Kansas --- Dr. Stu Duncan**

**Louisiana --- Dr. Roger Leonard**

**Mississippi --- Dr. Angus Catchot**

**Missouri --- Dr. Kelly Tindall**

**New Mexico --- Dr. Jane Pierce**

**North Carolina --- Dr. Jack Bachelier**

**Oklahoma --- Dr. Terry Pitts**

**South Carolina --- Dr. Jeremy Green**

**Tennessee --- Dr. Scott Stewart**

**Texas --- Dr. David Kern**

**Virginia --- Dr. Ames Herbert**

### **Background**

This information was provided by state coordinators and was collected from surveys of county agents, extension specialists, private consultants and research entomologists. **All data are averaged over a total reporting unit.** For example, if a unit report represents 100 acres and an 8% loss on 25 of these acres, then in the table summary this shows up as a 2% loss.  $((.08 \times 25)/100)$ . This type of averaging is used for all data reported including yields and costs of control. Because of averaging and rounding some individual state summary numbers listed as '0' are slightly larger. Costs are averaged to the nearest cent, bales and acres to the nearest whole number, other numbers are rounded to the nearest .001. Bales are calculated at 480 pounds.

### **Highlights**

**Cotton losses to arthropod pests reduced overall yields by 3.85%. These losses reflect another low estimate, reflecting a trend which began in 2000. Bollworm/budworm complex took top ranking at 1.177% loss. No other pest exceeded 1% loss. Stink bugs were ranked second at 0.716%. Lygus (0.656%) were third. Cotton fleahoppers were 4<sup>th</sup> at 0.359%; and aphids were 5<sup>th</sup> at 0.284%. Total costs and loss for insects in 2010 were \$970 million. Direct management costs for arthropods were \$56.44 per acre.**

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### Explanation of Tables

In an attempt at capturing as many of the costs of insect management as possible, the Cotton Insect Losses estimates have changed in the last few years. They were begun as a simple attempt to arrive at the 'average cost of spraying insecticide' for control of cotton arthropod pests. We still attempt to arrive at the most accurate estimate possible for spray activities, but have also added some of the other costs which are incurred in cotton insect pest management. These 'additional' costs increase the bottom line of expenditures for arthropod pest management - but also more accurately reflect true expenditures. We include 'at planting insecticide costs,' (an estimate of the cost of systemic insecticides applied at planting for control of thrips and other pests of seedling cotton) 'Bt cotton costs', (an estimate of the technology fee and the seed surcharge) 'eradication costs' (which include the maintenance fee in those states which have eradicated the weevil and other eradication projects) and 'scouting costs' to the traditional 'foliar insecticide costs'. Bales lost are also given a dollar value using 480 pound bales at the average per pound price. 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 NASS-USDA acres and yield estimates Cotton Insect Losses 2010

State	Upland Cotton		Cotton yields in pounds lint per acre			
	<u>Acres planted</u>	<u>Acres harvested</u>	<u>Est. Yield*</u>	<u>December</u>	<u>January</u>	<b>2009</b>
Alabama	340,000	337,000	603	686	684	691
Arizona	195,000	193,000	1,497	1492	1,467	1467
Arkansas	545,000	540,000	1,082	1067	1,049	797
California	124,000	123,000	1,433	1483	1,639	1714
Florida	92,000	89,000	654	782	809	646
Georgia	1,330,000	1,320,000	775	779	811	882
Kansas	51,000	49,000	780	780	784	720
Louisiana	255,000	250,000	922	864	864	725
Mississippi	420,000	415,000	990	971	983	692
Missouri	310,000	308,000	1,072	1073	1,068	960
New Mexico	47,000	46,000	1,008	1060	1,096	828
North Carolina	550,000	545,000	700	854	854	986
Oklahoma	285,000	270,000	800	788	738	792
South Carolina	202,000	201,000	840	876	872	842
Tennessee	390,000	387,000	905	862	843	857
Texas	5,550,000	5,350,000	655	716	722	644
Virginia	83,000	82,000	760	685	685	990
<b>total US</b>	<b>10,769,000</b>	<b>10,505,000</b>	<b>779</b>	<b>807</b>	<b>814</b>	<b>763</b>
<u>Pima</u>						
Arizona	2,500	2,500		960	864	1129
California	182,000	180,000		1174	1,216	1448
New Mexico	2,700	2,700		928	889	688
Texas	17,000	16,500		1015	931	863
<b>total US</b>	<b>204,200</b>	<b>201,700</b>		<b>1154</b>	<b>1,184</b>	<b>1386</b>
<b>TOTAL US</b>	<b>10,973,200</b>	<b>10,706,700</b>		<b>814</b>	<b>821</b>	<b>775</b>

Crop Production 2010 Summary Jan 2011 Agric Statistics Board NASS, USDA \*estimates from Losses coordinators

Table 1a		NASS-USDA planting and harvest acres			Cotton Insect Losses 2010		
State		Area Planted			Area Harvested		
		2008	2009	2010	2008	2009	2010
	<u>Upland</u>						
Alabama		290,000	255,000	340,000	285,000	250,000	<b>337,000</b>
Arizona		130,000	145,000	195,000	128,000	144,000	<b>193,000</b>
Arkansas		650,000	520,000	545,000	640,000	500,000	<b>540,000</b>
California		120,000	71,000	124,000	117,000	70,000	<b>123,000</b>
Florida		67,000	82,000	92,000	65,000	78,000	<b>89,000</b>
Georgia		950,000	1,000,000	1,330,000	940,000	990,000	<b>1,320,000</b>
Kansas		35,000	38,000	51,000	28,000	34,000	<b>49,000</b>
Louisiana		290,000	230,000	255,000	260,000	225,000	<b>250,000</b>
Mississippi		365,000	305,000	420,000	360,000	295,000	<b>415,000</b>
Missouri		310,000	272,000	310,000	307,000	260,000	<b>308,000</b>
New Mexico		37,000	30,500	47,000	34,000	29,000	<b>46,000</b>
North Carolina		440,000	375,000	550,000	438,000	370,000	<b>545,000</b>
Oklahoma		170,000	205,000	285,000	155,000	200,000	<b>270,000</b>
South Carolina		135,000	115,000	202,000	134,000	114,000	<b>201,000</b>
Tennessee		285,000	300,000	390,000	280,000	280,000	<b>387,000</b>
Texas		4,900,000	5,000,000	5,550,000	3,350,000	3,650,000	<b>5,350,000</b>
Virginia		65,000	64,000	83,000	64,000	63,000	<b>82,000</b>
<b>total US</b>		<b>9,239,000</b>	<b>9,007,500</b>	10,769,000	<b>7,585,000</b>	<b>7,552,000</b>	<b>10,505,000</b>
	<u>Pima</u>						
Arizona		1,000	1,700	2,500	1,000	1,700	<b>2,500</b>
California		155,000	119,000	182,000	151,000	116,000	<b>180,000</b>
New Mexico		3,000	3,000	2,700	3,000	3,000	<b>2,700</b>
Texas		16,000	18,000	17,000	15,000	17,800	<b>16,500</b>
<b>total US</b>		<b>175,000</b>	<b>141,700</b>	204,200	<b>170,000</b>	<b>138,500</b>	<b>201,700</b>
All US Cotton		<b>9,414,000</b>	<b>9,149,200</b>	<b>10,973,200</b>	<b>7,755,000</b>	<b>7,690,500</b>	<b>10,706,700</b>

Table 2

Table 2		At planting insecticide Applications		Cotton Insect Losses 2010			
States	Acres treated	weightedCost/ all acres	Cost/ treated acre	Acres treated	weightedCost/ all acres	Cost/ treated acre	Total Cost
		Seed treatments	In-furrow treatments				
North Alabama	74,450	\$6.75	\$9.00	39,707	\$4.80	\$12.00	\$1,146,534
South Alabama	153,900	\$9.50	\$10.00	64,800	\$4.80	\$12.00	\$2,316,600
Arizona	29,644	\$1.65	\$11.11	758	\$0.02	\$4.28	\$332,514
Southeast Arkansas	204,060	\$10.45	\$11.00	10,740	\$0.75	\$15.00	\$2,405,760
Northeast Arkansas	306,090	\$10.45	\$11.00	16,110	\$0.75	\$15.00	\$3,608,640
California	168,850	\$8.25	\$15.00	122,800	\$6.00	\$15.00	\$4,374,750
Florida	81,700	\$8.36	\$8.80	55,900	\$6.37	\$9.80	\$1,266,780
Georgia	463,750	\$3.50	\$10.00	795,000	\$6.30	\$10.50	\$12,985,000
Kansas	0	\$0.00	\$0.00	2,400	\$0.49	\$9.80	\$23,520
Louisiana	234,060	\$11.88	\$12.64	49,800	\$2.10	\$10.50	\$3,481,418
Mississippi – Delta	323,000	\$8.55	\$9.00	34,000	\$1.20	\$12.00	\$3,315,000
Mississippi - Hills	78,200	\$8.28	\$9.00	8,500	\$1.20	\$12.00	\$805,800
Missouri	254,200	\$12.52	\$15.27	89,900	\$4.54	\$15.67	\$5,290,367
New Mexico	47,918	\$2.40	\$3.00	12,579	\$2.06	\$9.80	\$267,025
North Carolina	341,760	\$7.88	\$12.32	373,800	\$11.20	\$16.00	\$10,191,283
Oklahoma	241,352	\$3.96	\$4.50	75,358	\$2.69	\$9.80	\$1,824,594
South Carolina	100,000	\$6.00	\$12.00	75,358	\$3.69	\$9.80	\$1,938,508
Tennessee	392,000	\$8.62	\$8.80	8,000	\$0.20	\$9.80	\$3,528,000
Texas Southern Plains	825,000	\$2.70	\$9.00	962,500	\$4.55	\$13.00	\$19,937,500
Texas Coastal Bend	312,400	\$6.96	\$9.80	8,800	\$0.20	\$9.98	\$3,149,344
Texas Rolling Plains	637,500	\$9.78	\$11.50	75,000	\$0.98	\$9.80	\$8,066,250
Texas Winter Garden	35,000	\$12.96	\$12.96	0	\$0.00	\$0.00	\$453,600
Texas Blacklands	153,900	\$7.60	\$8.00	6,480	\$0.00	\$0.12	\$1,231,978
Texas Permian Basin	75,000	\$2.30	\$11.50	0	\$0.00	\$9.80	\$862,500
Texas Trans-Pecos	3,800	\$1.10	\$11.00	7,600	\$1.96	\$9.80	\$116,280
Texas Panhandle	532,000	\$8.75	\$12.50	152,000	\$1.96	\$9.80	\$8,139,600
Texas Lower Rio Grande	86,450	\$6.65	\$7.00	18,200	\$1.96	\$9.80	\$783,510
Virginia	28,700	\$5.25	\$15.00	53,300	\$6.37	\$9.80	\$952,840
All States	6,184,685	\$6.04	\$10.46	3,119,390	\$3.56	\$12.22	\$102,795,496



Table 3

Cotton Insect Eradication by state

Cotton Insect Losses 2010

State	Number Acres	Cost/ treated Acre	Wt cost/all acres	Total Cost
North Alabama	99,267	\$2.50	\$2.50	\$248,168
South Alabama	750,000	\$5.00	\$5.00	\$3,750,000
Arizona	199,828	\$2.09	\$2.09	\$417,641
Southeast Arkansas	214,800	\$12.00	\$12.00	\$2,577,600
Northeast Arkansas	322,200	\$13.00	\$13.00	\$4,188,600
California	0	\$0.00	\$0.00	\$0
Florida	86,000	\$1.50	\$1.50	\$129,000
Georgia	1,325,000	\$1.02	\$1.02	\$1,351,500
Kansas	0	\$0.00	\$0.00	\$0
Louisiana	249,000	\$5.00	\$5.00	\$1,245,000
Mississippi - Delta	340,000	\$3.00	\$3.00	\$1,020,000
Mississippi - Hills	85,000	\$3.00	\$3.00	\$255,000
Missouri	310,000	\$0.00	\$0.00	\$0
New Mexico	59,898	\$5.95	\$5.95	\$356,393
North Carolina	534,000	\$1.25	\$1.25	\$667,500
Oklahoma	0	\$0.00	\$0.00	\$0
South Carolina	200,000	\$1.25	\$1.25	\$250,000
Tennessee	400,000	\$1.50	\$1.50	\$600,000
Texas Southern Plains	2,750,000	\$4.00	\$4.00	\$11,000,000
Texas Coastal Bend	440,000	\$22.50	\$22.50	\$9,900,000
Texas Rolling Plains	750,000	\$5.00	\$5.00	\$3,750,000
Texas Winter Garden	35,000	\$23.14	\$23.14	\$809,900
Texas Blacklands	162,000	\$13.25	\$13.25	\$2,146,500
Texas Permian Basin	375,000	\$6.50	\$6.50	\$2,437,500
Texas Trans-Pecos	38,000	\$10.00	\$10.00	\$380,000
Texas Panhandle	760,000	\$6.14	\$6.14	\$4,666,400
Texas Lower Rio Grande	91,000	\$13.25	\$13.25	\$1,205,750
Virginia	82,000	\$3.25	\$3.25	\$266,500
<b>All States - Boll Weevil</b>	<b>10,069,993</b>	<b>\$5.01</b>	<b>\$5.03</b>	<b>\$53,618,951</b>
Arizona Pink Bollworm	199,828	\$8.04	\$8.04	\$1,605,808
California Pink Bollworm	268,000	\$5.97	\$5.97	\$1,600,183
New Mexico Pink Bollworm	13,178	\$6.98	\$1.54	\$91,979
West Texas Pink Bollworm	38,000	\$10.00	\$0.07	\$380,000
<b>Total US - Pink Bollworm</b>	<b>519,006</b>	<b>\$7.09</b>	<b>\$0.35</b>	<b>\$3,677,971</b>
<b>Total US - Insect Eradication*</b>	<b>10,588,999</b>	<b>\$5.41</b>	<b>\$5.37</b>	<b>\$57,296,922</b>

<b>State</b>	<b>Number acres</b>	<b>Bt cost/Acre</b>	<b>Average/ all Acres</b>	<b>Total Cost</b>	<b>% population Bollworm</b>	<b>Acres Bt cotton sprayed</b>	<b>Avg. appli to Bt cotton</b>
Alabama, North	98,267	\$18.51	\$18.32	\$1,818,652	86.5%	22,633	1.00
Alabama, South	137,700	\$24.88	\$21.15	\$3,426,456	86.3%	10,530	1.06
Arizona	193,219	\$27.60	\$26.69	\$5,332,839	0.0%	0	0.00
Arkansas, Southeast	209,430	\$22.30	\$21.74	\$4,669,546	99.1%	190,532	1.57
Arkansas, Northeast	314,145	\$12.85	\$12.53	\$4,036,209	99.4%	112,142	1.00
California**	NR	NR	NR	NR	NR	NR	NR
Florida	86,000	\$28.26	\$28.26	\$2,430,360	50.0%	35,905	1.00
Georgia	1,298,500	\$15.85	\$15.53	\$20,583,336	99.4%	425,106	1.00
Kansas	0	\$0.00	\$0.00	\$0	0.0%	0	0.00
Louisiana	243,522	\$28.43	\$27.80	\$6,922,720	99.2%	235,043	2.31
Mississippi, Delta	333,200	\$30.52	\$29.91	\$10,168,040	84.9%	290,190	2.69
Mississippi, Hills	79,900	\$30.73	\$28.88	\$2,455,149	89.5%	8,755	0.99
Missouri	303,800	\$33.45	\$32.78	\$10,162,110	80.0%	1,318	1.00
New Mexico	34,810	\$8.19	\$4.76	\$284,962	100.0%	4,872	1.01
North Carolina	528,660	\$23.79	\$23.56	\$12,579,274	75.0%	531,864	1.00
Oklahoma	274,264	\$14.56	\$14.56	\$3,993,284	100.0%	3	1.80
South Carolina	198,000	\$12.98	\$12.85	\$2,569,224	100.0%	189,050	1.16
Tennessee	388,000	\$13.02	\$12.63	\$5,051,918	99.3%	67,880	1.00
Texas Southern Plains	1,650,000	\$8.60	\$5.16	\$14,197,611	100.0%	0	0.00
Texas Coastal Bend	321,200	\$11.42	\$8.34	\$3,668,618	94.7%	12,012	1.00
Texas Rolling Plains	675,000	\$7.22	\$6.50	\$4,872,750	0.0%	0	0.00
Texas Winter Garden	18,410	\$11.71	\$6.16	\$215,552	100.0%	0	0.00
Texas Blacklands	157,140	\$7.50	\$7.28	\$1,178,550	89.8%	697	1.00
Texas Permian Basin	318,750	\$8.20	\$6.97	\$2,613,750	100.0%	0	0.00
Texas Trans-Pecos	20,520	\$7.22	\$3.90	\$148,116	100.0%	0	0.00
Texas Panhandle	283,480	\$14.57	\$5.43	\$4,130,304	100.0%	0	0.00
Texas Lower Rio Grande	89,180	\$10.21	\$10.00	\$910,126	96.7%	0	0.00
Virginia	81,180	\$12.83	\$12.70	\$1,041,400	100.0%	24,354	0.50
<b>US</b>	<b>8,336,277</b>	<b>\$17.92</b>	<b>\$12.14</b>	<b>\$129,460,857</b>	<b>95.0%</b>	<b>1,773,474</b>	<b>1.06</b>

\*\* Due to severe Extension budget constraints, this information could not be collected.

Table 5

Types of cotton by state

Cotton Insect Losses 2010

	Acres of cotton which are						
	Bollgard	Bollgard II	Widestrike	Herbicides GM only	non-GM conventional	Organic	Pima
<b>US</b>	<b>733,596</b>	<b>6,358,226</b>	<b>1,279,144</b>	<b>1,764,130</b>	<b>237,627</b>	<b>12,935</b>	<b>174,073</b>
<b>Alabama</b>	<b>60,353</b>	<b>120,390</b>	<b>16,510</b>	<b>32,241</b>	<b>17,200</b>	<b>0</b>	<b>0</b>
<b>Arizona</b>	<b>0</b>	<b>173,897</b>	<b>19,322</b>	<b>2,644</b>	<b>3,965</b>	<b>0</b>	<b>2,500</b>
<b>Arkansas</b>	<b>0</b>	<b>450,543</b>	<b>73,032</b>	<b>11,814</b>	<b>1,611</b>	<b>0</b>	<b>0</b>
<b>California</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>NR</b>	<b>150</b>	<b>150,080</b>
<b>Florida</b>	<b>34,400</b>	<b>43,860</b>	<b>7,740</b>	<b>4,300</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Georgia</b>	<b>471,700</b>	<b>515,425</b>	<b>316,675</b>	<b>19,875</b>	<b>1,325</b>	<b>0</b>	<b>0</b>
<b>Kansas</b>	<b>0</b>	<b>16,800</b>	<b>2,400</b>	<b>48,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Louisiana</b>	<b>50,049</b>	<b>147,408</b>	<b>46,065</b>	<b>5,478</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Mississippi</b>	<b>21,250</b>	<b>314,500</b>	<b>73,950</b>	<b>7,650</b>	<b>7,650</b>	<b>0</b>	<b>0</b>
<b>Missouri</b>	<b>5,270</b>	<b>289,230</b>	<b>9,300</b>	<b>6,200</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>New Mexico</b>	<b>299</b>	<b>33,543</b>	<b>13,956</b>	<b>6,169</b>	<b>5,391</b>	<b>539</b>	<b>4,013</b>
<b>North Carolina</b>	<b>8,544</b>	<b>306,516</b>	<b>216,804</b>	<b>1,299</b>	<b>1,299</b>	<b>0</b>	<b>0</b>
<b>Oklahoma</b>	<b>0</b>	<b>274,264</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>South Carolina</b>	<b>20,000</b>	<b>154,000</b>	<b>25,000</b>	<b>1,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Tennessee</b>	<b>4,000</b>	<b>136,000</b>	<b>252,000</b>	<b>8,000</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Texas</b>	<b>57,730</b>	<b>3,353,150</b>	<b>153,910</b>	<b>1,608,640</b>	<b>199,185</b>	<b>12,395</b>	<b>17,480</b>
<b>Virginia</b>	<b>0</b>	<b>28,700</b>	<b>52,480</b>	<b>820</b>	<b>0</b>	<b>0</b>	<b>0</b>

Table 6

## Cotton Insect Monitoring Costs

## Cotton Insect Losses 2010

State	Acres Scouted	Times/week Scouted	wt Avg Cost all acres	Cost per scoutedacre	Total Cost
Alabama, North	89,340	1.30	\$5.85	\$6.50	\$580,712
Alabama, South	105,300	1.20	\$5.20	\$8.00	\$842,400
Arizona	198,958	1.97	\$10.09	\$10.14	\$2,017,006
Arkansas, Southeast	208,356	1.50	\$8.73	\$9.00	\$1,875,204
Arkansas, Northeast	306,090	1.50	\$8.08	\$8.50	\$2,601,765
California	246,300	1.00	\$9.00	\$10.00	\$2,763,000
Florida	55,900	1.00	\$6.01	\$9.25	\$517,075
Georgia	927,500	1.10	\$5.60	\$8.00	\$7,420,000
Kansas	16,800	1.00	\$2.80	\$8.00	\$134,400
Louisiana	227,337	1.50	\$8.90	\$9.75	\$2,216,536
Mississippi, Delta	333,200	2.00	\$7.35	\$7.50	\$2,499,000
Mississippi, Hills	68,000	1.50	\$5.60	\$7.00	\$476,000
Missouri	291,400	1.00	\$8.27	\$8.80	\$2,564,320
New Mexico	25,157	1.00	\$3.99	\$9.50	\$238,993
North Carolina	400,500	1.00	\$6.00	\$8.00	\$3,204,000
Oklahoma	120,000	1.00	\$2.19	\$5.00	\$600,000
South Carolina	120,000	1.50	\$5.10	\$8.50	\$1,020,000
Tennessee	300,000	1.30	\$6.45	\$8.60	\$2,580,000
Texas Southern Plains	1,650,000	1.20	\$3.60	\$6.00	\$9,900,000
Texas Coastal Bend	356,400	1.20	\$6.03	\$7.45	\$2,655,180
Texas Rolling Plains	75,000	1.20	\$0.60	\$6.00	\$450,000
Texas Winter Garden	33,950	1.20	\$6.31	\$6.50	\$220,675
Texas Blacklands	123,120	1.20	\$3.80	\$5.00	\$615,600
Texas Permian Basin	18,750	1.20	\$0.30	\$6.00	\$112,500
Texas Trans-Pecos	19,000	1.20	\$3.00	\$6.00	\$114,000
Texas Panhandle	494,000	1.20	\$3.90	\$6.00	\$2,964,000
Texas Lower Rio Grande	69,160	1.20	\$3.80	\$5.00	\$345,800
Virginia	4,100	1.00	\$0.43	\$8.50	\$34,850
<b>Total US</b>	<b>6,878,519</b>	<b>1.23</b>	<b>\$4.80</b>	<b>\$7.45</b>	<b>\$51,563,016</b>

Table 7 Application technology acres and costs by state Cotton Insect Losses 2010

State	applications by air			applications by ground			# Acres
	% Acres	cost/ Acre	# apps	% Acres	cost/ Acre	# apps	NO apps
Alabama, North	40%	\$4.10	0.50	85%	\$3.60	2.60	993
Alabama, South	15%	\$4.50	2.00	85%	\$3.00	2.50	16,200
Arizona	65%	\$8.67	1.88	40%	\$7.31	1.59	56,594
Arkansas, Southeast	80%	\$6.00	6.00	20%	\$5.50	2.00	1,074
Arkansas, Northeast	70%	\$6.00	3.00	30%	\$5.50	2.00	3,222
California	85%	\$9.00	3.00	15%	\$13.50	1.00	30,700
Florida	25%	\$4.75	1.00	100%	\$5.25	2.00	19,780
Georgia	30%	\$6.00	1.50	80%	\$4.00	2.00	198,750
Kansas	3%	\$15.00	1.00	20%	\$6.00	1.00	33,600
Louisiana	91%	\$4.35	1.80	98%	\$5.50	1.10	4,980
Mississippi Delta	80%	\$5.50	7.00	20%	\$4.00	2.00	0
Mississippi Hills	10%	\$7.00	1.00	90%	\$4.00	3.00	5,950
Missouri	6%	\$6.00	1.50	100%	\$4.50	3.60	0
New Mexico	69%	\$8.00	1.00	7%	\$6.00	1.00	6,589
North Carolina	90%	\$5.00	1.00	95%	\$2.75	1.60	80,100
Oklahoma	76%	\$7.50	1.00	2%	\$5.50	1.00	32,912
South Carolina	25%	\$5.50	0.50	95%	\$4.50	2.00	16,000
Tennessee	10%	\$7.00	0.40	100%	\$4.75	3.60	24,000
Texas Southern Plains	27%	\$6.00	1.00	61%	\$5.00	1.00	1,237,500
Texas Coastal Bend	20%	\$5.50	0.70	80%	\$2.90	2.60	8,800
Texas Rolling Plains	20%	\$4.50	1.00	80%	\$3.50	1.00	75,000
Texas Winter Garden	13%	\$6.00	1.00	19%	\$3.75	1.10	1,750
Texas Blacklands	45%	\$5.25	1.00	55%	\$4.00	1.00	6,480
Texas Permian Basin	10%	\$4.50	1.00	40%	\$3.50	2.00	187,500
Texas Trans-Pecos	3%	\$5.00	1.00	12%	\$5.50	0.80	5,320
Texas Panhandle	20%	\$5.85	1.00	30%	\$4.25	1.50	15,200
Texas Lower Rio Grande	55%	\$5.25	1.00	45%	\$4.00	1.00	3,640
Virginia	0%	\$0.00	0.00	100%	\$5.50	1.30	0
<b>Total US</b>	<b>36%</b>	<b>\$5.97</b>	<b>1.98</b>	<b>63%</b>	<b>\$4.33</b>	<b>1.72</b>	<b>2,072,633</b>

Table 8

## Summary of All States

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	115,470	25,920	1.00	0.002	\$0.01	0.000%	0
Bollworm/Budworm	8,288,944	2,113,842	1.59	0.313	\$2.53	1.177%	263,902
Pink Bollworm	99,285	0	0.00	0.000	\$0.00	0.000%	0
Cotton Fleahopper	4,487,032	2,357,727	1.64	0.361	\$2.78	0.359%	81,048
Lygus	5,967,935	2,523,963	2.76	0.650	\$7.63	0.656%	196,936
Cotton Leaf Perforator	24,588	0	0.00	0.000	\$0.00	0.000%	0
Spider Mites	3,557,579	838,184	1.16	0.091	\$1.48	0.197%	57,360
Thrips	10,191,931	3,488,695	1.21	0.393	\$2.27	0.193%	45,964
Beet Armyworm	1,079,152	52,222	0.97	0.005	\$0.06	0.000%	146
Fall Armyworm	2,762,701	203,109	0.83	0.016	\$0.20	0.198%	41,256
European Cornborer	0	0	0.00	0.000	\$0.00	0.000%	0
Stink Bugs	6,712,988	2,782,462	1.67	0.433	\$3.44	0.716%	162,397
Grasshoppers	1,293,128	53,300	0.53	0.003	\$0.02	0.001%	373
Saltmarsh Caterpillars	735,177	3,400	0.00	0.000	\$0.00	0.001%	140
Aphids	7,168,129	1,310,943	0.96	0.117	\$1.44	0.284%	60,462
Banded Winged Whitefly	483,273	0	0.00	0.000	\$0.00	0.000%	0
Silverleaf Whitefly (Bemesia)	531,830	113,852	1.57	0.017	\$0.74	0.015%	4,992
Loopers	739,898	9,160	1.00	0.001	\$0.01	0.001%	197
Southern Armyworms	242,500	0	0.00	0.000	\$0.00	0.000%	0
Cutworms	487,946	543,570	0.97	0.049	\$0.19	0.003%	699
Clouded Plant bugs	614,569	213,683	0.98	0.020	\$0.14	0.024%	6,465
Other Insects 1	192,107	18,303	0.98	0.002	\$0.01	0.003%	1,107
Other Insects 2	435,054	6,219	1.00	0.001	\$0.01	0.019%	34,471
Other Insects 3	21,795	1,488	0.50	0.000	\$0.00	0.000%	17
Other Insects 4	638	638	0.50	0.000	\$0.00	0.000%	1
				2.473	\$22.96	3.847%	957,933

**Yield & Management Results**

Total Acres	10,699,257
Total bales Harvested	17,360,414
yield (lbs/acre)	779
Total bales Lost to Insects	957,933
Percent Yield Loss	3.85%
Yield w/o Insects (lbs/ac)	810
Ave. # Spray Applications	2.47
Bales lost all factors	6,231,673
% yield loss all factors	26.4%

**Economic results**

	Total	Per Acre
Foliar Insecticides Costs	\$245,684,305	\$22.96
At Planting Costs	\$64,672,581	\$6.04
In-furrow costs	\$38,122,915	\$3.56
Scouting costs	\$51,563,016	\$4.82
*Eradication costs*	\$54,212,472	\$5.07
Transgenic cotton	\$149,597,949	\$13.98
Total Costs	\$603,853,238	\$56.44
Yield Lost to insects	\$366,468,507	\$34.25
Total Losses + Costs	\$970,321,745	\$90.69

\* Pink Bollworm costs - \$.35 and Boll weevil costs - \$.471

Table 9

## Alabama Summary

## Cotton Insect Losses 2010

Pest	#apps/ acre			#apps/ tot acres	cost/ acre	%red	Bales lost
	acres infested	acres treated	trtd				
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	261,267	26,822	1.0	0.10	\$0.82	0.50%	3,278
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	13,063	0	0.0	0.00	\$0.00	0.00%	0
Lygus	261,267	89,267	1.3	0.44	\$4.09	0.57%	4,723
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	67,660	5,000	1.0	0.02	\$0.21	0.05%	5,510
Thrips	261,267	32,917	1.0	0.13	\$0.68	0.19%	1,574
Beet Armyworm	993	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	19,853	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	261,267	163,827	1.9	1.22	\$6.82	2.36%	13,500
Grasshoppers	148,778	16,796	1.0	0.06	\$0.51	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	180,267	5,000	1.0	0.02	\$0.20	0.08%	630
Banded Winged Whitefly	8,100	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	1,620	0	0.0	0.00	\$0.00	0.00%	0
Loopers	12,960	4,860	1.0	0.02	\$0.19	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	14,890	5,000	1.0	0.02	\$0.10	0.00%	0
Clouded Plant bugs	8,100	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				2.03	\$13.62	3.74%	29,215

**Yield & Management Results**

Total Acres	261,267
Total bales Harvested	328,156
yield (lbs/acre)	603
Total bales Lost to Insects	29,215
Percent Yield Loss	3.74%
Yield w/o Insects (lbs/ac)	626
Ave. # Spray Applications	2.03
Bales lost all factors	322,157
% yield loss all factors	48.92%

**Economic results**

	Total	Per Acre
Foliar Insecticides Costs	\$3,557,151	\$13.62
At Planting Costs	\$2,209,052	\$8.46
In-furrow costs		\$1,254,082
Scouting costs	\$1,423,112	\$5.45
Eradication costs	\$815,168	\$3.12
Transgenic cotton	\$5,182,651	\$19.84
Total Costs	\$14,441,215	\$55.27
Yield Lost to insects	\$10,517,283	\$40.25
Total Losses + Costs	\$24,958,498	\$95.53

\$4.80 |

Table 9a

North Alabama

Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	99,267	10,622	1.0	0.11	\$1.40	0.50%	1,574
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	4,963	0	0.0	0.00	\$0.00	0.00%	0
Lygus	99,267	89,267	1.3	1.17	\$10.76	1.50%	4,723
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	59,560	5,000	1.0	0.05	\$0.55	1.75%	5,510
Thrips	99,267	24,817	1.0	0.25	\$1.31	0.50%	1,574
Beet Armyworm	993	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	19,853	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	99,267	9,927	1.0	0.10	\$0.73	0.50%	1,574
Grasshoppers	2,978	596	1.0	0.01	\$0.04	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	99,267	5,000	1.0	0.05	\$0.53	0.20%	630
Banded Winged Whitefly	0	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	0	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	14,890	5,000	1.0	0.05	\$0.25	0.00%	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				1.78	\$15.57	4.95%	15,585

  

Yield & Management Results	
Total Acres	99,267
Total bales Harvested	150,969
yield (lbs/acre)	730
Total bales Lost to Insects	15,585
Percent Yield Loss	4.95%
Yield w/o Insects (lbs/ac)	768
Ave. # Spray Applications	1.783
Bales lost all factors	163,877
% yield loss all factors	52.05%

  

Economic Results	
	Total
Foliar Insecticides Costs	\$1,545,533
At Planting Costs	\$670,052
In-furrow costs	\$476,482
Scouting costs	\$580,712
Eradication costs	\$248,168
Transgenic cotton	\$1,818,652
Total Costs	\$5,339,598
Yield Lost to insects	\$5,610,552
Total costs plus loss	\$10,950,151



Table 9b

South Alabama

Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	162,000	16,200	1.0	0.10	\$0.80	0.50%	1,704
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	8,100	0	0.0	0.00	\$0.00	0.00%	0
Lygus	162,000	0	0.0	0.00	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	8,100	0	0.0	0.00	\$0.00	0.00%	0
Thrips	162,000	8,100	1.0	0.05	\$0.30	0.00%	0
Beet Armyworm	0	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	0	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	162,000	153,900	2.0	1.90	\$10.45	3.50%	11,926
Grasshoppers	145,800	16,200	1.0	0.10	\$0.80	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	81,000	0	0.0	0.00	\$0.00	0.00%	0
Banded Winged Whitefly	8,100	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	1,620	0	0.0	0.00	\$0.00	0.00%	0
Loopers	12,960	4,860	1.0	0.03	\$0.30	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.00	\$0.00	0.00%	0
Clouded Plant bugs	8,100	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				2.18	\$12.65	4.00%	13,630

  

Yield & Management Results		
Total Acres	162,000	
Total bales Harvested	177,188	
yield (lbs/acre)	525	
Total bales Lost to Insects	13,630	
Percent Yield Loss	4.00%	
Yield w/o Insects (lbs/ac)	547	
Ave. # Spray Applications	2.180	
Bales lost all factors	163,558	
% yield loss all factors	48.00%	

  

Economic Results		Total	Per Acre
Foliar Insecticides Costs		\$2,049,300	\$12.65
At Planting Costs		\$1,539,000	\$9.50
In-furrow costs		\$777,600	\$4.80
Scouting costs		\$842,400	\$5.20
Eradication costs		\$567,000	\$3.50
Transgenic cotton		\$3,426,456	\$21.15
Total Costs		\$9,201,756	\$56.80
Yield Lost to insects		\$4,906,731	\$30.29
Total Losses + Costs		\$14,108,487	\$87.09

Table 10

## Arizona Summary

## Cotton Insect Losses 2010

Pest	Acres Infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	34,677	1,021	1.0	0.01	\$0.08	0.05%	400
Pink Bollworm	4,525	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	129,706	50,287	0.3	0.08	\$1.43	0.11%	824
Lygus	177,805	123,047	1.2	0.74	\$14.46	2.02%	15,556
Cotton Leaf Perforator	12,308	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	91,557	14,458	0.7	0.05	\$1.15	0.17%	1,323
Thrips	199,363	40,296	0.6	0.12	\$1.34	0.39%	3,014
Beet Armyworm	28,303	408	1.0	0.00	\$0.02	0.00%	14
Fall Armyworm	13,738	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	124,558	30,525	0.5	0.08	\$1.26	0.12%	904
Grasshoppers	13,158	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	6,009	0	0.0	0.00	\$0.00	0.00%	0
Aphids	49,005	10,456	0.5	0.03	\$0.45	0.02%	184
Banded Winged Whitefly	24,964	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	164,491	85,797	1.0	0.43	\$10.84	0.42%	3,271
Loopers	17,946	0	0.0	0.00	\$0.00	0.00%	14
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	3,826	0	0.0	0.00	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.00%	0
Pale-sided Fleabeetle	81,148	464	0.3	0.00	\$0.02	0.01%	70
Bagrada stink bug	21,177	0	0.0	0.00	\$0.00	0.00%	0
Darkling beetles	21,795	1,488	0.5	0.00	\$0.07	0.00%	17
Misc.(crickets, seed corn maggots)	638	638	0.5	0.00	\$0.02	0.00%	1
				1.54	\$31.13	3.32%	25,591

## Yield &amp; Management Results

Total Acres	199,828
Total bales Harvested	623,361
Yield (lbs/acre)	1,497
Total bales Lost to Insects	25,591
Percent Yield Loss	3.32%
Yield w/o Insects (lbs/ac)	1,549
Ave. # Spray Applications	1.537
yield loss to all factors	123,336
% yield loss all factors	16.52%

## Economic Results

	Total	Per Acre
Foliar Insecticides Costs	\$6,220,132	\$31.13
At Planting Costs	\$329,272	\$1.65
In-furrow costs	\$3,242	\$0.02
Scouting costs	\$2,017,006	\$10.09
Eradication costs	\$2,023,448	\$10.13
Transgenic cotton	\$5,332,839	\$26.69
Total Costs	\$15,925,940	\$79.70
Yield Lost to insects	\$7,984,293	\$39.96
Total Losses + Costs	\$23,910,233	\$119.65

Official Az Losses may be seen on the Az WEB <http://cals.arizona.edu/crops/insects/cil/cil.html>

Eradication includes PBW: \$8.04 and BW: \$2.09

Table 11

## Arkansas Summary

## Cotton Insect Lossees 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	537,000	330,685	1.7	1.04	\$3.12	2.26%	32,090
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	273,870	16,110	1.0	0.03	\$0.14	0.00%	0
Lygus	537,000	496,188	2.8	2.58	\$18.06	2.74%	38,946
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	311,460	118,140	1.4	0.31	\$2.79	0.27%	3,855
Thrips	537,000	161,100	1.0	0.30	\$0.90	0.20%	2,832
Beet Armyworm	59,070	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	134,250	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	537,000	32,220	1.0	0.06	\$0.24	0.16%	2,253
Grasshoppers	171,840	2,148	1.0	0.00	\$0.01	0.00%	58
Saltmarsh Caterpillars	59,070	0	0.0	0.00	\$0.00	0.00%	0
Aphids	472,560	20,406	1.0	0.04	\$0.27	0.02%	290
Banded Winged Whitefly	69,810	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	17,184	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	102,030	42,960	1.0	0.08	\$0.24	0.02%	238
Clouded Plant bugs	214,800	96,660	1.0	0.18	\$1.17	0.04%	502
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				4.62	\$26.94	5.71%	81,064

**Yield & Management Results**

Total Acres	537,000
Total bales Harvested	1,210,488
yield (lbs/acre)	1,082
Total bales Lost to Insects	81,064
Percent Yield Loss	5.71%
Yield w/o Insects (lbs/ac)	1148
Ave. # Spray Applications	4.623
Bales lost all factors	205,470
% yield loss all factors	14.51%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$14,465,115	\$26.94
At Planting Costs	\$5,611,650	\$10.45
In-furrow costs	\$402,750	\$0.75
Scouting costs	\$4,475,680	\$8.33
Eradication costs	\$6,766,200	\$12.60
Transgenic cotton	\$8,705,755	\$16.21
Total Costs	\$40,427,150	\$75.28
Yield Lost to insects	\$31,906,599	\$59.42
Total Losses + Costs	\$72,333,749	\$134.70

Table 11a

Northeast Arkansas

Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	322,200	120,181	1.5	0.56	\$1.68	2.00%	16,729
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	209,430	16,110	1.0	0.05	\$0.23	0.00%	0
Lygus	322,200	289,980	3.0	2.70	\$18.90	2.30%	19,239
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	225,540	96,660	1.5	0.45	\$4.05	0.35%	2,928
Thrips	322,200	96,660	1.0	0.30	\$0.90	0.20%	1,673
Beet Armyworm	48,330	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	80,550	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	322,200	32,220	1.0	0.10	\$0.40	0.20%	1,673
Grasshoppers	128,880	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	48,330	0	0.0	0.00	\$0.00	0.00%	0
Aphids	257,760	9,666	1.0	0.03	\$0.21	0.00%	0
Banded Winged Whitefly	48,330	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	6,444	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	80,550	32,220	1.0	0.10	\$0.30	0.03%	209
Clouded Plant bugs	193,320	96,660	1.0	0.30	\$1.95	0.06%	502
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				4.59	\$28.61	5.14%	42,953

  

Yield & Management Results	
Total Acres	322,200
Total bales Harvested	718,238
yield (lbs/acre)	1070
Total bales Lost to Insects	42,953
Percent Yield Loss	5.14%
Yield w/o Insects (lbs/ac)	1128
Ave. # Spray Applications	4.590
Bales lost all factors	118,235
% yield loss all factors	14.14%

  

Economic Results		Total	Per Acre
Foliar Insecticides Costs		\$9,219,270	\$28.61
At Planting Costs		\$3,366,990	\$10.45
In-furrow costs		\$241,650	\$0.75
Scouting costs		\$2,601,765	\$8.08
Eradication costs		\$4,188,600	\$13.00
Transgenic cotton		\$4,036,209	\$12.53
Total Costs		\$23,654,484	\$73.42
Yield Lost to insects		\$16,906,262	\$52.47
Total Losses + Costs		\$40,560,746	\$125.89

Table 11b

## Southeast Arkansas

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	214,800	210,504	1.8	1.76	\$5.29	2.65%	15,360
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	64,440	0	0.0	0.00	\$0.00	0.00%	0
Lygus	214,800	206,208	2.5	2.40	\$16.80	3.40%	19,707
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	85,920	21,480	1.0	0.10	\$0.90	0.16%	927
Thrips	214,800	64,440	1.0	0.30	\$0.90	0.20%	1,159
Beet Armyworm	10,740	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	53,700	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	214,800	0	0.0	0.00	\$0.00	0.10%	580
Grasshoppers	42,960	2,148	1.0	0.01	\$0.03	0.01%	58
Saltmarsh Caterpillars	10,740	0	0.0	0.00	\$0.00	0.00%	0
Aphids	214,800	10,740	1.0	0.05	\$0.35	0.05%	290
Banded Winged Whitefly	21,480	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	10,740	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	21,480	10,740	1.0	0.05	\$0.15	0.01%	29
Clouded Plant bugs	21,480	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				4.67	\$24.42	6.58%	38,111

**Yield & Management Results**

Total Acres	214800
Total bales Harvested	492250
yield (lbs/acre)	1100
Total bales Lost to Insects	38111
Percent Yield Loss	6.58%
Yield w/o Insects (lbs/ac)	1177
Ave. # Spray Applications	4.674
Bales lost all factors	87379
% yield loss all factors	15.08%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$5,245,846	\$24.42
At Planting Costs	\$2,244,660	\$10.45
In-furrow costs	\$161,100	\$0.75
Scouting costs	\$1,875,204	\$8.73
Eradication costs	\$2,577,600	\$12.00
Transgenic cotton	\$4,669,546	\$21.74
Total Costs	\$16,773,955	\$78.09
Yield Lost to insects	\$15,000,337	\$69.83
Total Losses + Costs	\$31,774,292	\$147.93

Table 12

## California Summary

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	153,500	0	0	0.000	\$0.00	0.00%	0
Pink Bollworm	12,280	0	0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0	0.000	\$0.00	0.00%	0
Lygus	276,300	199,550	4	2.275	\$56.88	2.70%	28,762
Cotton Leaf Perforator	12,280	0	0	0.000	\$0.00	0.00%	0
Spider Mites	276,300	153,500	1	0.250	\$7.50	0.09%	959
Thrips	291,650	153,500	1	0.250	\$0.00	0.00%	0
Beet Armyworm	245,600	0	0	0.000	\$0.00	0.00%	0
Fall Armyworm	0	0	0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0	0.000	\$0.00	0.00%	0
Stink Bugs	0	0	0	0.000	\$0.00	0.00%	0
Grasshoppers	0	0	0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	46,050	0	0	0.000	\$0.00	0.00%	0
Aphids	276,300	46,050	0	0.045	\$1.13	0.05%	479
Banded Winged Whitefly	0	0	0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemesia)	184,200	15,350	0	0.015	\$0.45	0.03%	320
Loopers	30,700	0	0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0	0.000	\$0.00	0.00%	0
Other Insects	0	0	0	0.000	\$0.00	0.00%	0
				2.835	\$65.95	2.87%	30,519

## Economic Results

Yield & Management Results	
Total Acres	307,000
Total bales Harvested	849,367
yield (lbs/acre)	1,328
Total bales Lost to Insects	30,519
Percent Yield Loss	2.87%
Yield w/o Insects (lbs/ac)	1,367
Ave. # Spray Applications	2.8
Bales lost all factors	215,884
% yield loss all factors	20.3%

	Total	Per Acre
Foliar Insecticides Costs	\$20,246,727	\$65.95
At Planting Costs	\$2,532,750	\$8.25
In-furrow costs	\$1,842,000	\$6.00
Scouting costs	\$2,763,000	\$9.00
Eradication costs	\$1,698,733	\$5.53
Transgenic cotton	\$0	\$0.00
Total Costs	\$29,083,210	\$94.73
Yield Lost to insects	\$15,601,528	\$50.82
Total Losses + Costs	\$44,684,738	\$145.55

\*\* Due to severe Extension budget constraints, this information could not be collected.

Table 13

## Florida Summary

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	38,700	11,180	1.0	0.13	\$1.27	0.45%	824
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0.0	0.00	\$0.00	0.00%	0
Lygus	34,400	34,400	1.0	0.40	\$3.70	0.80%	1,464
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	4,300	4,300	1.0	0.05	\$0.90	0.25%	458
Thrips	86,000	21,500	1.0	0.25	\$1.44	1.00%	1,830
Beet Armyworm	4,300	4,300	1.0	0.05	\$0.00	0.05%	92
Fall Armyworm	21,500	15,480	1.0	0.18	\$2.39	0.75%	1,373
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	86,000	70,520	1.5	1.23	\$10.65	4.00%	7,322
Grasshoppers	12,900	6,880	0.0	0.00	\$0.00	0.08%	137
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	25,800	2,580	1.0	0.03	\$0.30	0.30%	549
Banded Winged Whitefly	4,300	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	4,300	0	0.0	0.00	\$0.00	0.00%	0
Loopers	8,600	4,300	1.0	0.05	\$0.62	0.10%	183
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.00	\$0.00	0.00%	0
Clouded Plant bugs	17,200	4,300	0.0	0.00	\$0.00	0.20%	366
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
			2.37		\$21.27	7.98%	14,598

**Yield & Management Results**

Total Acres	86,000
Total bales Harvested	117,175
yield (lbs/acre)	654
Total bales Lost to Insects	14,598
Percent Yield Loss	7.98%
Yield w/o Insects (lbs/ac)	711
Ave. # Spray Applications	2.37
Bales lost all factors	65,871
% yield loss all factors	35.99%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$1,828,809	\$21.27
At Planting Costs	\$718,960	\$8.36
In-furrow costs	\$547,820	\$6.37
Scouting costs	\$517,075	\$6.01
Eradication costs	\$129,000	\$1.50
Transgenic cotton	\$2,430,360	\$28.26
Total Costs	\$6,172,024	\$71.77
Yield Lost to insects	\$5,465,458	\$63.55
Total Losses + Costs	\$11,637,481	\$135.32

Table 14

## Georgia Summary

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre		cost/ acre	%red	Bales lost
			trtd	#apps/ tot acres			
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	993,750	132,500	1.0	0.10	\$0.75	0.38%	10,327
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0.0	0.00	\$0.00	0.00%	0
Lygus	397,500	106,000	1.0	0.08	\$0.52	0.15%	4,131
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	530,000	14,999	1.0	0.01	\$0.11	0.02%	551
Thrips	1,192,500	198,750	1.0	0.15	\$0.90	0.01%	248
Beet Armyworm	0	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	26,500	6,625	1.0	0.01	\$0.05	0.02%	551
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	1,126,250	1,060,000	2.5	2.00	\$15.00	1.70%	46,817
Grasshoppers	0	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	993,750	13,250	1.0	0.01	\$0.08	0.00%	103
Banded Winged Whitefly	0	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	53,000	1,325	1.0	0.00	\$0.01	0.04%	1,102
Loopers	0	0	1.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.00	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
			2.36		\$17.42	2.32%	63,829

**Yield & Management Results**

Total Acres	1,325,000
Total bales Harvested	2,139,323
yield (lbs/acre)	775
Total bales Lost to Insects	63,829
Percent Yield Loss	2.32%
Yield w/o Insects (lbs/ac)	793
Ave. # Spray Applications	2.357
Bales lost all factors	614,618
% yield loss all factors	22.32%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$23,079,115	\$17.42
At Planting Costs	\$4,637,500	\$3.50
In-furrow costs	\$8,347,500	\$6.30
Scouting costs	\$7,420,000	\$5.60
Eradication costs	\$1,351,500	\$1.02
Transgenic cotton	\$20,583,336	\$15.53
Total Costs	\$65,418,951	\$49.37
Yield Lost to insects	\$19,914,790	\$15.03
Total Losses + Costs	\$85,333,741	\$64.40



Table 15

## Kansas Summary

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	0	0	0.0	0.00	\$0.00	0.00%	0
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	14,400	2,400	1.0	0.05	\$0.60	1.50%	1,744
Lygus	4,800	0	0.0	0.00	\$0.00	0.20%	232
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	0	0	0.0	0.00	\$0.00	0.00%	0
Thrips	19,200	4,800	1.0	0.10	\$1.20	3.20%	3,720
Beet Armyworm	0	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	0	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	960	0	0.0	0.00	\$0.00	0.00%	0
Grasshoppers	960	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	0	0	0.0	0.00	\$0.00	0.00%	0
Banded Winged Whitefly	0	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	0	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.00	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				0.15	\$1.80	4.90%	5696

**Yield & Management Results**

Total Acres	48000
Total bales Harvested	78000
yield (lbs/acre)	780
Total bales Lost to Insects	5696
Percent Yield Loss	4.9%
Yield w/o Insects (lbs/ac)	820
Ave. # Spray Applications	0.150
Bales lost all factors	38244
% yield loss all factors	32.9%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$86,400	\$1.80
At Planting Costs	\$0	\$0.00
In-furrow costs	\$23,520	\$0.49
Scouting costs	\$134,400	\$2.80
Eradication costs	\$0	\$0.00
Transgenic cotton	\$0	\$0.00
Total Costs	\$244,320	\$5.09
Yield Lost to insects	\$1,777,145	\$37.02
Total Losses + Costs	\$2,021,465	\$42.11

Table 16

Louisiana Summary				Cotton Insect Losses 2010			
Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	50	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	245,514	229,329	2.9	2.67	\$24.84	1.28%	9,749
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	30,129	0	0.0	0.00	\$0.00	0.00%	0
Lygus	249,000	243,024	3.1	3.03	\$33.13	4.10%	31,183
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	91,134	51,294	0.9	0.19	\$1.90	0.33%	2,505
Thrips	246,759	124,500	1.0	0.50	\$2.17	0.50%	3,769
Beet Armyworm	6,474	1,245	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	62,001	42,579	0.5	0.09	\$0.91	0.12%	947
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	68,226	26,643	0.5	0.05	\$0.41	0.03%	208
Grasshoppers	25	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	498	0	0.0	0.00	\$0.00	0.00%	0
Aphids	181,023	97,857	0.5	0.20	\$1.69	0.25%	1,935
Banded Winged Whitefly	249	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	72,708	0	0.3	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	37,350	37,350	0.5	0.08	\$0.00	0.00%	0
Clouded Plant bugs	20,169	623	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				6.79	\$65.05	6.61%	50296

Yield & Management Results	
Total Acres	249000
Total bales Harvested	478288
yield (lbs/acre)	922
Total bales Lost to Insects	50296
Percent Yield Loss	6.61%
Yield w/o Insects (lbs/ac)	987
Ave. # Spray Applications	6.792
Bales lost all factors	282264
% yield loss all factors	37.11%

Economic Results		Total	Per Acre
Foliar Insecticides Costs		\$16,198,438	\$65.05
At Planting Costs		\$2,958,518	\$11.88
In-furrow costs		\$522,900	\$2.10
Scouting costs		\$2,216,536	\$8.90
Eradication costs		\$1,245,000	\$5.00
Transgenic cotton		\$6,922,720	\$27.80
Total Costs		\$30,064,113	\$120.74
Yield Lost to insects		\$17,382,172	\$69.81
Total Losses + Costs		\$47,446,284	\$190.55

Table 17

## Mississippi Summary

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	391,000	327,250	2.3	1.79	\$16.32	1.84%	20,400
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	20,400	0	0.0	0.00	\$0.00	0.00%	0
Lygus	416,500	396,950	5.4	5.00	\$57.14	3.87%	42,907
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	289,000	161,500	1.7	0.65	\$7.87	1.36%	15,078
Thrips	425,000	110,500	1.0	0.26	\$1.82	0.25%	2,772
Beet Armyworm	4,250	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	56,100	8,500	0.0	0.00	\$0.00	0.03%	293
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	238,000	55,250	1.0	0.13	\$1.30	1.18%	13,038
Grasshoppers	38,250	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	53,550	3,400	0.0	0.00	\$0.00	0.01%	140
Aphids	255,000	114,750	1.0	0.27	\$2.82	0.06%	665
Banded Winged Whitefly	7,650	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	34,850	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	212,500	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	14,450	212,500	1.0	0.50	\$3.00	0.00%	38
Clouded Plant bugs	57,800	13,600	1.0	0.03	\$0.35	0.34%	3,770
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.59	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				8.64	\$90.62	8.94%	99,101

Yield & Management Results	
Total Acres	425000
Total bales Harvested	876563
yield (lbs/acre)	990
Total bales Lost to Insects	99101
Percent Yield Loss	8.94%
Yield w/o Insects (lbs/ac)	1087
Ave. # Spray Applications	8.64
Bales lost all factors	232146
% yield loss all factors	20.9%

Economic Results		Total	Per Acre
Foliar Insecticides Costs		\$38,515,124	\$90.62
At Planting Costs		\$3,610,800	\$8.50
In-furrow costs		\$510,000	\$1.20
Scouting costs		\$2,975,000	\$7.00
Eradication costs		\$1,275,000	\$3.00
Transgenic cotton		\$12,622,605	\$29.70
Total Costs		\$59,508,529	\$140.02
Yield Lost to insects		\$37,103,332	\$87.30
Total Losses + Costs		\$96,611,861	\$227.32

Table 17a

## Mississippi Delta

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	323,000	289,000	2.5	2.13	\$19.13	1.90%	18,098
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	20,400	0	0.0	0.00	\$0.00	0.00%	0
Lygus	340,000	333,200	6.0	5.88	\$67.62	4.50%	42,864
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	272,000	153,000	1.8	0.79	\$9.45	1.60%	15,240
Thrips	340,000	102,000	1.0	0.30	\$2.10	0.25%	2,381
Beet Armyworm	3,400	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	51,000	6,800	0.0	0.00	\$0.00	0.03%	286
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	204,000	51,000	1.0	0.15	\$1.50	1.26%	12,002
Grasshoppers	34,000	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	51,000	3,400	0.0	0.00	\$0.00	0.02%	143
Aphids	204,000	102,000	1.0	0.30	\$3.15	0.06%	572
Banded Winged Whitefly	6,800	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	34,000	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	170,000	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	10,200	170,000	1.0	0.50	\$3.00	0.00%	29
Clouded Plant bugs	40,800	6,800	1.0	0.02	\$0.22	0.30%	2,858
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				10.06	\$106.17	9.92%	94471

**Yield & Management Results**

Total Acres	340000
Total bales Harvested	743750
yield (lbs/acre)	1050
Total bales Lost to Insects	94471
Percent Yield Loss	9.92%
Yield w/o Insects (lbs/ac)	1166
Ave. # Spray Applications	10.063
Bales lost all factors	208774
% yield loss all factors	21.92%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$36,096,100	\$106.17
At Planting Costs	\$2,907,000	\$ 8.55
In-furrow costs	\$408,000	\$1.20
Scouting costs	\$2,499,000	\$7.35
Eradication costs	\$1,020,000	\$3.00
Transgenic cotton	\$10,168,040	\$29.91
Total Costs	\$53,098,140	\$156.17
Yield Lost to insects	\$35,370,076	\$104.03
Total Losses + Costs	\$88,468,216	\$260.20

Table 17b

## Mississippi Hills

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	68,000	38,250	1.0	0.45	\$4.50	1.60%	2,561
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0.0	0.00	\$0.00	0.00%	0
Lygus	76,500	63,750	2.0	1.50	\$16.50	1.35%	2,161
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	17,000	8,500	1.0	0.10	\$1.40	0.40%	640
Thrips	85,000	8,500	1.0	0.10	\$0.70	0.25%	400
Beet Armyworm	850	0	1.0	0.00	\$0.00	0.00%	0
Fall Armyworm	5,100	1,700	0.0	0.00	\$0.00	0.01%	19
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	34,000	4,250	1.0	0.05	\$0.50	0.84%	1,344
Grasshoppers	4,250	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	2,550	0	0.0	0.00	\$0.00	0.00%	5
Aphids	51,000	12,750	1.0	0.15	\$1.50	0.06%	96
Banded Winged Whitefly	850	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	850	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	42,500	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	4,250	42,500	1.0	0.50	\$3.00	0.01%	8
Clouded Plant bugs	17,000	6,800	1.0	0.08	\$0.88	0.50%	800
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
			2.93		\$28.98	5.02%	8035

  

Yield & Management Results	
Total Acres	85000
Total bales Harvested	132813
yield (lbs/acre)	750
Total bales Lost to Insects	8035
Percent Yield Loss	5.02%
Yield w/o Insects (lbs/ac)	790
Ave. # Spray Applications	2.93
Bales lost all factors	27241
% yield loss all factors	17.0%

  

Economic Results		
Foliar Insecticides Costs	Total	Per Acre
At Planting Costs	\$2,463,300	\$28.98
In-furrow costs	\$703,800	\$8.28
Scouting costs	\$102,000	\$1.20
Eradication costs	\$476,000	\$5.60
Transgenic cotton	\$255,000	\$3.00
Total Costs	\$2,455,149	\$28.88
Yield Lost to insects	\$6,455,249	\$75.94
Total Losses + Costs	\$3,008,189	\$35.39

Table 18

## Missouri Summary

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	11,470	7,750	1.0	0.025	\$0.13	0.00%	0
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	38,750	38,750	1.0	0.125	\$0.63	0.00%	0
Lygus	310,000	261,020	2.4	2.021	\$10.51	1.00%	7,301
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	37,820	34,410	1.7	0.189	\$1.12	1.22%	8,907
Thrips	186,000	182,280	1.9	1.117	\$4.84	0.00%	0
Beet Armyworm	1,550	1,550	1.0	0.005	\$0.03	0.00%	0
Fall Armyworm	55,800	55,800	1.0	0.180	\$1.35	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	31,620	31,620	1.7	0.170	\$0.97	0.05%	372
Grasshoppers	0	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	46,810	46,810	1.7	0.252	\$1.26	0.00%	0
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	13,950	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	46,500	46,500	1.0	0.150	\$0.75	0.00%	0
Other Insects 1	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.000	\$0.00	0.00%	0
				4,234	\$21.57	2.27%	16,580

  

Yield & Management Results		
Total Acres	310000	
Total bales Harvested	692333	
yield (lbs/acre)	1072	
Total bales Lost to Insects	16580	
Percent Yield Loss	2.27%	
Yield w/o Insects (lbs/ac)	1097	
Ave. # Spray Applications	4.234	
Bales lost all factors	37753	
% yield loss all factors	5.17%	

  

Economic Results		Total	Per Acre
Foliar Insecticides Costs		\$6,685,554	\$21.57
At Planting Costs		\$3,881,634	\$12.52
In-furrow costs		\$1,408,733	\$4.54
Scouting costs		\$2,564,320	\$8.27
Eradication costs		\$0	\$0.00
Transgenic cotton		\$10,162,110	\$32.78
Total Costs		\$24,702,351	\$79.69
Yield Lost to insects		\$7,958,522	\$25.67
Total Losses + Costs		\$32,660,874	\$105.36

Table 19

## New Mexico Survey

## Cotton Insect Losses 2010

Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	% Reduction	Bales Lost
Boll Weevil	0	0	0.0	0.00	\$0.00	0.000	0
Bollworm/Budworm	8,386	3,594	1.0	0.06	\$0.63	0.196	272
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.000	0
Cotton Fleahopper	0	0	0.0	0.00	\$0.00	0.000	0
Lygus	16,172	1,258	1.0	0.02	\$0.17	0.297	412
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.000	0
Spider Mites	0	0	0.0	0.00	\$0.00	0.000	0
Thrips	25,756	1,198	1.0	0.02	\$0.12	0.043	60
Beet Armyworm	3,953	839	1.0	0.01	\$0.21	0.020	27
Fall Armyworm	659	0	0.0	0.00	\$0.00	0.000	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.000	0
Stink Bugs	21,563	2,396	1.0	0.04	\$0.42	0.648	899
Grasshoppers	9,584	1,977	1.0	0.03	\$0.35	0.128	178
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.000	0
Aphids	1,557	479	0.0	0.00	\$0.00	0.000	0
Banded Winged Whitefly	0	0	0.0	0.00	\$0.00	0.000	0
Silverleaf Whitefly (Bemisia)	719	0	0.0	0.00	\$0.00	0.000	0
Loopers	0	0	0.0	0.00	\$0.00	0.000	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.000	0
Cutworms	0	0	0.0	0.00	\$0.00	0.000	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.000	0
Leaffooted Bug	958	240	1.0	0.00	\$0.04	0.050	69
Cotton Square Borer	1,378	719	1.0	0.01	\$0.12	0.014	19
Other 3	0	0	0.0	0.00	\$0.00	0.000	0
Other 4	0	0	0.0	0.00	\$0.00	0.000	0
				0.20	\$2.06	1.395	1935

**Yield & Management Results**

Total Acres	59,898
Total bales Harvested	125,786
yield (lbs/acre)	1,008
Total bales Lost to Insects	1,935
Percent Yield Loss	1.40%
Yield w/o Insects (lbs/ac)	1111
Ave. # Spray Applications	0.188
Bales lost all factors	12,890
% yield loss all factors	9.30%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$123,300	\$2.06
At Planting Costs	\$143,755	\$2.40
In-furrow costs	\$123,270	\$2.06
Scouting costs	\$238,993	\$3.99
Eradication costs	\$448,372	\$7.49
Transgenic cotton	\$284,962	\$4.76
Total Costs	\$1,362,653	\$22.75
Yield Lost to insects	\$742,965	\$12.40
Total Losses + Costs	\$2,105,617	\$35.15

Table 20

## North Carolina Summary

## Cotton Insect Losses 2010

Pest	#apps/ acre				cost/ acre	%red	Bales lost
	acres infested	acres treated	trtd	#apps/ tot acres			
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	534,000	267,000	1.2	0.60	\$4.50	0.51%	4,109
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0.0	0.00	\$0.00	0.00%	0
Lygus	534,000	64,080	1.0	0.12	\$0.87	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	267,000	4,005	1.0	0.01	\$0.09	0.05%	401
Thrips	534,000	363,120	1.4	0.95	\$5.71	1.00%	8,024
Beet Armyworm	80,100	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	133,500	0	0.0	0.00	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	534,000	267,000	0.4	0.20	\$1.60	1.39%	11,154
Grasshoppers	53	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	534,000	534	1.0	0.00	\$0.01	0.00%	8
Banded Winged Whitefly	0	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	0	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	53,400	21,360	1.0	0.04	\$0.16	0.00%	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				1.92	\$12.94	2.95%	23696

**Yield & Management Results**

Total Acres	534000
Total bales Harvested	778750
yield (lbs/acre)	700
Total bales Lost to Insects	23696
Percent Yield Loss	2.95%
Yield w/o Insects (lbs/ac)	721
Ave. # Spray Applications	1.921
Bales lost all factors	23696
% yield loss all factors	2.95%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$6,911,562	\$12.94
At Planting Costs	\$4,210,483	\$7.88
In-furrow costs	\$5,980,800	\$11.20
Scouting costs	\$3,204,000	\$6.00
Eradication costs	\$667,500	\$1.25
Transgenic cotton	\$12,579,274	\$23.56
Total Costs	\$33,553,619	\$62.83
Yield Lost to insects	\$9,668,065	\$18.10
Total Losses + Costs	\$43,221,684	\$80.94



Table 21

## Oklahoma Summary

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	0	0	0.0	0.000	\$0.00	0.00%	0
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	233,124	159,073	1.0	0.580	\$5.22	2.55%	12,816
Lygus	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	0	0	0.0	0.000	\$0.00	0.00%	0
Thrips	161,816	161,816	1.0	0.590	\$2.95	0.00%	3
Beet Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	27,426	48,270	1.0	0.176	\$0.35	0.50%	2,513
Grasshoppers	27	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	250	62	1.0	0.000	\$0.00	0.00%	0
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.000	\$0.00	0.00%	0
				1.346	\$8.52	3.05%	15,332

**Yield & Management Results**

Total Acres	274264
Total bales Harvested	457107
yield (lbs/acre)	800
Total bales Lost to Insects	15332
Percent Yield Loss	3.05%
Yield w/o Insects (lbs/ac)	825
Ave. # Spray Applications	1.346225
Bales lost all factors	45488
% yield loss all factors	9.05%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$2,337,679	\$8.52
At Planting Costs	\$1,086,085	\$3.96
In-furrow costs	\$738,508	\$2.69
Scouting costs	\$600,000	\$2.19
Eradication costs	\$0	\$0.00
Transgenic cotton	\$3,993,284	\$14.56
Total Costs	\$8,755,557	\$31.92
Yield Lost to insects	\$5,151,584	\$18.78
Total Losses + Costs	\$13,907,141	\$50.71

Table 22

South Carolina Summary				Cotton Insect Losses 2010			
<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	200,000	180,000	1.0	0.900	\$7.20	1.50%	7,049
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	200,000	0	0.0	0.000	\$0.00	0.00%	0
Lygus	200,000	10,000	0.1	0.005	\$0.04	0.10%	470
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	190,000	20,000	0.3	0.025	\$0.35	0.10%	446
Thrips	200,000	120,000	1.0	0.600	\$3.90	0.50%	2,350
Beet Armyworm	30,000	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	190,000	10,000	0.5	0.025	\$0.35	0.24%	1,116
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	200,000	200,000	1.5	1.500	\$12.00	2.50%	11,749
Grasshoppers	180,000	20,000	0.1	0.010	\$0.07	0.00%	0
Saltmarsh Caterpillars	20,000	0	0.0	0.000	\$0.00	0.00%	0
Aphids	200,000	20,000	0.5	0.050	\$0.45	0.00%	0
Banded Winged Whitefly	40,000	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	40,000	0	0.0	0.000	\$0.00	0.00%	0
Loopers	50,000	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	30,000	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	180,000	20,000	1.0	0.100	\$0.50	0.09%	423
Clouded Plant bugs	10,000	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.000	\$0.00	0.00%	0
				3.215	\$24.86	5.02%	23,603

**Yield & Management Results**

Total Acres	200,000
Total bales Harvested	350,000
yield (lbs/acre)	840
Total bales Lost to Insects	23,603
Percent Yield Loss	5.02%
Yield w/o Insects (lbs/ac)	884
Ave. # Spray Applications	3.215
Bales lost all factors	119,941
% yield loss all factors	25.52%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$4,971,000	\$24.86
At Planting Costs	\$1,200,000	\$6.00
In-furrow costs	\$738,508	\$3.69
Scouting costs	\$1,020,000	\$5.10
Eradication costs	\$250,000	\$1.25
Transgenic cotton	\$2,569,224	\$12.85
Total Costs	\$10,748,733	\$53.74
Yield Lost to insects	\$14,161,660	\$70.81
Total Losses + Costs	\$24,910,392	\$124.55

Table 23

## Tennessee Summary

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	320,000	160,000	1.2	0.48	\$4.32	0.96%	9,746
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0.0	0.00	\$0.00	0.00%	0
Lygus	400,000	340,000	1.8	1.53	\$14.99	1.50%	15,228
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	240,000	132,000	1.3	0.43	\$6.01	0.84%	8,528
Thrips	400,000	140,000	1.0	0.35	\$2.66	0.50%	5,076
Beet Armyworm	12,000	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	40,000	8,000	1.0	0.02	\$0.22	0.02%	203
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	400,000	260,000	1.5	0.98	\$8.53	1.60%	16,243
Grasshoppers	8,000	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	300,000	20,000	1.0	0.05	\$0.46	0.11%	1,142
Banded Winged Whitefly	40,000	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	16,000	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	16,000	200,000	1.0	0.50	\$1.20	0.00%	0
Clouded Plant bugs	240,000	52,000	1.0	0.13	\$1.27	0.18%	1,827
Other Insects 1	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.00	\$0.00	0.00%	0
				4.46	\$39.65	5.71%	57,993

**Yield & Management Results**

Total Acres	400000
Total bales Harvested	754167
yield (lbs/acre)	905
Total bales Lost to Insects	57993
Percent Yield Loss	5.71%
Yield w/o Insects (lbs/ac)	960
Ave. # Spray Applications	4.46
Bales lost all factors	261033
% yield loss all factors	26%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$15,861,500	\$39.65
At Planting Costs	\$3,449,600	\$8.62
In-furrow costs	\$78,400	\$0.20
Scouting costs	\$2,580,000	\$6.45
Eradication costs	\$600,000	\$1.50
Transgenic cotton	\$5,051,918	\$12.63
Total Costs	\$27,621,418	\$69.05
Yield Lost to insects	\$23,382,898	\$58.46
Total Losses + Costs	\$51,004,316	\$127.51

Table 24

## Texas Summary

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	115,420	25,920	1.00	0.00	\$0.01	0.000%	0
Bollworm/Budworm	4,535,080	412,112	1.13	0.09	\$0.94	1.452%	165,659
Pink Bollworm	82,480	0	0.00	0.00	\$0.00	0.000%	0
Cotton Fleahopper	3,533,590	2,091,106	1.73	0.67	\$4.72	0.977%	65,664
Lygus	2,153,191	159,180	1.00	0.03	\$0.37	0.079%	5,622
Cotton Leaf Perforator	0	0	0.00	0.00	\$0.00	0.000%	0
Spider Mites	1,140,848	124,578	1.01	0.02	\$0.37	0.133%	8,839
Thrips	5,343,620	1,590,418	1.30	0.38	\$2.32	0.125%	8,937
Beet Armyworm	602,559	43,880	0.99	0.01	\$0.12	0.000%	13
Fall Armyworm	2,008,800	56,125	0.99	0.01	\$0.20	0.365%	36,774
European Cornborer	0	0	0.00	0.00	\$0.00	0.000%	0
Stink Bugs	3,047,917	534,191	1.00	0.10	\$0.80	0.551%	35,426
Grasshoppers	709,544	5,500	1.00	0.00	\$0.01	0.000%	0
Saltmarsh Caterpillars	550,000	0	0.00	0.00	\$0.00	0.000%	0
Aphids	3,651,807	912,709	1.00	0.17	\$2.15	0.568%	54,476
Banded Winged Whitefly	288,200	0	0.00	0.00	\$0.00	0.000%	0
Silverleaf Whitefly (Bemisia)	83,500	11,380	0.08	0.00	\$0.00	0.004%	301
Loopers	465,000	0	0.00	0.00	\$0.00	0.000%	0
Southern Armyworms	0	0	0.00	0.00	\$0.00	0.000%	0
Cutworms	66,000	4,400	1.00	0.00	\$0.01	0.000%	0
Clouded Plant bugs	0	0	0.00	0.00	\$0.00	0.000%	0
Crenotiades (green mirid)	110,000	17,600	1	0.00	\$0.02	0.006%	968
Cotton Square Borer	412,500	5,500	1	0.00	\$0.01	0.038%	3,932
Other 3	0	0	0	0.00	\$0.00	0.000%	0
Other 4	0	0	0	0.00	\$0.00	0.000%	0
				1.49	\$12.05	4.299%	386612

**Yield & Management Results**

Total Acres	5401000
Total bales Harvested	7371719
yield (lbs/acre)	655
Total bales Lost to Insects	386612
Percent Yield Loss	4.30%
Yield w/o Insects (lbs/ac)	685
Ave. # Spray Applications	1.5
Bales lost all factors	3724597
% yield loss all factors	34%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$65,073,746	\$12.05
At Planting Costs	\$27,662,020	\$5.12
Infurrow costs	\$15,078,542	\$2.79
Scouting costs	\$17,377,755	\$3.22
Eradication costs	\$36,676,050	\$6.79
Transgenic cotton	\$27,279,735	\$5.05
Total Costs	\$189,147,848	\$35.02
Yield Lost to insects	\$148,458,833	\$27.49
Total Losses + Costs	\$337,606,681	\$62.51

Table 24a

Texas Southern Plains

Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	2,200,000	220,000	1.2	0.096	\$1.06	1.60%	83,891
Pink Bollworm	27,500	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	1,375,000	412,500	1.0	0.150	\$1.20	0.00%	0
Lygus	1,375,000	137,500	1.0	0.050	\$0.68	0.10%	5,243
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	687,500	68,750	1.0	0.025	\$0.45	0.13%	6,554
Thrips	2,750,000	550,000	1.2	0.240	\$1.54	0.10%	5,243
Beet Armyworm	412,500	5,500	1.0	0.002	\$0.03	0.00%	0
Fall Armyworm	1,925,000	55,000	1.0	0.020	\$0.40	0.70%	36,702
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	2,062,500	137,500	1.0	0.050	\$0.45	0.38%	19,662
Grasshoppers	550,000	5,500	1.0	0.002	\$0.02	0.00%	0
Saltmarsh Caterpillars	550,000	0	0.0	0.000	\$0.00	0.00%	0
Aphids	2,200,000	687,500	1.0	0.250	\$3.50	0.80%	41,945
Banded Winged Whitefly	275,000	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	275,000	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Square Borer	412,500	5,500	1.0	0.002	\$0.02	0.08%	3,932
Other 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other 4	0	0	0.0	0.000	\$0.00	0.00%	0
				0.887	\$9.34	3.88%	203,173

**Yield & Management Results**

Total Acres	2750000
Total bales Harvested	3723958
yield (lbs/acre)	650
Total bales Lost to Insects	203173
Percent Yield Loss	3.88%
Yield w/o Insects (lbs/ac)	676
Ave. # Spray Applications	0.887
Bales lost all factors	1519207
% yield loss all factors	29%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$25,682,250	\$9.34
At Planting Costs	\$7,425,000	\$2.70
In-furrow costs	\$12,512,500	\$4.55
Scouting costs	\$9,900,000	\$3.60
Eradication costs	\$11,000,000	\$4.00
Transgenic cotton	\$14,197,611	\$5.16
Total Costs	\$80,717,361	\$29.35
Yield Lost to insects	\$78,018,303	\$28.37
Total Losses + Costs	\$158,735,665	\$57.72

Table 24b

Texas Coastal Bend				Cotton Insect Losses 2010			
Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	44,000	0	0.0	0.000	\$0.00	0.000%	0
Bollworm/Budworm	440,000	52,800	1.2	0.144	\$1.48	1.00%	12,909
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	440,000	396,000	2.0	1.800	\$12.60	2.00%	25,817
Lygus	88,000	13,200	1.0	0.030	\$0.23	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	308,000	8,800	1.0	0.020	\$0.16	0.01%	181
Thrips	440,000	44,000	1.0	0.100	\$0.64	0.02%	258
Beet Armyworm	8,800	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	8,800	0	1.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	352,000	264,000	1.0	0.600	\$4.50	0.40%	5,163
Grasshoppers	44	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	352,000	17,600	1.0	0.040	\$0.26	0.04%	516
Banded Winged Whitefly	13,200	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	52,800	880	1.0	0.002	\$0.02	0.00%	46
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	66,000	4,400	1.0	0.010	\$0.07	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	110,000	17,600	1.0	0.040	\$0.30	0.08%	968
Cotton square borer	0	0	0.0	0.000	\$0.00	0.00%	0
Other 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other 4	0	0	0.0	0.000	\$0.00	0.00%	0
				2.786	\$20.25	3.55%	45,859

**Yield & Management Results**

Total Acres	440000
Total bales Harvested	713167
yield (lbs/acre)	778
Total bales Lost to Insects	45859
Percent Yield Loss	3.55%
Yield w/o Insects (lbs/ac)	807
Ave. # Spray Applications	2.79
Bales lost all factors	577693
% yield loss all factors	44.8%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$8,908,680	\$20.25
At Planting Costs	\$3,061,520	\$6.96
In-furrow costs	\$87,824	\$0.20
Scouting costs	\$2,655,180	\$6.03
Eradication costs	\$9,900,000	\$22.50
Transgenic cotton	\$3,668,618	\$8.34
Total Costs	\$28,281,822	\$64.28
Yield Lost to insects	\$17,609,893	\$40.02
Total Losses + Costs	\$45,891,715	\$104.30

Table 24c

## Texas Rolling Plains

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.00	\$0.00	0.00%	0
Bollworm/Budworm	750,000	1,500	1.0	0.00	\$0.02	0.20%	2,860
Pink Bollworm	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Fleahopper	750,000	712,500	2.0	1.90	\$14.25	2.00%	28,599
Lygus	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.00	\$0.00	0.00%	0
Spider Mites	75,000	7,500	1.0	0.01	\$0.18	0.01%	143
Thrips	750,000	22,500	1.0	0.03	\$0.18	0.00%	0
Beet Armyworm	0	0	0.0	0.00	\$0.00	0.00%	0
Fall Armyworm	75,000	750	1.0	0.00	\$0.01	0.01%	71
European Cornborer	0	0	0.0	0.00	\$0.00	0.00%	0
Stink Bugs	225,000	15,000	1.0	0.02	\$0.15	0.03%	429
Grasshoppers	7,500	0	0.0	0.00	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.00	\$0.00	0.00%	0
Aphids	525,000	45,000	1.0	0.06	\$0.54	0.70%	10,010
Banded Winged Whitefly	0	0	0.0	0.00	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.00	\$0.00	0.00%	0
Loopers	0	0	0.0	0.00	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.00	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.00	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.00	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.00	\$0.00	0.00%	0
Cotton square borer	0	0	0.0	0.00	\$0.00	0.00%	0
Other 3	0	0	0.0	0.00	\$0.00	0.00%	0
Other 4	0	0	0.0	0.00	\$0.00	0.00%	0
				0.15	\$1.38	1.014%	3322

**Yield & Management Results**

Total Acres	750,000
Total bales Harvested	671,875
yield (lbs/acre)	430
Total bales Lost to Insects	3,322
Percent Yield Loss	1.01%
Yield w/o Insects (lbs/ac)	434
Ave. # Spray Applications	0.145
Bales lost all factors	758,072
% yield loss all factors	53.01%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$1,032,375	\$1.38
At Planting Costs	\$7,331,250	\$9.78
In-furrow costs	\$735,000	\$0.98
Scouting costs	\$450,000	\$0.60
Eradication costs	\$3,750,000	\$5.00
Transgenic cotton	\$4,872,750	\$6.50
Total Costs	\$18,171,375	\$24.23
Yield Lost to insects	\$1,275,624	\$1.70
Total Losses + Costs	\$19,446,999	\$25.93

Table 24d

## Texas Wintergarden

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	35,000	0	0.0	0.000	\$0.00	0.00%	0
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	35,000	35,000	2.0	2.000	\$12.00	1.20%	1,435
Lygus	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	35,000	26,250	1.1	0.803	\$11.24	1.40%	1,674
Thrips	35,000	5,250	1.2	0.180	\$0.72	0.05%	60
Beet Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	5,250	2,450	1.0	0.070	\$0.63	0.17%	197
Grasshoppers	0	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	35,000	17,500	1.0	0.500	\$4.50	1.00%	1,196
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	29,750	10,500	0.0	0.000	\$0.00	0.21%	254
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton square borer	0	0	0.0	0.000	\$0.00	0.00%	0
Other 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other 4	0	0	0.0	0.000	\$0.00	0.00%	0
				3.553	\$29.09	4.03%	4,816

**Yield & Management Results**

Total Acres	35,000
Total bales Harvested	109,375
yield (lbs/acre)	1,500
Total bales Lost to Insects	4,816
Percent Yield Loss	4.03%
Yield w/o Insects (lbs/ac)	1563
Ave. # Spray Applications	3.553
Bales lost all factors	10,196
% yield loss all factors	8.53%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$1,017,975	\$29.09
At Planting Costs	\$453,600	\$12.96
In-furrow costs	\$0	\$0.00
Scouting costs	\$220,675	\$6.31
Eradication costs	\$809,900	\$23.14
Transgenic cotton	\$215,552	\$6.16
Total Costs	\$2,717,702	\$77.65
Yield Lost to insects	\$1,849,244	\$52.84
Total Losses + Costs	\$4,566,946	\$130.48



Table 24e

Pest	Texas Blackland				Cotton Insect Losses 2010		
	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	25,920	25,920	1.0	0.160	\$0.40	0.000%	0
Bollworm/Budworm	162,000	2,268	1.0	0.014	\$0.11	2.000%	5,767
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.000%	0
Cotton Fleahopper	162,000	150,660	3.5	3.255	\$7.32	2.000%	5,767
Lygus	40,014	8,100	1.0	0.050	\$0.23	0.124%	356
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.000%	0
Spider Mites	25,920	8,262	1.0	0.051	\$0.51	0.080%	231
Thrips	160,380	133,812	1.0	0.826	\$2.07	0.000%	0
Beet Armyworm	0	0	0.0	0.000	\$0.00	0.000%	0
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.000%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.000%	0
Stink Bugs	153,900	102,060	1.0	0.630	\$5.10	2.850%	8,218
Grasshoppers	0	0	0.0	0.000	\$0.00	0.000%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.000%	0
Aphids	100,278	24,300	1.0	0.150	\$0.68	0.186%	535
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.000%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.000%	0
Loopers	0	0	0.0	0.000	\$0.00	0.000%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.000%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.000%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.000%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.000%	0
Cotton square borer	0	0	0.0	0.000	\$0.00	0.000%	0
Other 3	0	0	0.0	0.000	\$0.00	0.000%	0
Other 4	0	0	0.0	0.000	\$0.00	0.000%	0
				5.136	\$16.42	7.239%	20,874

**Yield & Management Results**

Total Acres	162,000
Total bales Harvested	232,875
yield (lbs/acre)	690
Total bales Lost to Insects	20,874
Percent Yield Loss	7.24%
Yield w/o Insects (lbs/ac)	744
Ave. # Spray Applications	5.136
Bales lost all factors	55,477
% yield loss all factors	19.24%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$2,659,546	\$16.42
At Planting Costs	\$1,231,200	\$7.60
In-furrow costs	\$778	\$0.00
Scouting costs	\$615,600	\$3.80
Eradication costs	\$2,146,500	\$13.25
Transgenic cotton	\$1,178,550	\$7.28
Total Costs	\$7,832,174	\$48.35
Yield Lost to insects	\$8,015,748	\$49.48
Total Losses + Costs	\$15,847,921	\$97.83

Table 24f

## Texas Permian Basin

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	300,000	18,750	1.0	0.050	\$0.53	8.00%	54,756
Pink Bollworm	37,500	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	0	150,000	1.0	0.400	\$2.80	0.00%	0
Lygus	375,000	0	0.0	0.000	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	1,875	375	1.0	0.001	\$0.02	0.00%	10
Thrips	356,250	37,500	1.0	0.100	\$0.60	0.00%	0
Beet Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	0	375	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	75,000	3,750	1.0	0.010	\$0.11	0.20%	1,369
Grasshoppers	0	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	187,500	93,750	1.0	0.250	\$2.50	0.00%	0
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton square borer	0	0	0.0	0.000	\$0.00	0.00%	0
Other 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other 4	0	0	0.0	0.000	\$0.00	0.00%	0
				0.811	\$6.55	8.20%	56,135

**Yield & Management Results**

Total Acres	375,000
Total bales Harvested	320,313
yield (lbs/acre)	410
Total bales Lost to Insects	56,135
Percent Yield Loss	8.20%
Yield w/o Insects (lbs/ac)	447
Ave. # Spray Applications	0.811
Bales lost all factors	364,138
% yield loss all factors	53.20%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$2,455,875	\$6.55
At Planting Costs	\$862,500	\$2.30
In-furrow costs	\$0	\$0.00
Scouting costs	\$112,500	\$0.30
Eradication costs	\$2,437,500	\$6.50
Transgenic cotton	\$2,613,750	\$6.97
Total Costs	\$8,482,125	\$22.62
Yield Lost to insects	\$21,555,915	\$57.48
Total Losses + Costs	\$30,038,040	\$80.10

Table 24g

Texas Trans-Pecos

Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	25,080	1,520	1.0	0.040	\$0.56	0.99%	882
Pink Bollworm	17,480	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	1,140	0	0.0	0.000	\$0.00	0.00%	1
Lygus	1,900	380	1.0	0.010	\$0.08	0.03%	22
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	0	0	0.0	0.000	\$0.00	0.00%	0
Thrips	1,900	190	1.0	0.005	\$0.03	0.00%	0
Beet Armyworm	1,140	380	0.0	0.000	\$0.00	0.02%	13
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	11,400	5,700	1.0	0.150	\$1.80	0.30%	267
Grasshoppers	0	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	5,700	760	1.0	0.020	\$0.18	0.08%	67
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	950	0	1.0	0.000	\$0.00	0.00%	0
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton square borer	0	0	0.0	0.000	\$0.00	0.00%	0
Other 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other 4	0	0	0.0	0.000	\$0.00	0.00%	0
				0.225	\$2.64	1.41%	1,253

**Yield & Management Results**

Total Acres	38,000
Total bales Harvested	85,104
yield (lbs/acre)	1,075
Total bales Lost to Insects	1,253
Percent Yield Loss	1.41%
Yield w/o Insects (lbs/ac)	1090
Ave. # Spray Applications	0.225
Bales lost all factors	4,015
% yield loss all factors	4.51%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$100,434	\$2.64
At Planting Costs	\$41,800	\$1.10
In-furrow costs	\$74,480	\$1.96
Scouting costs	\$114,000	\$3.00
Eradication costs	\$760,000	\$20.00
Transgenic cotton	\$148,116	\$3.90
Total Costs	\$1,238,830	\$32.60
Yield Lost to insects	\$481,331	\$12.67
Total Losses + Costs	\$1,720,161	\$45.27

Table 24h

Texas Panhandle				Cotton Insect Losses 2010			
Pest	acres infested	acres treated	#apps/ acre trtd	#apps/ tot acres	cost/ acre	%red	Bales lost
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	532,000	114,000	1.0	0.150	\$1.65	0.14%	2,363
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	684,000	152,000	1.0	0.200	\$1.60	0.05%	760
Lygus	250,800	0	1.0	0.000	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	0	0	0.0	0.000	\$0.00	0.00%	0
Thrips	760,000	722,000	1.5	1.425	\$9.12	0.20%	3,376
Beet Armyworm	152,000	38,000	1.0	0.050	\$0.75	0.00%	0
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	114,000	0	0.0	0.000	\$0.00	0.00%	0
Grasshoppers	152,000	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	190,000	0	1.0	0.000	\$0.00	0.00%	0
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	190,000	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton square borer	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.000	\$0.00	0.00%	0
				1.825	\$13.12	0.39%	6,499

**Yield & Management Results**

Total Acres	760,000
Total bales Harvested	1,425,000
yield (lbs/acre)	900
Total bales Lost to Insects	6,499
Percent Yield Loss	0.39%
Yield w/o Insects (lbs/ac)	903
Ave. # Spray Applications	1.825
Bales lost all factors	263,089
% yield loss all factors	15.59%

**Economis Results**

	Total	Per Acre
Foliar Insecticides Costs	\$9,971,200	\$13.12
At Planting Costs	\$6,650,000	\$8.75
In-furrow costs	\$1,489,600	\$1.96
Scouting costs	\$2,964,000	\$3.90
Eradication costs	\$4,666,400	\$6.14
Transgenic cotton	\$4,130,304	\$5.43
Total Costs	\$29,871,504	\$39.30
Yield Lost to insects	\$2,495,670	\$3.28
Total Losses + Costs	\$32,367,174	\$42.59

Table 24i

## Texas Lower Rio Grande Valley

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	45,500	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	91,000	1,274	1.0	0.014	\$0.14	2.00%	2,231
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	86,450	82,446	1.0	0.906	\$5.66	2.95%	3,285
Lygus	22,477	0	0.0	0.000	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	7,553	4,641	1.0	0.051	\$0.61	0.04%	46
Thrips	90,090	75,166	1.0	0.826	\$5.78	0.00%	0
Beet Armyworm	28,119	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	48,867	3,731	1.0	0.041	\$0.41	0.11%	120
Grasshoppers	0	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	56,329	26,299	1.0	0.289	\$2.60	0.19%	207
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Creontiades (green mirid)	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton square borer	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.000	\$0.00	0.00%	0
				2.127	\$15.21	5.28%	5,890

**Yield & Management Results**

Total Acres	91,000
Total bales Harvested	90,052
yield (lbs/acre)	475
Total bales Lost to Insects	5,890
Percent Yield Loss	5.28%
Yield w/o Insects (lbs/ac)	501
Ave. # Spray Applications	2.127
Bales lost all factors	21,508
% yield loss all factors	19.28%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$1,383,883	\$15.21
At Planting Costs	\$605,150	\$6.65
In-furrow costs	\$178,360	\$1.96
Scouting costs	\$345,800	\$3.80
Eradication costs	\$1,205,750	\$13.25
Transgenic cotton	\$910,126	\$10.00
Total Costs	\$4,629,069	\$50.87
Yield Lost to insects	\$2,261,741	\$24.85
Total Losses + Costs	\$6,890,810	\$75.72

Table 25

## Virginia Summary

## Cotton Insect Losses 2010

<b>Pest</b>	<b>acres infested</b>	<b>acres treated</b>	<b>#apps/ acre trtd</b>	<b>#apps/ tot acres</b>	<b>cost/ acre</b>	<b>%red</b>	<b>Bales lost</b>
Boll Weevil	0	0	0.0	0.000	\$0.00	0.00%	0
Bollworm/Budworm	24,600	24,600	1.0	0.300	\$2.40	0.00%	0
Pink Bollworm	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Fleahopper	0	0	0.0	0.000	\$0.00	0.00%	0
Lygus	0	0	0.0	0.000	\$0.00	0.00%	0
Cotton Leaf Perforator	0	0	0.0	0.000	\$0.00	0.00%	0
Spider Mites	20,500	0	0.0	0.000	\$0.00	0.00%	0
Thrips	82,000	82,000	1.0	1.000	\$7.00	1.00%	1,755
Beet Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
Fall Armyworm	0	0	0.0	0.000	\$0.00	0.00%	0
European Cornborer	0	0	0.0	0.000	\$0.00	0.00%	0
Stink Bugs	8,200	0	1.0	0.000	\$0.00	0.00%	0
Grasshoppers	8	0	0.0	0.000	\$0.00	0.00%	0
Saltmarsh Caterpillars	0	0	0.0	0.000	\$0.00	0.00%	0
Aphids	0	0	0.0	0.000	\$0.00	0.00%	0
Banded Winged Whitefly	0	0	0.0	0.000	\$0.00	0.00%	0
Silverleaf Whitefly (Bemisia)	0	0	0.0	0.000	\$0.00	0.00%	0
Loopers	0	0	0.0	0.000	\$0.00	0.00%	0
Southern Armyworms	0	0	0.0	0.000	\$0.00	0.00%	0
Cutworms	0	0	0.0	0.000	\$0.00	0.00%	0
Clouded Plant bugs	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 1	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 2	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 3	0	0	0.0	0.000	\$0.00	0.00%	0
Other Insects 4	0	0	0.0	0.000	\$0.00	0.00%	0
				1.300	9.4	1.00%	1,755

**Yield & Management Results**

Total Acres	82,000
Total bales Harvested	129,833
yield (lbs/acre)	760
Total bales Lost to Insects	1,755
Percent Yield Loss	1.00%
Yield w/o Insects (lbs/ac)	768
Ave. # Spray Applications	1.300
Bales lost all factors	33,757
% yield loss all factors	26.00%

**Economic Results**

	Total	Per Acre
Foliar Insecticides Costs	\$770,800	\$9.40
At Planting Costs	\$430,500	\$5.25
In-furrow costs	\$522,340	\$6.37
Scouting costs	\$34,850	\$0.43
Eradication costs	\$266,500	\$3.25
Transgenic cotton	\$1,041,400	\$12.70
Total Costs	\$3,066,390	\$37.40
Yield Lost to insects	\$547,405	\$6.68
Total Losses + Costs	\$3,613,795	\$44.07

Table 26 Ranked losses by state Cotton Insect losses 2010

	Acres	% reduction	cost + loss	bales lost
<b>US</b>	10,660,257	3.91%	\$974,181,838	985,821
Mississippi	425,000	8.94%	\$96,611,861	99,101
Florida	86,000	7.98%	\$11,637,481	14,598
Louisiana	249,000	6.61%	\$47,446,284	50,296
Tennessee	400,000	5.71%	\$51,004,316	57,993
Arkansas	537,000	5.71%	\$72,333,749	81,064
South Carolina	200,000	5.02%	\$24,910,392	23,603
Kansas	48,000	4.90%	\$2,021,465	5,696
Texas	5,401,000	4.30%	\$337,606,681	386,612
Alabama	261,267	3.74%	\$24,958,498	29,215
Arizona	199,828	3.32%	\$23,910,233	25,591
Oklahoma	274,264	3.05%	\$13,907,141	15,332
North Carolina	778,750	2.95%	\$43,221,684	23,696
California	268,000	2.87%	\$31,575,502	25,098
Georgia	1,325,000	2.32%	\$85,333,741	63,829
Missouri	310,000	2.27%	\$32,660,874	16,580
New Mexico	59,898	1.40%	\$2,105,617	1,935
Virginia	82,000	1.00%	\$3,613,795	1,755

Table 27 Ranked Losses by pest Cotton Insect losses 2010

<b>pest</b>	<b>% Reduction</b>	<b>acres infested</b>	<b>rank</b>	<b>% infested</b>	<b>Cost/acre</b>	<b>Bales lost</b>
Bollworm/Budworm	1.186%	8,148,844	1	76.44%	\$2.54	263,902
Stink Bugs	0.724%	6,712,988	2	62.97%	\$3.45	162,397
Lygus	0.677%	5,932,835	3	55.65%	\$6.86	191,826
Cotton Fleahopper	0.362%	4,487,032	4	42.09%	\$2.79	81,048
Aphids	0.286%	7,133,029	5	66.91%	\$1.39	60,377
Thrips	0.200%	10,165,601	6	95.36%	\$2.32	45,964
Spider Mites	0.199%	3,522,479	7	33.04%	\$1.75	57,189
Fall Armyworm	0.199%	2,762,701	8	25.92%	\$0.20	41,256
Clouded Plant bugs	0.024%	614,569	9	5.77%	\$0.14	6,465
Silverleaf Whitefly (Bemisia)	0.020%	508,430	10	4.77%	\$0.81	4,935
Other Insects*	0.024%	649,594	11	6.09%	\$0.02	5,076
Cutworms	0.003%	487,946	12	4.58%	\$0.19	699
Loopers	0.001%	735,998	13	6.90%	\$0.01	197
Grasshoppers	0.001%	1,293,128	14	12.13%	\$0.02	373
Beet Armyworm	0.001%	967,552	15	9.08%	\$0.06	146
Saltmarsh Caterpillars	0.001%	689,127	16	6.46%	\$0.00	140
Banded Winged Whitefly	0.000%	483,273	17	4.53%	\$0.00	0
Pink Bollworm	0.000%	97,725	18	0.92%	\$0.00	0
Cotton Leaf Perforator	0.000%	14,988	19	0.14%	\$0.00	0
Southern Armyworms	0.000%	242,500	20	2.27%	\$0.00	0
Boll Weevil	0.000%	115,470	21	1.08%	\$0.01	0
European Cornborer	0.000%	0	22	0.00%	\$0.00	0