

## COTTON INSECT LOSSES 2000

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### Abstract

Arthropod pests reduced overall yield by 9.26% in 2000. Acreage was up and yields were down, largely due to weather. As in 1999, Texas losses overshadowed those in the remainder of the cotton belt. Boll weevil, no longer a major factor east of the Mississippi River, was again the number 1 pest of US cotton in 2000. While infesting only about 44% of the acres it reduced yields by 2.86% across the US. Another surprise was the beet armyworm which came in second at 2.11% loss. The bollworm/budworm complex, causing 1.43% loss, was the number three arthropod pest of cotton in 2000. Eighty-one percent (81%) of US cotton acres was infested by heliothines. Of those, 79% were bollworms, *Helioverpa zea*. Thrips at 0.59% loss was 4<sup>th</sup> and *Lygus* at 0.56% were 5<sup>th</sup>. Stink bugs (0.52%), aphids (0.44%), spider mites (0.22%), cotton fleahopper (0.15%) and western flower thrips (0.14%) complete the top ten insect pests of 2000. Total cost of management and loss to insects to the 2000 crop was \$1.671 billion or \$117.32 per acre. Of those costs approximately \$62 are direct insect management costs.

### Introduction

This information was provided by state coordinators and was collected from surveys of county agents, extension specialists, private consultants and research entomologists. **All data are averaged over a total reporting unit.** For example, if a unit report represents 100 acres had an 8% loss on 25 of those acres, then in the table summary this shows up as a 2% loss.  $((.08 \times 25)/100)$ . This type of averaging is used for all data reported, including yields and costs of control. Because of averaging and rounding some individual state summary numbers listed as '0' are slightly larger. Costs are averaged to the nearest cent, bales and acres to the nearest whole number, other numbers are rounded to the nearest .001. Bales are calculated at 480 pounds, and a cost of \$0.65 per pound of lint is used in figuring costs.

### Explanation of Tables

In an attempt to include as many of the costs of insect management as possible, the Cotton Insect Losses estimates have changed in the last few years. They were begun as a simple attempt to arrive at the 'average cost of spraying insecticide' for control of cotton arthropod pests. We still attempt to arrive at the most accurate estimate possible for spray activities, but have also added some of the other costs which are incurred in cotton insect pest management. These 'additional' costs increase the bottom line of expenditures for arthropod pest management - but also more accurately reflect true expenditures. 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.

### Acknowledgments

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

Table 1. USDA Cotton Production Estimates. Cotton Insect Losses – 2000.

| State           | Upland Cotton     |                   | Cotton yields in pounds lint per acre |             |             |             |
|-----------------|-------------------|-------------------|---------------------------------------|-------------|-------------|-------------|
|                 | Acres Planted     | Acres harvested   | Est. Yield *                          | December    | January     | 1999        |
| Alabama         | 590,000           | 530,000           | 520                                   | 489         | 489         | 601         |
| Arizona         | 280,000           | 278,000           | 1287                                  | 1273        | 1312        | 1118        |
| Arkansas        | 960,000           | 950,000           | 709                                   | 743         | 733         | 685         |
| California      | 775,000           | 770,000           | 1275                                  | 1380        | 1371        | 849         |
| Florida         | 130,000           | 106,000           | 490                                   | 420         | 453         | 498         |
| Georgia         | 1,500,000         | 1,350,000         | 600                                   | 594         | 583         | 517         |
| Kansas          | 40,000            | 37,000            | 300                                   | 525         | 298         | 501         |
| Louisiana       | 710,000           | 695,000           | 639                                   | 627         | 628         | 573         |
| Mississippi     | 1,300,000         | 1,280,000         | 662                                   | 649         | 649         | 755         |
| Missouri        | 400,000           | 388,000           | 731                                   | 648         | 668         | 509         |
| New Mexico      | 90,000            | 85,000            | 625                                   | 734         | 734         | 781         |
| North Carolina  | 930,000           | 925,000           | 770                                   | 748         | 747         | 669         |
| Oklahoma        | 280,000           | 170,000           | 440                                   | 420         | 438         | 540         |
| South Carolina  | 300,000           | 290,000           | 645                                   | 629         | 629         | 600         |
| Tennessee       | 570,000           | 565,000           | 600                                   | 606         | 607         | 593         |
| Texas           | 6,400,000         | 4,400,000         | 379                                   | 410         | 431         | 519         |
| Virginia        | 110,000           | 108,000           | 800                                   | 722         | 707         | 770         |
| <b>total US</b> | <b>15,365,000</b> | <b>12,927,000</b> | <b>595</b>                            | <b>612</b>  | <b>625</b>  | <b>616</b>  |
|                 | <b>Pima</b>       | <b>Pima</b>       |                                       | <b>Pima</b> | <b>Pima</b> | <b>Pima</b> |
| Arizona         | 6,000             | 6,000             |                                       | 824         | 824         | 768         |
| California      | 145,000           | 144,000           |                                       | 1200        | 1167        | 900         |
| New Mexico      | 4,500             | 4,500             |                                       | 680         | 768         | 617         |
| Texas           | 16,000            | 16,000            |                                       | 930         | 900         | 649         |
| <b>total US</b> | <b>171,500</b>    | <b>170,500</b>    |                                       | <b>1144</b> | <b>1119</b> | <b>842</b>  |
|                 | all cotton        | all cotton        |                                       | all cotton  | all cotton  | all cotton  |
| <b>TOTAL US</b> | <b>15,536,500</b> | <b>13,097,500</b> |                                       | <b>619</b>  | <b>631</b>  | <b>621</b>  |

From USDA/NASS Agricultural Statistics Service January , 2001.

\*estimates from losses Coordinators.

Table 1a. USDA Planting and-Harvest Estimates 1997-1999. Cotton Insect Losses – 2000.

| State                | Area Planted      |                   |                   | Area Harvested    |                   |                   |
|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                      | 1997              | 1998              | 1999              | 1997              | 1998              | 1999              |
| <b><u>Upland</u></b> |                   |                   |                   |                   |                   |                   |
| Alabama              | 535,000           | 495,000           | 565,000           | 442,000           | 475,000           | 561,000           |
| Arizona              | 325,000           | 250,000           | 270,000           | 324,000           | 248,000           | 269,000           |
| Arkansas             | 980,000           | 920,000           | 970,000           | 965,000           | 900,000           | 960,000           |
| California           | 880,000           | 650,000           | 610,000           | 875,000           | 620,000           | 605,000           |
| Florida              | 100,000           | 89,000            | 107,000           | 99,000            | 80,000            | 106,000           |
| Georgia              | 1,440,000         | 1,400,000         | 1,470,000         | 1,425,000         | 1,320,000         | 1,300,000         |
| Kansas               | 12,000            | 17,000            | 33,000            | 10,000            | 16,000            | 28,000            |
| Louisiana            | 655,000           | 535,000           | 615,000           | 650,000           | 525,000           | 610,000           |
| Mississippi          | 985,000           | 950,000           | 1,200,000         | 970,000           | 940,000           | 1,180,000         |
| Missouri             | 395,000           | 370,000           | 380,000           | 390,000           | 357,000           | 377,000           |
| New Mexico           | 70,000            | 60,000            | 84,000            | 66,000            | 58,000            | 79,000            |
| North Carolina       | 690,000           | 710,000           | 880,000           | 685,000           | 705,000           | 825,000           |
| Oklahoma             | 200,000           | 160,000           | 240,000           | 190,000           | 120,000           | 150,000           |
| South Carolina       | 290,000           | 290,000           | 330,000           | 286,000           | 286,000           | 315,000           |
| Tennessee            | 490,000           | 450,000           | 570,000           | 480,000           | 445,000           | 565,000           |
| Texas                | 5,500,000         | 5,650,000         | 6,150,000         | 5,200,000         | 3,300,000         | 5,100,000         |
| Virginia             | 101,000           | 92,000            | 110,000           | 100,000           | 91,000            | 108,000           |
| <b>total US</b>      | <b>13,648,000</b> | <b>13,088,000</b> | <b>14,584,000</b> | <b>13,157,000</b> | <b>10,486,000</b> | <b>13,138,000</b> |
| <b><u>Pima</u></b>   |                   |                   |                   |                   |                   |                   |
| Arizona              | 22,000            | 15,900            | 9,000             | 22,000            | 15,500            | 8,900             |
| California           | 185,000           | 200,000           | 240,000           | 184,000           | 180,000           | 239,000           |
| New Mexico           | 11,000            | 9,000             | 7,500             | 11,000            | 9,000             | 7,000             |
| Texas                | 32,000            | 105,000           | 33,000            | 32,000            | 32,000            | 32,000            |
| <b>total US</b>      | <b>250,000</b>    | <b>329,900</b>    | <b>289,500</b>    | <b>249,000</b>    | <b>236,500</b>    | <b>286,900</b>    |
| <b>TOTAL US</b>      | <b>13,898,000</b> | <b>13,417,900</b> | <b>14,873,500</b> | <b>13,406,000</b> | <b>10,722,500</b> | <b>13,424,900</b> |

\*USDA/NASS -January 2001 estimates.

Table 2. At Planting Insecticide Applications. Cotton Insect Losses – 2000.

| <b>State</b>                   | <b>Number acres</b> | <b>Weighted Avg Cost</b> | <b>Cost/Treated Acre</b> | <b>Total Cost</b>   |
|--------------------------------|---------------------|--------------------------|--------------------------|---------------------|
| Alabama, South                 | 225,000             | \$10.80                  | \$12.00                  | \$2,700,000         |
| Alabama, Central               | 85,000              | \$11.33                  | \$12.00                  | \$1,020,000         |
| Alabama, North                 | 250,000             | \$13.50                  | \$13.50                  | \$3,375,000         |
| Arizona Bt                     | 35,800              | \$1.87                   | \$9.33                   | \$334,014           |
| Arizona Conv                   | 10,000              | \$0.93                   | \$9.33                   | \$93,300            |
| Arkansas, Northeast            | 500,000             | \$12.00                  | \$12.00                  | \$6,000,000         |
| Arkansas, Southeast            | 450,000             | \$9.45                   | \$10.50                  | \$4,725,000         |
| California, San Joaquin Valley | 180,000             | \$3.07                   | \$15.00                  | \$2,700,000         |
| Florida                        | 66,000              | \$6.75                   | \$9.20                   | \$607,200           |
| Georgia                        | 1,050,000           | \$8.08                   | \$10.00                  | \$10,500,000        |
| Kansas                         | 10,000              | \$3.00                   | \$12.00                  | \$120,000           |
| Louisiana Conv                 | 96,658              | \$5.51                   | \$7.35                   | \$710,436           |
| Louisiana Bt                   | 431,787             | \$5.51                   | \$7.35                   | \$3,173,634         |
| Mississippi Delta              | 740,000             | \$9.66                   | \$10.60                  | \$7,844,000         |
| Mississippi Hills              | 390,000             | \$8.09                   | \$9.85                   | \$3,841,500         |
| Missouri                       | 359,080             | \$8.57                   | \$9.55                   | \$3,429,214         |
| New Mexico                     | 30,000              | \$1.88                   | \$4.50                   | \$135,000           |
| North Carolina Bt              | 471,000             | \$11.01                  | \$11.50                  | \$5,416,500         |
| North Carolina Conv            | 385,000             | \$10.83                  | \$11.50                  | \$4,427,500         |
| Oklahoma                       | 75,000              | \$2.33                   | \$6.75                   | \$506,250           |
| South Carolina                 | 285,000             | \$14.96                  | \$15.75                  | \$4,488,750         |
| Tennessee                      | 536,962             | \$8.27                   | \$9.16                   | \$4,918,572         |
| Texas, Upper Gulf Coast        | 142,051             | \$6.35                   | \$11.55                  | \$1,640,689         |
| Texas, Lower Gulf Coast        | 41,947              | \$1.27                   | \$11.55                  | \$484,488           |
| Texas, Northern Rolling Plains | 18,000              | \$0.19                   | \$4.90                   | \$88,200            |
| Texas, High Plains             | 800,000             | \$2.64                   | \$9.95                   | \$7,960,000         |
| Texas, Far West                | 31,650              | \$0.32                   | \$7.00                   | \$221,550           |
| Texas, Lower Rio Grande Valley | 0                   | \$0.00                   | \$0.00                   | \$0                 |
| Texas, Southern Rolling Plains | 0                   | \$0.00                   | \$0.00                   | \$0                 |
| Texas, Northern Blacklands     | 120,000             | \$4.80                   | \$6.00                   | \$720,000           |
| Texas, Southern Blacklands     | 25,000              | \$1.43                   | \$7.50                   | \$187,500           |
| Virginia                       | 105,000             | \$11.78                  | \$12.00                  | \$1,260,000         |
| <b>Total US</b>                | <b>7,945,935</b>    | <b>\$5.87</b>            | <b>\$10.52</b>           | <b>\$83,628,298</b> |

Table 3. Cotton Insect Eradication. Cotton Insect Losses – 2000.

| <b>State</b>                                 | <b>Number Acres</b> | <b>Cost/Acre</b> | <b>Wt cost/acre</b> | <b>Total Cost</b>    |
|--|---------------------|------------------|---------------------|----------------------|
| Alabama, South                               | 250,000             | \$5.00           | \$5.00              | \$1,250,000          |
| Alabama, Central                             | 90,000              | \$5.00           | \$5.00              | \$450,000            |
| Alabama, North                               | 250,000             | \$5.00           | \$5.00              | \$1,250,000          |
| Arizona Bt                                   | 179,000             | \$1.78           | \$1.78              | \$318,620            |
| Arizona Conv                                 | 100,000             | \$1.78           | \$1.78              | \$178,000            |
| Arkansas, Northeast                          | 200,000             | \$15.00          | \$6.00              | \$3,000,000          |
| Arkansas, Southeast                          | 430,000             | \$35.00          | \$30.10             | \$15,050,000         |
| California, San Joaquin Valley               | 0                   | \$0.00           | \$0.00              | \$0                  |
| Florida                                      | 90,000              | \$6.00           | \$6.00              | \$540,000            |
| Georgia                                      | 1,300,000           | \$4.00           | \$4.00              | \$5,200,000          |
| Kansas                                       | 0                   | \$0.00           | \$0.00              | \$0                  |
| Louisiana Conv                               | 128,877             | \$14.00          | \$14.00             | \$1,804,278          |
| Louisiana Bt                                 | 575,716             | \$14.00          | \$14.00             | \$8,060,024          |
| Mississippi Delta                            | 812,000             | \$22.00          | \$22.00             | \$17,864,000         |
| Mississippi Hills                            | 475,000             | \$23.40          | \$23.40             | \$11,115,000         |
| Missouri                                     | 0                   | \$0.00           | \$0.00              | \$0                  |
| New Mexico                                   | 40,772              | \$24.15          | \$13.73             | \$984,644            |
| North Carolina Bt                            | 492,000             | \$1.85           | \$1.85              | \$910,200            |
| North Carolina Conv                          | 409,000             | \$1.85           | \$1.85              | \$756,650            |
| Oklahoma                                     | 216,970             | \$12.20          | \$12.20             | \$2,647,034          |
| South Carolina                               | 300,000             | \$5.35           | \$5.35              | \$1,605,000          |
| Tennessee                                    | 594,897             | \$13.20          | \$13.20             | \$7,852,640          |
| Texas, Upper Gulf Coast                      | 0                   | \$0.00           | \$0.00              | \$0                  |
| Texas, Lower Gulf Coast                      | 381,337             | \$23.14          | \$23.14             | \$8,824,138          |
| Texas, Northern Rolling Plains               | 460,000             | \$10.30          | \$10.30             | \$4,738,000          |
| Texas, High Plains                           | 1,950,000           | \$8.00           | \$5.18              | \$15,600,000         |
| Texas, Far West                              | 547,000             | \$10.10          | \$8.04              | \$5,524,700          |
| Texas, Lower Rio Grande Valley               | 0                   | \$0.00           | \$0.00              | \$0                  |
| Texas, Southern Rolling Plains               | 680,000             | \$11.00          | \$45.33             | \$7,480,000          |
| Texas, Northern Blacklands                   | 0                   | \$0.00           | \$0.00              | \$0                  |
| Texas, Southern Blacklands                   | 0                   | \$0.00           | \$0.00              | \$0                  |
| Virginia                                     | 107,000             | \$3.25           | \$3.25              | \$347,750            |
| <b>Total US - BOLL WEEVIL</b>                | <b>11,059,569</b>   | <b>\$8.66</b>    | <b>\$6.72</b>       | <b>\$95,743,961</b>  |
| California, San Joaquin Valley Pink Bollworm | 879,680             | \$5.31           | \$0.33              | \$4,671,101          |
| Texas, Far West Pink Bollworm                | 47,000              | \$0.00           | \$0.00              | \$0                  |
| <b>Total US - Insect Eradication</b>         | <b>11,986,249</b>   | <b>\$8.38</b>    | <b>\$7.05</b>       | <b>\$100,415,062</b> |

Table 4. Bt Cotton Costs by State. Cotton Insect Losses – 2000.

| <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, South                 | 150,000             | \$26.00              | \$15.60                  | \$3,900,000          | 60                           | 5,000                          | 1.00                             |
| Alabama, Central               | 55,800              | \$28.00              | \$17.36                  | \$1,562,400          | 60                           | 1,000                          | 1.00                             |
| Alabama, North                 | 205,000             | \$26.00              | \$21.32                  | \$5,330,000          | 50                           | 0                              | 0.00                             |
| Arizona                        | 179,000             | \$30.11              | \$19.32                  | \$5,389,690          | 63                           | 2,000                          | 1.00                             |
| Arkansas, Northeast            | 100,000             | \$28.00              | \$5.60                   | \$2,800,000          | 70                           | 50,000                         | 0.50                             |
| Arkansas, Southeast            | 250,000             | \$28.00              | \$14.00                  | \$7,000,000          | 30                           | 200,000                        | 1.00                             |
| California, San Joaquin Valley | 33,000              | \$12.00              | \$0.45                   | \$396,000            | 100                          | 0                              | 0.00                             |
| Florida                        | 41,000              | \$25.00              | \$11.39                  | \$1,025,000          | 50                           | 1,000                          | 1.00                             |
| Georgia                        | 650,000             | \$26.00              | \$13.00                  | \$16,900,000         | 50                           | 162,500                        | 1.00                             |
| Kansas                         | 0                   | \$0.00               | \$0.00                   | \$0                  | 100                          | 0                              | 0.00                             |
| Louisiana                      | 575,716             | \$29.16              | \$23.83                  | \$16,787,879         | 100                          | 262,984                        | 1.50                             |
| Mississippi Delta              | 570,000             | \$30.20              | \$21.20                  | \$17,214,000         | 50                           | 285,000                        | 1.10                             |
| Mississippi Hills              | 380,000             | \$30.50              | \$24.40                  | \$11,590,000         | 70                           | 39,000                         | 1.00                             |
| Missouri                       | 74,065              | \$27.25              | \$5.05                   | \$2,018,271          | 99                           | 993                            | 1.00                             |
| New Mexico                     | 12,000              | \$24.55              | \$4.11                   | \$294,600            | 100                          | 2,000                          | 1.00                             |
| North Carolina                 | 492,000             | \$19.25              | \$10.51                  | \$9,471,000          | 95                           | 0                              | 0.00                             |
| Oklahoma                       | 83,000              | \$19.75              | \$7.56                   | \$1,639,250          | 75                           | 3,000                          | 1.00                             |
| South Carolina                 | 225,000             | \$22.00              | \$16.50                  | \$4,950,000          | 85                           | 185,000                        | 1.50                             |
| Tennessee                      | 458,491             | \$22.00              | \$16.96                  | \$10,086,802         | 86                           | 135,905                        | 0.80                             |
| Texas, Upper Gulf Coast        | 108,500             | \$19.75              | \$8.30                   | \$2,142,875          | 65                           | 25,182                         | 1.00                             |
| Texas, Lower Gulf Coast        | 57,200              | \$19.75              | \$2.96                   | \$1,129,700          | 65                           | 2,860                          | 1.00                             |
| Texas, Northern Rolling Plains | 25,000              | \$22.80              | \$1.24                   | \$570,000            | 60                           | 1,000                          | 1.00                             |
| Texas, High Plains             | 250,000             | \$22.20              | \$1.84                   | \$5,550,000          | 99                           | 10,000                         | 1.00                             |
| Texas, Far West                | 80,820              | \$24.58              | \$2.89                   | \$1,986,556          | 100                          | 0                              | 0.00                             |
| Texas, Lower Rio Grande Valley | 0                   | \$0.00               | \$0.00                   | \$0                  | 100                          | 0                              | 0.00                             |
| Texas, Southern Rolling Plains | 50,000              | \$11.65              | \$3.53                   | \$582,500            | 68                           | 0                              | 0.00                             |
| Texas, Northern Blacklands     | 12,000              | \$21.00              | \$1.68                   | \$252,000            | 100                          | 0                              | 0.00                             |
| Texas, Southern Blacklands     | 60,000              | \$22.00              | \$10.08                  | \$1,320,000          | 85                           | 40,000                         | 1.00                             |
| Virginia                       | 42,800              | \$18.00              | \$7.20                   | \$770,400            | 90                           | 40,660                         | 1.20                             |
| <b>Total US</b>                | <b>5,220,392</b>    | <b>\$25.41</b>       | <b>\$9.31</b>            | <b>\$132,658,922</b> | <b>79</b>                    | <b>1,455,084</b>               | <b>0.33</b>                      |

\* Pink bollworm.

Table 5. Insecticide Application Type and Cost\*. Cotton Insect Losses – 2000.

| State                          | Acres treated<br>by air | Cost/Acre<br>by Air <sup>4</sup> | Total cost<br>application air | Acres treated<br>by ground | Cost/Acre<br>by ground | Total cost<br>application<br>ground | Total #<br>applications<br>all arthropods | Average<br>number<br>by air | Average<br>number<br>by ground |
|--------------------------------|-------------------------|----------------------------------|-------------------------------|----------------------------|------------------------|-------------------------------------|---|-----------------------------|--------------------------------|
| Alabama, South                 | 12,500                  | \$3.75                           | \$46,875                      | 100,000                    | \$2.50                 | \$500,000                           | 1.174                                     | 1.000                       | 2.000                          |
| Alabama, Central               | 4,500                   | \$3.25                           | \$14,625                      | 36,000                     | \$2.50                 | \$135,000                           | 1.012                                     | 1.000                       | 1.500                          |
| Alabama, North                 | 50,000                  | \$3.10                           | \$155,000                     | 200,000                    | \$2.00                 | \$600,000                           | 1.341                                     | 1.000                       | 1.500                          |
| Arizona Bt                     | 128,880                 | \$3.97                           | \$869,811                     | 54,237                     | \$3.00                 | \$162,711                           | 1.441                                     | 1.700                       | 1.000                          |
| Arizona Conv                   | 70,000                  | \$3.58                           | \$626,500                     | 29,600                     | \$2.64                 | \$117,216                           | 3.294                                     | 2.500                       | 1.500                          |
| Arkansas, Northeast            | 350,000                 | \$3.25                           | \$4,550,000                   | 150,000                    | \$2.00                 | \$900,000                           | 7.400                                     | 4.000                       | 3.000                          |
| Arkansas, Southeast            | 350,000                 | \$4.00                           | \$5,600,000                   | 150,000                    | \$2.00                 | \$900,000                           | 5.720                                     | 4.000                       | 3.000                          |
| California, San Joaquin Valley | 501,418                 | \$12.50                          | \$6,894,492                   | 747,728                    | \$10.00                | \$8,972,736                         | 2.374                                     | 1.100                       | 1.200                          |
| Florida                        | 22,500                  | \$3.50                           | \$78,750                      | 67,500                     | \$2.25                 | \$151,875                           | 1.279                                     | 1.000                       | 1.000                          |
| Georgia                        | 650,000                 | \$3.50                           | \$2,275,000                   | 910,000                    | \$3.00                 | \$5,460,000                         | 2.269                                     | 1.000                       | 2.000                          |
| Kansas                         | 800                     | \$15.00                          | \$12,000                      | 1,200                      | \$12.00                | \$14,400                            | 0.084                                     | 1.000                       | 1.000                          |
| Louisiana Conv                 | 115,989                 | \$4.68                           | \$2,497,018                   | 79,904                     | \$3.20                 | \$613,661                           | 6.985                                     | 4.600                       | 2.400                          |
| Louisiana Bt                   | 518,144                 | \$4.68                           | \$11,154,613                  | 351,187                    | \$3.21                 | \$2,705,543                         | 4.053                                     | 4.600                       | 2.400                          |
| Mississippi Delta              | 609,000                 | \$2.20                           | \$3,483,480                   | 812,000                    | \$1.90                 | \$3,085,600                         | 4.643                                     | 2.600                       | 2.000                          |
| Mississippi Hills              | 142,500                 | \$2.25                           | \$256,500                     | 475,000                    | \$1.90                 | \$722,000                           | 1.582                                     | 0.800                       | 0.800                          |
| Missouri                       | 192,000                 | \$4.00                           | \$1,536,000                   | 264,000                    | \$2.00                 | \$2,112,000                         | 5.497                                     | 2.000                       | 4.000                          |
| New Mexico                     | 70,288                  | \$14.00                          | \$4,428,116                   | 21,517                     | \$8.60                 | \$185,043                           | 2.974                                     | 4.500                       | 1.000                          |
| North Carolina Bt              | 98,400                  | \$4.50                           | \$88,560                      | 442,800                    | \$2.50                 | \$885,600                           | 2.182                                     | 0.200                       | 0.800                          |
| North Carolina Conv            | 143,150                 | \$4.50                           | \$322,088                     | 351,740                    | \$2.50                 | \$1,758,700                         | 3.855                                     | 0.500                       | 2.000                          |
| Oklahoma                       | 119,334                 | \$3.50                           | \$835,335                     | 141,031                    | \$3.00                 | \$1,269,275                         | 1.721                                     | 2.000                       | 3.000                          |
| South Carolina                 | 165,000                 | \$4.50                           | \$1,113,750                   | 195,000                    | \$4.00                 | \$1,560,000                         | 3.090                                     | 1.500                       | 2.000                          |
| Tennessee                      | 550,875                 | \$3.46                           | \$18,679,057                  | 464,020                    | \$3.65                 | \$4,911,648                         | 6.666                                     | 9.800                       | 2.900                          |
| Texas, Upper Gulf Coast        | 116,224                 | \$3.15                           | \$1,464,419                   | 142,051                    | \$2.50                 | \$1,775,641                         | 8.557                                     | 4.000                       | 5.000                          |
| Texas, Lower Gulf Coast        | 133,468                 | \$3.15                           | \$462,466                     | 228,802                    | \$2.50                 | \$1,144,011                         | 3.116                                     | 1.100                       | 2.000                          |
| Texas, Northern Rolling Plains | 80,040                  | \$3.50                           | \$420,210                     | 50,600                     | \$1.50                 | \$98,670                            | 0.675                                     | 1.500                       | 1.300                          |
| Texas, High Plains             | 1,806,000               | \$4.00                           | \$28,896,000                  | 1,505,000                  | \$3.50                 | \$15,802,500                        | 4.510                                     | 4.000                       | 3.000                          |
| Texas, Far West                | 618,300                 | \$3.59                           | \$3,551,515                   | 4,809                      | \$2.85                 | \$34,264                            | 0.366                                     | 1.600                       | 2.500                          |
| Texas, Lower Rio Grande Valley | 146,400                 | \$3.00                           | \$2,635,200                   | 244,000                    | \$2.15                 | \$2,098,400                         | 6.828                                     | 6.000                       | 4.000                          |
| Texas, Southern Rolling Plains | 82,500                  | \$3.50                           | \$288,750                     | 82,500                     | \$3.50                 | \$288,750                           | 0.079                                     | 1.000                       | 1.000                          |
| Texas, Northern Blacklands     | 30,000                  | \$3.00                           | \$90,000                      | 120,000                    | \$3.00                 | \$900,000                           | 2.262                                     | 1.000                       | 2.500                          |
| Texas, Southern Blacklands     | 111,350                 | \$2.35                           | \$1,570,035                   | 78,600                     | \$2.25                 | \$530,550                           | 6.687                                     | 6.000                       | 3.000                          |
| Virginia                       | 10,700                  | \$6.50                           | \$13,910                      | 96,300                     | \$4.00                 | \$1,078,560                         | 3.304                                     | 0.200                       | 2.800                          |
| <b>US AVERAGE</b>              | <b>8,000,259</b>        | <b>\$2.41</b>                    | <b>\$35,704,463</b>           | <b>8,597,125</b>           | <b>\$2.06</b>          | <b>\$24,021,766</b>                 | <b>3.576</b>                              | <b>1.852</b>                | <b>1.354</b>                   |

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

Table 6. Cotton Insect Monitoring Costs. Cotton Insect Losses – 2000.

| <b>State</b>                   | <b>Acres Scouted</b> | <b>Times per week Scouted</b> | <b>wt Avg Cost over all acres</b> | <b>Cost/scouted acre</b> | <b>Total Cost</b>   |
|--------------------------------|----------------------|-------------------------------|-----------------------------------|--------------------------|---------------------|
| Alabama, South                 | 150,000              | 1.20                          | \$4.05                            | \$6.75                   | \$1,012,500         |
| Alabama, Central               | 72,000               | 1.20                          | \$4.80                            | \$6.00                   | \$432,000           |
| Alabama, North                 | 175,000              | 1.30                          | \$3.57                            | \$5.10                   | \$892,500           |
| Arizona Bt                     | 177,210              | 1.62                          | \$9.57                            | \$9.67                   | \$1,713,621         |
| Arizona Conv                   | 99,000               | 1.81                          | \$8.80                            | \$8.89                   | \$880,110           |
| Arkansas, Northeast            | 475,000              | 1.50                          | \$5.70                            | \$6.00                   | \$2,850,000         |
| Arkansas, Southeast            | 450,000              | 2.00                          | \$7.20                            | \$8.00                   | \$3,600,000         |
| California, San Joaquin Valley | 750,000              | 1.50                          | \$10.23                           | \$12.00                  | \$9,000,000         |
| Florida                        | 74,000               | 1.80                          | \$7.24                            | \$8.80                   | \$651,200           |
| Georgia                        | 1,010,000            | 1.50                          | \$5.63                            | \$7.25                   | \$7,322,500         |
| Kansas                         | 25,000               | 1.00                          | \$2.50                            | \$4.00                   | \$100,000           |
| Louisiana Conv                 | 112,123              | 1.60                          | \$7.26                            | \$8.34                   | \$935,106           |
| Louisiana Bt                   | 505,306              | 1.60                          | \$7.32                            | \$8.34                   | \$4,214,252         |
| Mississippi Delta              | 765,000              | 1.60                          | \$7.16                            | \$7.60                   | \$5,814,000         |
| Mississippi Hills              | 395,000              | 1.40                          | \$6.07                            | \$7.30                   | \$2,883,500         |
| Missouri                       | 334,000              | 1.00                          | \$4.55                            | \$5.45                   | \$1,820,300         |
| New Mexico                     | 34,000               | 1.00                          | \$4.27                            | \$9.00                   | \$306,000           |
| North Carolina Bt              | 266,000              | 0.70                          | \$4.05                            | \$7.50                   | \$1,995,000         |
| North Carolina Conv            | 324,000              | 1.00                          | \$5.94                            | \$7.50                   | \$2,430,000         |
| Oklahoma                       | 130,000              | 1.00                          | \$3.45                            | \$5.75                   | \$747,500           |
| South Carolina                 | 255,000              | 1.30                          | \$7.23                            | \$8.50                   | \$2,167,500         |
| Tennessee                      | 298,742              | 1.00                          | \$2.91                            | \$5.80                   | \$1,732,704         |
| Texas, Upper Gulf Coast        | 245,361              | 1.00                          | \$5.70                            | \$6.00                   | \$1,472,166         |
| Texas, Lower Gulf Coast        | 316,510              | 1.00                          | \$4.77                            | \$5.75                   | \$1,819,933         |
| Texas, Northern Rolling Plains | 25,000               | 1.50                          | \$0.33                            | \$6.00                   | \$150,000           |
| Texas, High Plains             | 900,000              | 1.20                          | \$1.42                            | \$4.75                   | \$4,275,000         |
| Texas, Far West                | 23,000               | 1.70                          | \$0.29                            | \$8.52                   | \$195,960           |
| Texas, Lower Rio Grande Valley | 195,000              | 0.70                          | \$1.26                            | \$1.58                   | \$308,100           |
| Texas, Southern Rolling Plains | 75,000               | 1.00                          | \$2.27                            | \$5.00                   | \$375,000           |
| Texas, Northern Blacklands     | 100,000              | 1.00                          | \$3.00                            | \$4.50                   | \$450,000           |
| Texas, Southern Blacklands     | 90,000               | 1.50                          | \$2.75                            | \$4.00                   | \$360,000           |
| Virginia                       | 30,000               | 1.50                          | \$2.38                            | \$8.50                   | \$255,000           |
| <b>Total US</b>                | <b>8,876,252</b>     | <b>1.35</b>                   | <b>\$4.43</b>                     | <b>\$7.12</b>            | <b>\$63,161,451</b> |



Table 7. Summary of All States. Cotton Insect Losses – 2000.

| <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             | 6,241,872             | 3,867,108            | 1.109                 | \$7.20                  | \$7.99            | 2.861        | 840,931           |
| Bollworm/budworm        | 11,444,647            | 5,567,312            | 0.721                 | \$10.78                 | \$7.78            | 1.427        | 419,287           |
| Pink Bollworm           | 572,100               | 84,700               | 0.014                 | \$14.51                 | \$0.21            | 0.061        | 17,930            |
| Cotton Fleahopper       | 5,913,848             | 1,036,657            | 0.076                 | \$5.42                  | \$0.41            | 0.152        | 44,808            |
| Lygus                   | 7,586,200             | 2,642,950            | 0.226                 | \$10.04                 | \$2.27            | 0.562        | 165,218           |
| Cotton Leafperforator   | 467,708               | 9,000                | 0.001                 | \$12.00                 | \$0.01            | 0.000        | 31                |
| Spider Mites            | 3,190,851             | 1,454,551            | 0.124                 | \$22.23                 | \$2.75            | 0.221        | 64,856            |
| Thrips, early season    | 12,086,338            | 4,109,091            | 0.346                 | \$5.61                  | \$1.94            | 0.590        | 173,430           |
| Beet Armyworm           | 6,244,406             | 3,065,592            | 0.342                 | \$14.39                 | \$4.93            | 2.112        | 620,722           |
| Fall Armyworm           | 1,873,997             | 440,913              | 0.028                 | \$11.31                 | \$0.31            | 0.061        | 17,830            |
| European Corn Borer     | 313,520               | 1,300                | 0.000                 | \$9.33                  | \$0.00            | 0.003        | 768               |
| Stink Bugs              | 5,293,202             | 1,459,549            | 0.138                 | \$7.75                  | \$1.07            | 0.522        | 153,508           |
| Grasshoppers            | 610,071               | 101,721              | 0.008                 | \$7.55                  | \$0.06            | 0.010        | 2,903             |
| Salt-marsh Caterpillars | 1,139,090             | 85,285               | 0.003                 | \$8.35                  | \$0.03            | 0.004        | 1,036             |
| Aphids                  | 11,088,096            | 3,800,402            | 0.311                 | \$8.16                  | \$2.54            | 0.437        | 128,297           |
| Bandedwinged Whitefly   | 3,267,953             | 466,127              | 0.029                 | \$7.51                  | \$0.22            | 0.018        | 5,169             |
| Silverleaf Whitefly     | 836,372               | 206,171              | 0.018                 | \$29.04                 | \$0.52            | 0.041        | 12,028            |
| Soybean Loopers         | 850,464               | 340,858              | 0.014                 | \$10.63                 | \$0.14            | 0.006        | 1,826             |
| Cabbage Loopers         | 2,604,519             | 302,481              | 0.021                 | \$12.74                 | \$0.27            | 0.022        | 6,582             |
| Western Flower Thrips   | 6,476,631             | 394,714              | 0.029                 | \$12.66                 | \$0.37            | 0.140        | 41,115            |
| Cutworms                | 2,566,553             | 781,310              | 0.052                 | \$4.36                  | \$0.23            | 0.014        | 4,059             |

|                       |               |
|-----------------------|---------------|
| Percent Lost          | 9.26          |
| Total Acres           | 14,248,474    |
| Total Bales lost      | 2,722,335     |
| Bales lost in dollars | \$784,032,442 |

|                    |                 |
|--------------------|-----------------|
| Est. yield/acre    | 595             |
| Spray applications | 3.610           |
| Cost + loss        | \$1,671,680,209 |
| Cost + loss/acre   | \$117.32        |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$34.03    |
| At planting        | \$5.87     |
| Bt use fees        | \$9.31     |
| Eradication        | \$8.66     |
| Scouting           | \$4.43     |
| Total              | \$62.30    |

Table 8. Alabama Summary. Cotton Insect Losses – 2000.

| <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             | 1,600                 | 1,600                | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Bollworm/budworm        | 567,500               | 150,000              | 0.292                 | \$9.07                  | \$2.65            | 0.650       | 9,227             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 60,000                | 3,000                | 0.005                 | \$6.17                  | \$0.03            | 0.044       | 625               |
| Lygus                   | 440,000               | 230,000              | 0.390                 | \$4.98                  | \$1.94            | 0.498       | 7,068             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 120,000               | 5,000                | 0.008                 | \$9.90                  | \$0.08            | 0.229       | 3,250             |
| Thrips, early season    | 590,000               | 85,000               | 0.144                 | \$4.11                  | \$0.59            | 0.761       | 10,802            |
| Beet Armyworm           | 300                   | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 590,000               | 85,000               | 0.144                 | \$6.00                  | \$0.86            | 0.511       | 7,250             |
| Grasshoppers            | 20,000                | 8,200                | 0.017                 | \$9.45                  | \$0.16            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 590,000               | 30,000               | 0.051                 | \$11.13                 | \$0.57            | 1.239       | 17,573            |
| Bandedwinged Whitefly   | 245,000               | 5,000                | 0.008                 | \$12.00                 | \$0.10            | 0.081       | 1,146             |
| Silverleaf Whitefly     | 10,000                | 1,000                | 0.002                 | \$12.00                 | \$0.02            | 0.000       | 0                 |
| Soybean Loopers         | 26,000                | 12,000               | 0.020                 | \$14.92                 | \$0.30            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 150,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 92,000                | 81,500               | 0.138                 | \$2.85                  | \$0.39            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 4.01         |
| Total Acres           | 590,000      |
| Total Bales lost      | 56,940       |
| Bales lost in dollars | \$16,398,750 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 520          |
| Spray applications | 1.220        |
| Cost + loss        | \$44,118,550 |
| Cost + loss/acre   | \$74.78      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$7.70     |
| At planting        | \$12.03    |
| Bt use fees        | \$18.29    |
| Eradication        | \$5.00     |
| Scouting           | \$3.96     |
| Total              | \$46.98    |

Table 8a. North Alabama. Cotton Insect Losses - 2000.

| <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        | 250,000               | 15,000               | 0.060                 | \$8.25                  | \$0.50            | 0.000       | 0                 |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 250,000               | 200,000              | 0.800                 | \$4.80                  | \$3.84            | 0.750       | 5,078             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 120,000               | 5,000                | 0.020                 | \$9.90                  | \$0.20            | 0.480       | 3,250             |
| Thrips, early season    | 250,000               | 30,000               | 0.120                 | \$3.80                  | \$0.46            | 0.500       | 3,385             |
| Beet Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 250,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.100       | 677               |
| Grasshoppers            | 5,000                 | 200                  | 0.001                 | \$7.25                  | \$0.01            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 250,000               | 5,000                | 0.020                 | \$12.80                 | \$0.26            | 1.500       | 10,156            |
| Bandedwinged Whitefly   | 100,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Sweetpotato Whitefly    | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 3,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 150,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 85,000                | 80,000               | 0.320                 | \$2.75                  | \$0.88            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 3.33        |
| Total Acres           | 250,000     |
| Total Bales lost      | 22,547      |
| Bales lost in dollars | \$6,493,500 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 580          |
| Spray applications | 1.341        |
| Cost + loss        | \$18,873,700 |
| Cost + loss/acre   | \$75.49      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$6.13     |
| At planting        | \$13.50    |
| Bt use fees        | \$21.32    |
| Eradication        | \$5.00     |
| Scouting           | \$3.57     |
| Total              | \$49.52    |

Table 8b. Central Alabama. Cotton Insect Losses - 2000.

| <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             | 1,200                 | 1,200                | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Bollworm/budworm        | 67,500                | 22,500               | 0.250                 | \$7.00                  | \$1.75            | 0.375       | 633               |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 30,000                | 1,000                | 0.011                 | \$5.50                  | \$0.06            | 0.167       | 281               |
| Lygus                   | 90,000                | 10,000               | 0.111                 | \$5.50                  | \$0.61            | 0.500       | 844               |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 90,000                | 30,000               | 0.333                 | \$4.50                  | \$1.50            | 1.000       | 1,688             |
| Beet Armyworm           | 300                   | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 90,000                | 10,000               | 0.111                 | \$6.00                  | \$0.67            | 0.500       | 844               |
| Grasshoppers            | 10,000                | 8,000                | 0.107                 | \$9.50                  | \$1.01            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 90,000                | 5,000                | 0.056                 | \$10.00                 | \$0.56            | 1.000       | 1,688             |
| Bandedwinged Whitefly   | 45,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Sweetpotato Whitefly    | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 8,000                 | 2,000                | 0.022                 | \$14.50                 | \$0.32            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 5,000                 | 1,000                | 0.011                 | \$9.00                  | \$0.10            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 3.54        |
| Total Acres           | 90,000      |
| Harvested acres       |             |
| Total Bales lost      | 5,977       |
| Bales lost in dollars | \$1,721,250 |

|                    |             |
|--------------------|-------------|
| Est. yield/acre    | 340         |
| Spray applications | 1.012       |
| Cost + loss        | \$5,777,850 |
| Cost + loss/acre   | \$64.20     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$6.58     |
| At planting        | \$11.33    |
| Bt use fees        | \$17.36    |
| Eradication        | \$5.00     |
| Scouting           | \$4.80     |
| Total              | \$45.07    |

Table 8c. South Alabama. Cotton Insect Losses - 2000.

| <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             | 400                   | 400                  | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Bollworm/budworm        | 250,000               | 112,500              | 0.540                 | \$9.50                  | \$5.13            | 1.500       | 8,594             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 30,000                | 2,000                | 0.008                 | \$6.50                  | \$0.05            | 0.060       | 344               |
| Lygus                   | 100,000               | 20,000               | 0.080                 | \$6.50                  | \$0.52            | 0.200       | 1,146             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 250,000               | 25,000               | 0.100                 | \$4.00                  | \$0.40            | 1.000       | 5,729             |
| Beet Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 250,000               | 75,000               | 0.300                 | \$6.00                  | \$1.80            | 1.000       | 5,729             |
| Grasshoppers            | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 250,000               | 20,000               | 0.080                 | \$11.00                 | \$0.88            | 1.000       | 5,729             |
| Bandedwinged Whitefly   | 100,000               | 5,000                | 0.020                 | \$12.00                 | \$0.24            | 0.200       | 1,146             |
| Sweetpotato Whitefly    | 10,000                | 1,000                | 0.004                 | \$12.00                 | \$0.05            | 0.000       | 0                 |
| Soybean Loopers         | 15,000                | 10,000               | 0.040                 | \$15.00                 | \$0.60            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 2,000                 | 500                  | 0.002                 | \$6.00                  | \$0.01            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 4.96        |
| Total Acres           | 250,000     |
| Total Bales lost      | 28,417      |
| Bales lost in dollars | \$8,184,000 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 525          |
| Spray applications | 1.174        |
| Cost + loss        | \$19,467,000 |
| Cost + loss/acre   | \$77.87      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$9.68     |
| At planting        | \$10.80    |
| Bt use fees        | \$15.60    |
| Eradication        | \$5.00     |
| Scouting           | \$4.05     |
| Total              | \$45.13    |

Table 9. Arizona Summary. Cotton Insect Losses - 2000.

| <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                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| Bollworm/budworm        | 103,700               | 38,580               | \$0.17                | \$16.37                 | \$2.78            | 0.309       | 3,029             |
| Pink Bollworm           | 246,100               | 60,000               | \$0.56                | \$15.60                 | \$8.72            | 1.139       | 11,177            |
| Cotton Fleahopper       | 195,300               | 9,265                | \$0.02                | \$8.00                  | \$0.13            | 0.140       | 1,374             |
| Lygus                   | 279,000               | 151,820              | \$1.01                | \$20.66                 | \$20.78           | 3.105       | 30,461            |
| Cotton Leafperforator   | 32,900                | 9,000                | \$0.03                | \$12.00                 | \$0.39            | 0.003       | 31                |
| Spider Mites            | 69,750                | 13,950               | \$0.05                | \$15.00                 | \$0.75            | 0.023       | 228               |
| Thrips, early season    | 279,000               | 22,320               | \$0.08                | \$12.67                 | \$1.01            | 0.093       | 912               |
| Beet Armyworm           | 169,500               | 58,950               | \$0.20                | \$10.63                 | \$2.08            | 0.023       | 221               |
| Fall Armyworm           | 0                     | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 26,740                | 6,580                | \$0.01                | \$20.50                 | \$0.30            | 0.015       | 149               |
| Grasshoppers            | 0                     | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 23,950                | 3,000                | \$0.01                | \$15.00                 | \$0.16            | 0.000       | 0                 |
| Aphids                  | 32,850                | 2,790                | \$0.01                | \$23.00                 | \$0.14            | 0.006       | 56                |
| Bandedwinged Whitefly   | 139,500               | 2,358                | \$0.00                | \$15.00                 | \$0.06            | 0.002       | 23                |
| Silverleaf Whitefly     | 262,210               | 138,450              | \$0.66                | \$29.18                 | \$19.18           | 0.519       | 5,096             |
| Soybean Loopers         | 0                     | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 7,370                 | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 139,500               | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | \$0.00                | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |            |
|-----------------------|------------|
| Percent Lost          | 5.38       |
| Total Acres           | 279,000    |
| Total Bales lost      | 52,757     |
| Bales lost in dollars | 15,193,930 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 1,285        |
| Spray applications | 2.802        |
| Cost + loss        | \$39,859,628 |
| Cost + loss/acre   | \$142.87     |

| Cost/ Acre         |         |
|--------------------|---------|
| Foliar insecticide | \$56.48 |
| At planting        | \$1.53  |
| Bt use fees        | \$19.32 |
| Eradication        | \$1.78  |
| Scouting           | \$9.30  |
| Total              | \$88.41 |

Table 9a. Arizona Bt Cotton. Cotton Insect Losses - 2000.

| <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        | 53,700                | 3,580                | 0.020                 | \$16.37                 | \$0.33            | 0.150       | 953               |
| Pink Bollworm           | 161,100               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 125,300               | 6,265                | 0.018                 | \$8.00                  | \$0.14            | 0.140       | 889               |
| Lygus                   | 179,000               | 103,820              | 1.090                 | \$20.75                 | \$22.63           | 3.140       | 19,941            |
| Cotton Leafperforator   | 17,900                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 44,750                | 8,950                | 0.050                 | \$15.00                 | \$0.75            | 0.025       | 159               |
| Thrips, early season    | 179,000               | 14,320               | 0.080                 | \$12.67                 | \$1.01            | 0.100       | 635               |
| Beet Armyworm           | 89,500                | 8,950                | 0.025                 | \$6.50                  | \$0.16            | 0.000       | 0                 |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 10,740                | 3,580                | 0.013                 | \$20.50                 | \$0.26            | 0.006       | 38                |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 8,950                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 26,850                | 1,790                | 0.006                 | \$23.00                 | \$0.14            | 0.008       | 48                |
| Bandedwinged Whitefly   | 89,500                | 358                  | 0.001                 | \$15.00                 | \$0.02            | 0.003       | 16                |
| Silverleaf Whitefly     | 177,210               | 98,450               | 0.756                 | \$29.63                 | \$22.41           | 0.594       | 3,772             |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 5,370                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 89,500                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 4.17        |
| Total Acres           | 179,000     |
| Total Bales lost      | 26,451      |
| Bales lost in dollars | \$7,617,877 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 1,322        |
| Spray applications | 2.059        |
| Cost + loss        | \$23,937,610 |
| Cost + loss/acre   | \$133.73     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$47.84    |
| At planting        | \$1.87     |
| Bt use fees        | \$30.11    |
| Eradication        | \$1.78     |
| Scouting           | \$9.57     |
| Total              | \$91.17    |

Table 9b. Arizona Conventional Cotton. Cotton Insect Losses - 2000.

| <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        | 50,000                | 35,000               | 0.438                 | \$16.37                 | \$7.16            | 0.600       | 2,076             |
| Pink Bollworm           | 85,000                | 60,000               | 1.560                 | \$15.60                 | \$24.34           | 3.230       | 11,177            |
| Cotton Fleahopper       | 70,000                | 3,000                | 0.015                 | \$8.00                  | \$0.12            | 0.140       | 484               |
| Lygus                   | 100,000               | 48,000               | 0.854                 | \$20.44                 | \$17.46           | 3.040       | 10,520            |
| Cotton Leafperforator   | 15,000                | 9,000                | 0.090                 | \$12.00                 | \$1.08            | 0.009       | 31                |
| Spider Mites            | 25,000                | 5,000                | 0.050                 | \$15.00                 | \$0.75            | 0.020       | 69                |
| Thrips, early season    | 100,000               | 8,000                | 0.080                 | \$12.67                 | \$1.01            | 0.080       | 277               |
| Beet Armyworm           | 80,000                | 50,000               | 0.500                 | \$11.00                 | \$5.50            | 0.064       | 221               |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 16,000                | 3,000                | 0.019                 | \$20.50                 | \$0.38            | 0.032       | 111               |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 15,000                | 3,000                | 0.030                 | \$15.00                 | \$0.45            | 0.000       | 0                 |
| Aphids                  | 6,000                 | 1,000                | 0.006                 | \$23.00                 | \$0.14            | 0.002       | 8                 |
| Bandedwinged Whitefly   | 50,000                | 2,000                | 0.010                 | \$15.00                 | \$0.15            | 0.002       | 7                 |
| Silverleaf Whitefly     | 85,000                | 40,000               | 0.480                 | \$27.90                 | \$13.39           | 0.383       | 1,324             |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 2,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 50,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 7.60        |
| Total Acres           | 100,000     |
| Total Bales lost      | 26,306      |
| Bales lost in dollars | \$7,576,054 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 1,220        |
| Spray applications | 4.132        |
| Cost + loss        | \$15,922,017 |
| Cost + loss/acre   | \$159.22     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$71.95    |
| At planting        | \$0.93     |
| Bt use fees        | \$0.00     |
| Eradication        | \$1.78     |
| Scouting           | \$8.80     |
| Total              | \$83.46    |



Table 10. Arkansas Summary. Cotton Insect Losses - 2000.

| <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             | 975,000               | 625,000              | 2.500                 | \$7.49                  | \$18.73           | 1.926       | 37,109            |
| Bollworm/budworm        | 1,000,000             | 900,000              | 2.250                 | \$13.00                 | \$29.25           | 3.270       | 63,021            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 400,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 1,000,000             | 200,000              | 0.200                 | \$8.00                  | \$1.60            | 0.641       | 12,344            |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 450,000               | 175,000              | 0.275                 | \$16.45                 | \$4.53            | 0.224       | 4,323             |
| Thrips, early season    | 950,000               | 500,000              | 0.650                 | \$6.69                  | \$4.35            | 1.897       | 36,563            |
| Beet Armyworm           | 200,000               | 100,000              | 0.100                 | \$14.00                 | \$1.40            | 0.000       | 0                 |
| Fall Armyworm           | 400,000               | 150,000              | 0.150                 | \$12.00                 | \$1.80            | 0.197       | 3,802             |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 500,000               | 5,000                | 0.005                 | \$6.00                  | \$0.03            | 0.021       | 396               |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 150,000               | 10,000               | 0.010                 | \$9.00                  | \$0.09            | 0.000       | 0                 |
| Aphids                  | 1,000,000             | 200,000              | 0.200                 | \$8.50                  | \$1.70            | 0.500       | 9,635             |
| Bandedwinged Whitefly   | 250,000               | 20,000               | 0.020                 | \$10.00                 | \$0.20            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 150,000               | 10,000               | 0.000                 | N/A                     | \$0.01            | 0.000       | 0                 |
| Cabbage Loopers         | 100,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 400,000               | 100,000              | 0.100                 | \$7.00                  | \$0.70            | 0.118       | 2,281             |
| Cutworms                | 300,000               | 100,000              | 0.100                 | \$2.50                  | \$0.25            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 8.79         |
| Total Acres           | 1,000,000    |
| Total Bales lost      | 169,474      |
| Bales lost in dollars | \$48,808,500 |

|                    |               |
|--------------------|---------------|
| Est. yield/acre    | 709           |
| Spray applications | 6.560         |
| Cost + loss        | \$158,463,500 |
| Cost + loss/acre   | \$158.46      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$64.63    |
| At planting        | \$10.73    |
| Bt use fees        | \$9.80     |
| Eradication        | \$18.05    |
| Scouting           | \$6.45     |
| Total              | \$109.66   |

Table 10a. Northeast Arkansas. Cotton Insect Losses - 2000.

| <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             | 475,000               | 425,000              | 3.400                 | \$7.25                  | \$24.65           | 2.375       | 22,266            |
| Bollworm/budworm        | 500,000               | 450,000              | 1.800                 | \$10.00                 | \$18.00           | 2.500       | 23,438            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 350,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 500,000               | 100,000              | 0.200                 | \$8.00                  | \$1.60            | 1.000       | 9,375             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 250,000               | 100,000              | 0.400                 | \$17.00                 | \$6.80            | 0.250       | 2,344             |
| Thrips, early season    | 500,000               | 300,000              | 0.900                 | \$7.00                  | \$6.30            | 2.000       | 18,750            |
| Beet Armyworm           | 100,000               | 50,000               | 0.100                 | \$14.00                 | \$1.40            | 0.000       | 0                 |
| Fall Armyworm           | 300,000               | 100,000              | 0.200                 | \$12.00                 | \$2.40            | 0.300       | 2,813             |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 300,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 50,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 500,000               | 100,000              | 0.200                 | \$9.00                  | \$1.80            | 0.500       | 4,688             |
| Bandedwinged Whitefly   | 150,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 50,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 100,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 300,000               | 50,000               | 0.100                 | \$7.00                  | \$0.70            | 0.180       | 1,688             |
| Cutworms                | 200,000               | 50,000               | 0.100                 | \$3.00                  | \$0.30            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 9.11         |
| Total Acres           | 500,000      |
| Total Bales lost      | 85,359       |
| Bales lost in dollars | \$24,583,500 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 680          |
| Spray applications | 7.400        |
| Cost + loss        | \$71,208,500 |
| Cost + loss/acre   | \$142.42     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$63.95    |
| At planting        | \$12.00    |
| Bt use fees        | \$5.60     |
| Eradication        | \$6.00     |
| Scouting           | \$5.70     |
| Total              | \$93.25    |

Table 10b. Southeast Arkansas. Cotton Insect Losses - 2000.

| <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               | 200,000              | 1.600                 | \$8.00                  | \$12.80           | 1.500       | 14,844            |
| Bollworm/budworm        | 500,000               | 450,000              | 2.700                 | \$15.00                 | \$40.50           | 4.000       | 39,583            |
| 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                   | 500,000               | 100,000              | 0.200                 | \$8.00                  | \$1.60            | 0.300       | 2,969             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 200,000               | 75,000               | 0.150                 | \$15.00                 | \$2.25            | 0.200       | 1,979             |
| Thrips, early season    | 450,000               | 200,000              | 0.400                 | \$6.00                  | \$2.40            | 1.800       | 17,813            |
| Beet Armyworm           | 100,000               | 50,000               | 0.100                 | \$14.00                 | \$1.40            | 0.000       | 0                 |
| Fall Armyworm           | 100,000               | 50,000               | 0.100                 | \$12.00                 | \$1.20            | 0.100       | 990               |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 200,000               | 5,000                | 0.010                 | \$6.00                  | \$0.06            | 0.040       | 396               |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 100,000               | 10,000               | 0.020                 | \$9.00                  | \$0.18            | 0.000       | 0                 |
| Aphids                  | 500,000               | 100,000              | 0.200                 | \$8.00                  | \$1.60            | 0.500       | 4,948             |
| Bandedwinged Whitefly   | 100,000               | 20,000               | 0.040                 | \$10.00                 | \$0.40            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 100,000               | 10,000               | 0.000                 | N/A                     | \$0.02            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 100,000               | 50,000               | 0.100                 | \$7.00                  | \$0.70            | 0.060       | 594               |
| Cutworms                | 100,000               | 50,000               | 0.100                 | \$2.00                  | \$0.20            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 8.50         |
| Total Acres           | 500,000      |
| Total Bales lost      | 84,115       |
| Bales lost in dollars | \$24,225,000 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 738          |
| Spray applications | 5.720        |
| Cost + loss        | \$87,255,000 |
| Cost + loss/acre   | \$174.51     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$65.31    |
| At planting        | \$9.45     |
| Bt use fees        | \$14.00    |
| Eradication        | \$30.10    |
| Scouting           | \$7.20     |
| Total              | \$126.06   |

Table 11. California – San Joaquin Valley\*. Cotton Insect Losses - 2000.

| <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        | 87,968                | 8,797                | 0.010                 | \$26.00                 | \$0.26            | 0.002       | 59                |
| 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                   | 791,712               | 351,872              | 0.400                 | \$27.00                 | \$10.80           | 2.250       | 65,976            |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 870,833               | 659,760              | 1.125                 | \$30.00                 | \$33.75           | 1.485       | 43,542            |
| Thrips, early season    | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Beet Armyworm           | 263,904               | 131,352              | 0.149                 | \$18.00                 | \$2.69            | 0.060       | 1,759             |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 527,808               | 263,904              | 0.300                 | \$18.00                 | \$5.40            | 0.300       | 8,797             |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 105,562               | 52,781               | 0.060                 | \$33.00                 | \$1.98            | 0.012       | 352               |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 870,883               | 263,904              | 0.330                 | \$15.00                 | \$4.95            | 0.990       | 29,029            |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 5.10         |
| Total Acres           | 879,680      |
| Total Bales lost      | 149,514      |
| Bales lost in dollars | \$43,059,963 |

|                    |               |
|--------------------|---------------|
| Est. yield/acre    | 1,275         |
| Spray applications | 2.374         |
| Cost + loss        | \$107,785,226 |
| Cost + loss/acre   | \$122.53      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$59.83    |
| At planting        | \$3.07     |
| Bt use fees        | \$0.45     |
| Eradication        | \$0.00     |
| Scouting           | \$10.23    |
| Total              | \$73.58    |

\*The Sacramento and Imperial Valleys are not included in this year's report.

Table 12. Florida Summary. Cotton Insect Losses - 2000.

| <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                | 25,000               | 0.278                 | \$9.00                  | \$2.50            | 0.533       | 720               |
| 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                   | 75,000                | 8,000                | 0.089                 | \$4.25                  | \$0.38            | 0.000       | 0                 |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 90,000                | 6,000                | 0.067                 | \$5.50                  | \$0.37            | 0.200       | 270               |
| Beet Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 6,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 84,000                | 65,000               | 0.722                 | \$7.20                  | \$5.20            | 0.933       | 1,260             |
| Grasshoppers            | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 90,000                | 10,000               | 0.111                 | \$11.00                 | \$1.22            | 0.180       | 243               |
| Bandedwinged Whitefly   | 40,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 40,000                | 1,000                | 0.011                 | \$18.00                 | \$0.20            | 0.000       | 0                 |
| Soybean Loopers         | 30,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 20,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 1,000                 | 150                  | 0.002                 | \$8.00                  | \$0.01            | 0.000       | 0                 |

|                       |           |
|-----------------------|-----------|
| Percent Lost          | 1.85      |
| Total Acres           | 90,000    |
| Total Bales lost      | 2,493     |
| Bales lost in dollars | \$717,993 |

|                    |             |
|--------------------|-------------|
| Est. yield/acre    | 490         |
| Spray applications | 1.279       |
| Cost + loss        | \$4,430,593 |
| Cost + loss/acre   | \$49.23     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$9.88     |
| At planting        | \$6.75     |
| Bt use fees        | \$11.39    |
| Eradication        | \$6.00     |
| Scouting           | \$7.24     |
| Total              | \$41.25    |

Table 13. Georgia Summary. Cotton Insect Losses - 2000.

| <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        | 950,000               | 587,600              | 1.130                 | \$10.00                 | \$11.30           | 1.462       | 39,583            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 15,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 150,000               | 65,000               | 0.050                 | \$6.00                  | \$0.30            | 0.000       | 0                 |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 1,100,100             | 227,500              | 0.175                 | \$5.00                  | \$0.88            | 0.000       | 0                 |
| Beet Armyworm           | 20,000                | 13,000               | 0.010                 | \$10.00                 | \$0.10            | 0.000       | 0                 |
| Fall Armyworm           | 20,000                | 13,000               | 0.010                 | \$10.00                 | \$0.10            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 900,000               | 690,000              | 0.796                 | \$8.00                  | \$6.37            | 1.385       | 37,500            |
| Grasshoppers            | 50,000                | 1,000                | 0.001                 | \$8.00                  | \$0.01            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 500,000               | 91,000               | 0.070                 | \$9.00                  | \$0.63            | 0.385       | 10,417            |
| Bandedwinged Whitefly   | 10,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 150,000               | 5,000                | 0.006                 | \$15.00                 | \$0.09            | 0.231       | 6,250             |
| Soybean Loopers         | 40,000                | 26,000               | 0.020                 | \$14.00                 | \$0.28            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 5,000                 | 1,500                | 0.001                 | \$6.00                  | \$0.01            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 3.46         |
| Total Acres           | 1,300,000    |
| Total Bales lost      | 93,750       |
| Bales lost in dollars | \$27,000,000 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 600          |
| Spray applications | 2.269        |
| Cost + loss        | \$92,992,500 |
| Cost + loss/acre   | \$71.53      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$20.05    |
| At planting        | \$8.08     |
| Bt use fees        | \$13.00    |
| Eradication        | \$4.00     |
| Scouting           | \$5.63     |
| Total              | \$50.76    |

Table 14. Kansas Summary. Cotton Insect Losses - 2000.

| <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        | 1,000                 | 640                  | 0.016                 | \$15.00                 | \$0.24            | 0.025       | 10                |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 1,000                 | 200                  | 0.005                 | \$12.00                 | \$0.06            | 0.000       | 0                 |
| Lygus                   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 10,000                | 2,500                | 0.063                 | \$12.00                 | \$0.75            | 1.250       | 521               |
| Beet Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |           |
|-----------------------|-----------|
| Percent Lost          | 1.28      |
| Total Acres           | 40,000    |
| Total Bales lost      | 531       |
| Bales lost in dollars | \$153,000 |

|                    |           |
|--------------------|-----------|
| Est. yield/acre    | 300       |
| Spray applications | 0.084     |
| Cost + loss        | \$415,000 |
| Cost + loss/acre   | \$10.38   |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$1.05     |
| At planting        | \$3.00     |
| Bt use fees        | \$0.00     |
| Eradication        | \$0.00     |
| Scouting           | \$2.50     |
| Total              | \$6.55     |

Table 15. Louisiana Summary. Cotton Insect Losses - 2000.

| <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             | 547,089               | 172,633              | 0.363                 | \$0.06                  | \$0.02            | 0.186       | 2,350             |
| Bollworm/budworm        | 637,571               | 375,449              | 1.319                 | \$9.45                  | \$12.46           | 1.006       | 12,691            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 147,966               | 32,292               | 0.000                 | N/A                     | \$0.00            | 0.001       | 12                |
| Lygus                   | 407,141               | 270,800              | 0.525                 | \$4.52                  | \$2.37            | 0.270       | 3,405             |
| Cotton Leafperforator   | 4,808                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 339,918               | 333,546              | 0.237                 | \$9.61                  | \$2.28            | 0.067       | 841               |
| Thrips, early season    | 640,759               | 292,217              | 0.456                 | \$5.45                  | \$2.49            | 0.158       | 1,997             |
| Beet Armyworm           | 400,288               | 179,626              | 0.138                 | \$10.61                 | \$1.46            | 0.150       | 1,894             |
| Fall Armyworm           | 249,970               | 108,313              | 0.088                 | \$8.30                  | \$0.73            | 0.028       | 357               |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 374,699               | 127,705              | 0.213                 | \$5.36                  | \$1.14            | 0.638       | 8,049             |
| Grasshoppers            | 97,871                | 1,121                | 0.000                 | \$4.50                  | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 331,740               | 51,785               | 0.016                 | \$4.99                  | \$0.08            | 0.000       | 0                 |
| Aphids                  | 602,182               | 412,663              | 0.586                 | \$5.78                  | \$3.38            | 0.129       | 1,632             |
| Bandedwinged Whitefly   | 322,432               | 263,069              | 0.254                 | \$6.92                  | \$1.76            | 0.074       | 933               |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 298,164               | 245,058              | 0.139                 | \$8.71                  | \$1.21            | 0.085       | 1,066             |
| Cabbage Loopers         | 29,014                | 1,081                | 0.000                 | \$11.00                 | \$0.00            | 0.000       | 4                 |
| Western Flower Thrips   | 243,821               | 2,132                | 0.000                 | \$8.00                  | \$0.00            | 0.008       | 99                |
| Cutworms                | 374,053               | 356,960              | 0.456                 | \$3.70                  | \$1.69            | 0.061       | 767               |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 2.86         |
| Total Acres           | 704,593      |
| Total Bales lost      | 36,096       |
| Bales lost in dollars | \$10,395,744 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 639          |
| Spray applications | 4.790        |
| Cost + loss        | \$67,981,698 |
| Cost + loss/acre   | \$96.48      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$31.08    |
| At planting        | \$5.51     |
| Bt use fees        | \$23.83    |
| Eradication        | \$14.00    |
| Scouting           | \$7.31     |
| Total              | \$81.73    |



Table 15a. Louisiana Conventional Cotton Summary. Cotton Insect Losses - 2000.

| <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             | 100,068               | 31,576               | 0.343                 | \$0.37                  | \$0.13            | 0.078       | 173               |
| Bollworm/budworm        | 125,592               | 112,465              | 4.538                 | \$10.87                 | \$49.33           | 2.797       | 6,225             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 25,364                | 5,340                | 0.000                 | N/A                     | \$0.00            | 0.002       | 4                 |
| Lygus                   | 76,890                | 47,788               | 0.445                 | \$4.72                  | \$2.10            | 0.298       | 664               |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 63,131                | 60,411               | 0.234                 | \$9.32                  | \$2.18            | 0.064       | 142               |
| Thrips, early season    | 116,878               | 52,098               | 0.445                 | \$5.38                  | \$2.39            | 0.218       | 484               |
| Beet Armyworm           | 71,807                | 36,639               | 0.199                 | \$10.93                 | \$2.18            | 0.212       | 471               |
| Fall Armyworm           | 44,393                | 13,591               | 0.042                 | \$8.56                  | \$0.36            | 0.010       | 23                |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 68,890                | 28,799               | 0.156                 | \$5.45                  | \$0.85            | 0.641       | 1,428             |
| Grasshoppers            | 17,945                | 205                  | 0.000                 | \$4.50                  | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 60,678                | 3,618                | 0.014                 | \$6.25                  | \$0.09            | 0.000       | 0                 |
| Aphids                  | 111,501               | 75,856               | 0.589                 | \$6.20                  | \$3.65            | 0.216       | 481               |
| Bandedwinged Whitefly   | 4,095                 | 48,876               | 0.228                 | \$7.00                  | \$1.59            | 0.006       | 14                |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 30,251                | 23,360               | 0.073                 | \$9.05                  | \$0.66            | 0.045       | 99                |
| Cabbage Loopers         | 5,749                 | 198                  | 0.000                 | \$11.00                 | \$0.00            | 0.001       | 1                 |
| Western Flower Thrips   | 60,207                | 390                  | 0.000                 | \$8.00                  | \$0.00            | 0.000       | 0                 |
| Cutworms                | 70,836                | 66,540               | 0.465                 | \$3.70                  | \$1.72            | 0.049       | 110               |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 4.64        |
| Total Acres           | 128,877     |
| Total Bales lost      | 10,320      |
| Bales lost in dollars | \$2,972,192 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 640          |
| Spray applications | 7.770        |
| Cost + loss        | \$15,085,997 |
| Cost + loss/acre   | \$117.06     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$67.23    |
| At planting        | \$5.51     |
| Bt use fees        | \$0.00     |
| Eradication        | \$14.00    |
| Scouting           | \$7.26     |
| Total              | \$94.00    |

Table 15b. Louisiana Bt-Cotton Summary. Cotton Insect Losses - 2000.

| <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             | 447,021               | 141,057              | 0.368                 | \$0.00                  | \$0.00            | 0.210       | 2,178             |
| Bollworm/budworm        | 511,979               | 262,984              | 0.914                 | \$7.04                  | \$6.43            | 0.623       | 6,466             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 122,602               | 26,952               | 0.000                 | N/A                     | \$0.00            | 0.001       | 9                 |
| Lygus                   | 330,251               | 223,012              | 0.542                 | \$4.48                  | \$2.43            | 0.264       | 2,741             |
| Cotton Leafperforator   | 4,808                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 276,787               | 273,135              | 0.237                 | \$9.68                  | \$2.30            | 0.067       | 699               |
| Thrips, early season    | 523,881               | 240,119              | 0.459                 | \$5.47                  | \$2.51            | 0.146       | 1,512             |
| Beet Armyworm           | 328,481               | 142,987              | 0.124                 | \$10.50                 | \$1.30            | 0.137       | 1,422             |
| Fall Armyworm           | 205,577               | 94,722               | 0.099                 | \$8.28                  | \$0.82            | 0.032       | 334               |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 305,809               | 98,906               | 0.225                 | \$5.35                  | \$1.20            | 0.637       | 6,621             |
| Grasshoppers            | 79,926                | 916                  | 0.000                 | \$4.50                  | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 271,062               | 48,167               | 0.017                 | \$4.75                  | \$0.08            | 0.000       | 0                 |
| Aphids                  | 490,681               | 336,807              | 0.585                 | \$5.68                  | \$3.32            | 0.111       | 1,151             |
| Bandedwinged Whitefly   | 318,337               | 214,193              | 0.260                 | \$6.90                  | \$1.80            | 0.088       | 919               |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 267,913               | 221,698              | 0.154                 | \$8.67                  | \$1.34            | 0.093       | 967               |
| Cabbage Loopers         | 23,265                | 883                  | 0.000                 | \$11.00                 | \$0.00            | 0.000       | 3                 |
| Western Flower Thrips   | 183,614               | 1,742                | 0.000                 | \$8.00                  | \$0.00            | 0.010       | 99                |
| Cutworms                | 303,217               | 290,420              | 0.454                 | \$3.70                  | \$1.68            | 0.063       | 656               |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 2.48        |
| Total Acres           | 575,716     |
| Total Bales lost      | 25,776      |
| Bales lost in dollars | \$7,423,552 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 639          |
| Spray applications | 4.438        |
| Cost + loss        | \$54,173,172 |
| Cost + loss/acre   | \$94.10      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$25.21    |
| At planting        | \$5.51     |
| Bt use fees        | \$29.16    |
| Eradication        | \$14.00    |
| Scouting           | \$7.32     |
| Total              | \$81.20    |

Table 16. Mississippi Summary. Cotton Insect Losses - 2000.

| <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        | 1,287,000             | 515,000              | 0.863                 | \$13.20                 | \$11.39           | 2.232       | 59,850            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 38,800                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.001       | 29                |
| Lygus                   | 1,287,000             | 870,000              | 0.925                 | \$6.97                  | \$6.44            | 0.352       | 9,448             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 480,000               | 74,000               | 0.075                 | \$10.93                 | \$0.82            | 0.062       | 1,667             |
| Thrips, early season    | 1,287,000             | 652,000              | 0.648                 | \$5.24                  | \$3.39            | 0.626       | 16,790            |
| Beet Armyworm           | 530,000               | 96,000               | 0.075                 | \$11.73                 | \$0.87            | 0.071       | 1,917             |
| Fall Armyworm           | 767,000               | 157,000              | 0.122                 | \$12.14                 | \$1.48            | 0.445       | 11,925            |
| European Corn Borer     | 20,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 770,000               | 38,100               | 0.030                 | \$7.37                  | \$0.22            | 0.212       | 5,688             |
| Grasshoppers            | 51,200                | 10,000               | 0.008                 | \$7.60                  | \$0.06            | 0.007       | 196               |
| Salt-marsh Caterpillars | 209,000               | 19,000               | 0.015                 | \$9.11                  | \$0.13            | 0.016       | 435               |
| Aphids                  | 1,287,000             | 531,000              | 0.492                 | \$6.78                  | \$3.33            | 0.330       | 8,845             |
| Bandedwinged Whitefly   | 730,000               | 106,500              | 0.108                 | \$8.95                  | \$0.96            | 0.054       | 1,448             |
| Silverleaf Whitefly     | 1,000                 | 300                  | 0.000                 | \$19.50                 | \$0.00            | 0.004       | 104               |
| Soybean Loopers         | 215,000               | 47,000               | 0.037                 | \$11.83                 | \$0.43            | 0.028       | 760               |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 1,287,000             | 152,000              | 0.118                 | \$6.68                  | \$0.79            | 0.087       | 2,343             |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 4.53         |
| Total Acres           | 1,287,000    |
| Total Bales lost      | 121,444      |
| Bales lost in dollars | \$34,975,980 |

|                    |               |
|--------------------|---------------|
| Est. yield/acre    | 662           |
| Spray applications | 3.513         |
| Cost + loss        | \$152,183,853 |
| Cost + loss/acre   | \$118.25      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$30.34    |
| At planting        | \$9.08     |
| Bt use fees        | \$22.38    |
| Eradication        | \$22.52    |
| Scouting           | \$6.76     |
| Total              | \$91.07    |

Table 16a. Mississippi Delta. Cotton Insect Losses - 2000.

| <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        | 812,000               | 410,000              | 1.161                 | \$13.20                 | \$15.33           | 1.900       | 32,142            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 28,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.002       | 29                |
| Lygus                   | 812,000               | 730,000              | 1.259                 | \$7.20                  | \$9.06            | 0.500       | 8,458             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 160,000               | 55,000               | 0.088                 | \$10.80                 | \$0.95            | 0.059       | 1,000             |
| Thrips, early season    | 812,000               | 510,000              | 0.817                 | \$5.40                  | \$4.41            | 0.700       | 11,842            |
| Beet Armyworm           | 390,000               | 83,000               | 0.102                 | \$11.70                 | \$1.20            | 0.096       | 1,625             |
| Fall Armyworm           | 580,000               | 120,000              | 0.148                 | \$11.80                 | \$1.74            | 0.429       | 7,250             |
| European Corn Borer     | 20,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 420,000               | 5,100                | 0.006                 | \$7.20                  | \$0.05            | 0.207       | 3,500             |
| Grasshoppers            | 8,200                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.001       | 17                |
| Salt-marsh Caterpillars | 129,000               | 17,000               | 0.021                 | \$9.20                  | \$0.19            | 0.016       | 269               |
| Aphids                  | 812,000               | 490,000              | 0.724                 | \$6.80                  | \$4.92            | 0.400       | 6,767             |
| Bandedwinged Whitefly   | 510,000               | 85,000               | 0.136                 | \$8.70                  | \$1.18            | 0.031       | 531               |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 140,000               | 37,000               | 0.046                 | \$11.70                 | \$0.53            | 0.017       | 292               |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 812,000               | 110,000              | 0.135                 | \$6.60                  | \$0.89            | 0.080       | 1,353             |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 4.44         |
| Total Acres           | 812,000      |
| Total Bales lost      | 75,075       |
| Bales lost in dollars | \$21,621,480 |

|                    |               |
|--------------------|---------------|
| Est. yield/acre    | 680           |
| Spray applications | 4.643         |
| Cost + loss        | \$103,214,750 |
| Cost + loss/acre   | \$127.11      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$40.46    |
| At planting        | \$9.66     |
| Bt use fees        | \$21.20    |
| Eradication        | \$22.00    |
| Scouting           | \$7.16     |
| Total              | \$100.48   |

Table 16b. Mississippi Hills. Cotton Insect Losses - 2000.

| <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        | 475,000               | 105,000              | 0.354                 | \$13.20                 | \$4.67            | 2.800       | 27,708            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 10,800                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 475,000               | 140,000              | 0.354                 | \$5.55                  | \$1.96            | 0.100       | 990               |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 320,000               | 19,000               | 0.052                 | \$11.30                 | \$0.59            | 0.067       | 667               |
| Thrips, early season    | 475,000               | 142,000              | 0.359                 | \$4.60                  | \$1.65            | 0.500       | 4,948             |
| Beet Armyworm           | 140,000               | 13,000               | 0.027                 | \$11.90                 | \$0.33            | 0.029       | 292               |
| Fall Armyworm           | 187,000               | 37,000               | 0.078                 | \$13.25                 | \$1.03            | 0.472       | 4,675             |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 350,000               | 33,000               | 0.069                 | \$7.40                  | \$0.51            | 0.221       | 2,188             |
| Grasshoppers            | 43,000                | 10,000               | 0.021                 | \$7.60                  | \$0.16            | 0.018       | 179               |
| Salt-marsh Caterpillars | 80,000                | 2,000                | 0.004                 | \$8.30                  | \$0.03            | 0.017       | 167               |
| Aphids                  | 475,000               | 41,000               | 0.095                 | \$6.50                  | \$0.62            | 0.210       | 2,078             |
| Bandedwinged Whitefly   | 220,000               | 21,500               | 0.059                 | \$9.95                  | \$0.59            | 0.093       | 917               |
| Silverleaf Whitefly     | 1,000                 | 300                  | 0.001                 | \$19.50                 | \$0.01            | 0.011       | 104               |
| Soybean Loopers         | 75,000                | 10,000               | 0.021                 | \$12.30                 | \$0.26            | 0.047       | 469               |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 475,000               | 42,000               | 0.088                 | \$6.90                  | \$0.61            | 0.100       | 990               |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 4.69         |
| Total Acres           | 475,000      |
| Total Bales lost      | 46,370       |
| Bales lost in dollars | \$13,354,500 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 630          |
| Spray applications | 1.582        |
| Cost + loss        | \$48,969,103 |
| Cost + loss/acre   | \$103.09     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$13.02    |
| At planting        | \$8.09     |
| Bt use fees        | \$24.40    |
| Eradication        | \$23.40    |
| Scouting           | \$6.07     |
| Total              | \$74.98    |

Table 17. Missouri Summary. Cotton Insect Losses - 2000.

| <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             | 311,200               | 298,400              | 2.984                 | \$6.82                  | \$20.35           | 3.734       | 32,116            |
| Bollworm/budworm        | 347,600               | 301,600              | 0.905                 | \$8.34                  | \$7.55            | 1.469       | 12,630            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 51,200                | 10,400               | 0.026                 | \$7.00                  | \$0.18            | 0.000       | 0                 |
| Lygus                   | 352,400               | 106,000              | 0.292                 | \$6.43                  | \$1.87            | 0.546       | 4,697             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 98,400                | 28,800               | 0.072                 | \$11.90                 | \$0.86            | 0.106       | 910               |
| Thrips, early season    | 400,000               | 137,000              | 0.343                 | \$4.46                  | \$1.53            | 1.230       | 10,578            |
| Beet Armyworm           | 8,830                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 41,200                | 1,600                | 0.004                 | \$11.00                 | \$0.04            | 0.010       | 89                |
| European Corn Borer     | 36,000                | 800                  | 0.002                 | \$10.00                 | \$0.02            | 0.009       | 77                |
| Stink Bugs              | 61,600                | 3,600                | 0.009                 | \$4.00                  | \$0.04            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 280,000               | 221,600              | 0.609                 | \$6.89                  | \$4.20            | 0.574       | 4,936             |
| Bandedwinged Whitefly   | 130,000               | 69,200               | 0.173                 | \$5.00                  | \$0.87            | 0.023       | 196               |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 39,200                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 61,607                | 10,268               | 0.026                 | \$5.00                  | \$0.13            | 0.000       | 0                 |
| Cutworms                | 79,200                | 21,200               | 0.053                 | \$5.73                  | \$0.30            | 0.044       | 375               |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 7.74         |
| Total Acres           | 400,000      |
| Total Bales lost      | 66,604       |
| Bales lost in dollars | \$19,181,875 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 731          |
| Spray applications | 5.497        |
| Cost + loss        | \$41,623,025 |
| Cost + loss/acre   | \$104.06     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$37.93    |
| At planting        | \$8.57     |
| Bt use fees        | \$5.05     |
| Eradication        | \$0.00     |
| Scouting           | \$4.55     |
| Total              | \$56.10    |

Table 18. New Mexico Summary. Cotton Insect Losses - 2000.

| <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             | 41,908                | 18,908               | 0.527                 | \$18.00                 | \$9.49            | 1.753       | 2,014             |
| Bollworm/budworm        | 44,000                | 41,000               | 1.143                 | \$18.00                 | \$20.58           | 2.454       | 2,820             |
| Pink Bollworm           | 15,000                | 8,000                | 0.112                 | \$18.00                 | \$2.01            | 0.941       | 1,081             |
| Cotton Fleahopper       | 2,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.014       | 16                |
| Lygus                   | 25,000                | 6,500                | 0.091                 | \$8.50                  | \$0.77            | 1.569       | 1,802             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 15,000                | 2,000                | 0.028                 | \$9.00                  | \$0.25            | 0.314       | 360               |
| Beet Armyworm           | 34,000                | 4,000                | 0.056                 | \$21.00                 | \$1.17            | 0.474       | 545               |
| Fall Armyworm           | 4,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 8,000                 | 500                  | 0.007                 | \$18.00                 | \$0.13            | 0.056       | 64                |
| Grasshoppers            | 18,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 42,000                | 16,000               | 0.223                 | \$21.00                 | \$4.68            | 0.000       | 0                 |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 14,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 7.57        |
| Total Acres           | 71,722      |
| Total Bales lost      | 8,703       |
| Bales lost in dollars | \$2,506,436 |

|                    |             |
|--------------------|-------------|
| Est. yield/acre    | 625         |
| Spray applications | 2.186       |
| Cost + loss        | \$7,029,617 |
| Cost + loss/acre   | \$98.01     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$39.08    |
| At planting        | \$1.88     |
| Bt use fees        | \$4.11     |
| Eradication        | \$13.73    |
| Scouting           | \$4.27     |
| Total              | \$63.07    |

Table 19. North Carolina Summary. Cotton Insect Losses - 2000.

| <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        | 901,000               | 826,500              | 1.717                 | \$8.25                  | \$14.17           | 3.212       | 75,364            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 400,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 901,000               | 98,000               | 0.109                 | \$6.50                  | \$0.71            | 0.406       | 9,518             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 8,950                 | 895                  | 0.001                 | \$13.00                 | \$0.02            | 0.000       | 0                 |
| Thrips, early season    | 901,000               | 622,000              | 0.897                 | \$4.75                  | \$4.26            | 1.200       | 28,156            |
| Beet Armyworm           | 10,500                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 84,000                | 700                  | 0.001                 | \$10.25                 | \$0.01            | 0.000       | 0                 |
| European Corn Borer     | 120,000               | 500                  | 0.001                 | \$8.25                  | \$0.00            | 0.002       | 47                |
| Stink Bugs              | 901,000               | 93,000               | 0.123                 | \$8.10                  | \$1.00            | 2.751       | 64,538            |
| Grasshoppers            | 44,000                | 4,400                | 0.005                 | \$6.00                  | \$0.03            | 0.002       | 41                |
| Salt-marsh Caterpillars | 60,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 901,000               | 36,000               | 0.044                 | \$12.00                 | \$0.53            | 0.160       | 3,754             |
| Bandedwinged Whitefly   | 20,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 12,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 450,000               | 11,100               | 0.012                 | \$12.00                 | \$0.15            | 0.240       | 5,625             |
| Cutworms                | 202,000               | 22,200               | 0.025                 | \$5.00                  | \$0.12            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 7.97         |
| Total Acres           | 901,000      |
| Total Bales lost      | 187,043      |
| Bales lost in dollars | \$53,868,330 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 770          |
| Spray applications | 2.935        |
| Cost + loss        | \$98,189,242 |
| Cost + loss/acre   | \$108.98     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$20.99    |
| At planting        | \$10.93    |
| Bt use fees        | \$10.51    |
| Eradication        | \$1.85     |
| Scouting           | \$4.91     |
| Total              | \$49.19    |



Table 19a. North Carolina Bt Cotton Summary. Cotton Insect Losses - 2000.

| <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        | 492,000               | 426,000              | 0.866                 | \$8.25                  | \$7.14            | 1.260       | 16,144            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 200,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 492,000               | 59,500               | 0.121                 | \$6.50                  | \$0.79            | 0.560       | 7,175             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 4,950                 | 495                  | 0.001                 | \$13.00                 | \$0.02            | 0.000       | 0                 |
| Thrips, early season    | 492,000               | 342,000              | 0.904                 | \$4.75                  | \$4.29            | 1.200       | 15,375            |
| Beet Armyworm           | 5,500                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 44,000                | 200                  | 0.000                 | \$10.25                 | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 60,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 492,000               | 90,000               | 0.220                 | \$8.10                  | \$1.78            | 3.840       | 49,200            |
| Grasshoppers            | 24,000                | 2,400                | 0.005                 | \$6.00                  | \$0.03            | 0.002       | 23                |
| Salt-marsh Caterpillars | 10,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 492,000               | 19,800               | 0.044                 | \$12.00                 | \$0.53            | 0.160       | 2,050             |
| Bandedwinged Whitefly   | 10,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 6,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 247,000               | 6,100                | 0.012                 | \$12.00                 | \$0.15            | 0.241       | 3,088             |
| Cutworms                | 101,000               | 12,200               | 0.025                 | \$5.00                  | \$0.12            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 7.26         |
| Total Acres           | 492,000      |
| Total Bales lost      | 93,054       |
| Bales lost in dollars | \$26,799,480 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 779          |
| Spray applications | 2.198        |
| Cost + loss        | \$51,899,812 |
| Cost + loss/acre   | \$105.49     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$14.85    |
| At planting        | \$11.01    |
| Bt use fees        | \$19.25    |
| Eradication        | \$1.85     |
| Scouting           | \$4.05     |
| Total              | \$51.02    |

Table 19b. North Carolina Conventional Cotton Summary. Cotton Insect Losses - 2000.

| <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        | 409,000               | 400,500              | 2.742                 | \$8.25                  | \$22.62           | 5.560       | 59,220            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 200,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 409,000               | 38,500               | 0.094                 | \$6.50                  | \$0.61            | 0.220       | 2,343             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 4,000                 | 400                  | 0.001                 | \$13.00                 | \$0.02            | 0.000       | 0                 |
| Thrips, early season    | 409,000               | 280,000              | 0.890                 | \$4.75                  | \$4.23            | 1.200       | 12,781            |
| Beet Armyworm           | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 40,000                | 500                  | 0.001                 | \$10.25                 | \$0.01            | 0.000       | 0                 |
| European Corn Borer     | 60,000                | 500                  | 0.001                 | \$8.25                  | \$0.01            | 0.004       | 47                |
| Stink Bugs              | 409,000               | 3,000                | 0.007                 | \$8.10                  | \$0.06            | 1.440       | 15,338            |
| Grasshoppers            | 20,000                | 2,000                | 0.005                 | \$6.00                  | \$0.03            | 0.002       | 19                |
| Salt-marsh Caterpillars | 50,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 409,000               | 16,200               | 0.044                 | \$12.00                 | \$0.52            | 0.160       | 1,704             |
| Bandedwinged Whitefly   | 10,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 6,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 203,000               | 5,000                | 0.012                 | \$12.00                 | \$0.15            | 0.238       | 2,538             |
| Cutworms                | 101,000               | 10,000               | 0.024                 | \$5.00                  | \$0.12            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 8.82         |
| Total Acres           | 409,000      |
| Total Bales lost      | 93,989       |
| Bales lost in dollars | \$27,068,850 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 760          |
| Spray applications | 3.822        |
| Cost + loss        | \$46,289,430 |
| Cost + loss/acre   | \$113.18     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$28.38    |
| At planting        | \$10.83    |
| Bt use fees        | \$0.00     |
| Eradication        | \$1.85     |
| Scouting           | \$5.94     |
| Total              | \$46.99    |

Table 20. Oklahoma Summary. Cotton Insect Losses - 2000.

| <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        | 216,970               | 50,000               | 0.461                 | \$12.75                 | \$5.88            | 3.000       | 9,153             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 216,970               | 80,000               | 0.369                 | \$6.50                  | \$2.40            | 1.000       | 3,051             |
| Lygus                   | 30,000                | 1,000                | 0.005                 | \$6.75                  | \$0.03            | 0.035       | 105               |
| Cotton Leafperforator   | 40,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 3,000                 | 550                  | 0.005                 | \$14.00                 | \$0.07            | 0.007       | 21                |
| Thrips, early season    | 216,970               | 130,000              | 0.599                 | \$6.50                  | \$3.89            | 1.000       | 3,051             |
| Beet Armyworm           | 50,000                | 10,464               | 0.048                 | \$16.50                 | \$0.80            | 0.346       | 1,055             |
| Fall Armyworm           | 5,000                 | 1,000                | 0.005                 | \$16.50                 | \$0.08            | 0.035       | 105               |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 50,000                | 250                  | 0.001                 | \$10.75                 | \$0.01            | 0.058       | 176               |
| Grasshoppers            | 38,000                | 13,000               | 0.060                 | \$8.00                  | \$0.48            | 0.088       | 267               |
| Salt-marsh Caterpillars | 15,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 150,000               | 17,000               | 0.157                 | \$9.75                  | \$1.53            | 2.074       | 6,328             |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 60,000                | 2,500                | 0.012                 | \$11.50                 | \$0.13            | 0.138       | 422               |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 7.78        |
| Total Acres           | 216,970     |
| Total Bales lost      | 23,735      |
| Bales lost in dollars | \$6,835,793 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 440          |
| Spray applications | 1.721        |
| Cost + loss        | \$15,694,070 |
| Cost + loss/acre   | \$72.33      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$15.29    |
| At planting        | \$2.33     |
| Bt use fees        | \$7.56     |
| Eradication        | \$12.20    |
| Scouting           | \$3.45     |
| Total              | \$40.83    |

Table 21. South Carolina Summary. Cotton Insect Losses - 2000.

| <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        | 295,000               | 225,000              | 1.050                 | \$8.75                  | \$9.19            | 3.933       | 21,510            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 4,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 10,000                | 1,000                | 0.003                 | \$8.50                  | \$0.03            | 0.000       | 0                 |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 15,000                | 1,000                | 0.005                 | \$13.00                 | \$0.07            | 0.050       | 273               |
| Thrips, early season    | 260,000               | 125,000              | 0.625                 | \$4.50                  | \$2.81            | 0.000       | 0                 |
| Beet Armyworm           | 1,000                 | 500                  | 0.002                 | \$16.00                 | \$0.03            | 0.000       | 0                 |
| Fall Armyworm           | 5,000                 | 500                  | 0.002                 | \$15.50                 | \$0.03            | 0.017       | 91                |
| European Corn Borer     | 3,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 225,000               | 175,000              | 1.167                 | \$9.00                  | \$10.50           | 3.000       | 16,406            |
| Grasshoppers            | 50,000                | 10,000               | 0.067                 | \$9.00                  | \$0.60            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 150,000               | 50,000               | 0.167                 | \$8.00                  | \$1.33            | 0.000       | 0                 |
| Bandedwinged Whitefly   | 20,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 1,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 1,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 20,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 5,000                 | 1,000                | 0.003                 | \$5.00                  | \$0.02            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 7.00         |
| Total Acres           | 300,000      |
| Total Bales lost      | 38,281       |
| Bales lost in dollars | \$11,025,000 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 645          |
| Spray applications | 3.090        |
| Cost + loss        | \$31,615,000 |
| Cost + loss/acre   | \$105.38     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$24.60    |
| At planting        | \$14.96    |
| Bt use fees        | \$16.50    |
| Eradication        | \$5.35     |
| Scouting           | \$7.23     |
| Total              | \$68.63    |

Table 22. Tennessee Summary. Cotton Insect Losses - 2000.

| <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             | 574,897               | 574,897              | 3.444                 | \$8.01                  | \$27.58           | 3.002       | 33,969            |
| Bollworm/budworm        | 415,726               | 290,189              | 0.824                 | \$11.32                 | \$9.33            | 1.502       | 16,996            |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Lygus                   | 594,897               | 103,558              | 0.295                 | \$7.18                  | \$2.12            | 0.800       | 9,052             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 298,500               | 132,250              | 0.432                 | \$13.40                 | \$5.79            | 0.400       | 4,526             |
| Thrips, early season    | 594,897               | 473,254              | 1.300                 | \$8.01                  | \$10.42           | 1.159       | 13,113            |
| Beet Armyworm           | 380,050               | 500                  | 0.001                 | \$17.00                 | \$0.01            | 0.011       | 129               |
| Fall Armyworm           | 151,950               | 1,000                | 0.002                 | \$17.00                 | \$0.03            | 0.052       | 585               |
| European Corn Borer     | 133,520               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 4                 |
| Stink Bugs              | 530,348               | 129,484              | 0.218                 | \$8.24                  | \$1.79            | 1.400       | 15,846            |
| Grasshoppers            | 26,000                | 5,000                | 0.008                 | \$7.50                  | \$0.06            | 0.005       | 56                |
| Salt-marsh Caterpillars | 149,600               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.010       | 110               |
| Aphids                  | 513,244               | 70,660               | 0.119                 | \$10.38                 | \$1.23            | 0.195       | 2,210             |
| Bandedwinged Whitefly   | 217,321               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.103       | 1,161             |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 30,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 119,215               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.004       | 42                |
| Western Flower Thrips   | 458,490               | 3,810                | 0.006                 | \$5.54                  | \$0.04            | 0.602       | 6,813             |
| Cutworms                | 32,300                | 9,800                | 0.016                 | \$6.60                  | \$0.11            | 0.029       | 331               |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 9.27         |
| Total Acres           | 594,897      |
| Total Bales lost      | 104,943      |
| Bales lost in dollars | \$30,223,605 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 600          |
| Spray applications | 6.666        |
| Cost + loss        | \$90,784,905 |
| Cost + loss/acre   | \$152.61     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$58.52    |
| At planting        | \$7.99     |
| Bt use fees        | \$16.96    |
| Eradication        | \$15.64    |
| Scouting           | \$2.70     |
| Total              | \$101.80   |

Table 23. Texas Summary. Cotton Insect Losses - 2000.

| <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             | 3,790,178             | 2,175,670            | 1.840                 | \$7.18                  | \$13.20           | 7.347       | 729,894           |
| Bollworm/budworm        | 4,403,612             | 1,125,957            | 0.203                 | \$10.74                 | \$2.18            | 0.940       | 93,397            |
| Pink Bollworm           | 311,000               | 16,700               | 0.007                 | \$9.34                  | \$0.07            | 0.057       | 5,672             |
| Cotton Fleahopper       | 4,381,612             | 901,500              | 0.179                 | \$5.30                  | \$0.95            | 0.400       | 39,701            |
| Lygus                   | 1,227,000             | 178,400              | 0.033                 | \$8.29                  | \$0.27            | 0.108       | 10,748            |
| Cotton Leafperforator   | 390,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 431,500               | 29,800               | 0.009                 | \$9.87                  | \$0.09            | 0.057       | 5,685             |
| Thrips, early season    | 4,644,612             | 738,800              | 0.146                 | \$5.76                  | \$0.84            | 0.503       | 50,009            |
| Beet Armyworm           | 4,176,034             | 2,471,200            | 0.797                 | \$14.48                 | \$11.54           | 6.158       | 611,698           |
| Fall Armyworm           | 134,877               | 7,800                | 0.001                 | \$7.09                  | \$0.01            | 0.001       | 88                |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 270,745               | 40,330               | 0.007                 | \$6.81                  | \$0.05            | 0.018       | 1,758             |
| Grasshoppers            | 210,000               | 49,000               | 0.010                 | \$6.84                  | \$0.07            | 0.023       | 2,283             |
| Salt-marsh Caterpillars | 199,800               | 1,500                | 0.000                 | \$6.70                  | \$0.00            | 0.000       | 0                 |
| Aphids                  | 4,395,262             | 1,847,485            | 0.428                 | \$7.73                  | \$3.31            | 0.519       | 51,545            |
| Bandedwinged Whitefly   | 1,143,700             | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 253,600               | 7,640                | 0.001                 | \$16.15                 | \$0.02            | 0.002       | 226               |
| Soybean Loopers         | 48,300                | 800                  | 0.000                 | \$10.75                 | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 2,308,720             | 301,400              | 0.055                 | \$12.74                 | \$0.70            | 0.061       | 6,099             |
| Western Flower Thrips   | 3,602,330             | 1,000                | 0.000                 | \$4.90                  | \$0.00            | 0.000       | 10                |
| Cutworms                | 189,000               | 35,000               | 0.006                 | \$7.87                  | \$0.05            | 0.002       | 175               |

|                       |               |
|-----------------------|---------------|
| Percent Lost          | 16.20         |
| Total Acres           | 5,486,612     |
| Total Bales lost      | 1,608,986     |
| Bales lost in dollars | \$463,387,962 |

|                    |               |
|--------------------|---------------|
| Est. yield/acre    | 377           |
| Spray applications | 3.724         |
| Cost + loss        | \$722,764,741 |
| Cost + loss/acre   | \$131.73      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$33.35    |
| At planting        | \$2.06     |
| Bt use fees        | \$2.47     |
| Eradication        | \$7.69     |
| Scouting           | \$1.71     |
| Total              | \$47.27    |

Table 23a. Texas - Upper Coastal Bend. Cotton Insect Losses - 2000.

| <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             | 258,275               | 250,000              | 5.808                 | \$6.26                  | \$36.36           | 7.000       | 37,665            |
| Bollworm/budworm        | 258,275               | 103,310              | 0.400                 | \$9.90                  | \$3.96            | 1.000       | 5,381             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 258,275               | 200,000              | 0.774                 | \$4.76                  | \$3.69            | 0.000       | 0                 |
| Lygus                   | 200,000               | 70,000               | 0.271                 | \$8.15                  | \$2.21            | 0.774       | 4,167             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 258,275               | 120,000              | 0.697                 | \$6.50                  | \$4.53            | 3.000       | 16,142            |
| Beet Armyworm           | 50,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 46,490                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 82,645                | 21,000               | 0.081                 | \$6.70                  | \$0.54            | 0.320       | 1,722             |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 25,800                | 500                  | 0.002                 | \$6.70                  | \$0.01            | 0.000       | 0                 |
| Aphids                  | 258,275               | 129,138              | 0.500                 | \$7.00                  | \$3.50            | 1.000       | 5,381             |
| Bandedwinged Whitefly   | 64,500                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 22,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 24,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 280,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 103,000               | 6,000                | 0.023                 | \$6.55                  | \$0.15            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 13.09        |
| Total Acres           | 258,275      |
| Total Bales lost      | 70,457       |
| Bales lost in dollars | \$20,291,670 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 625          |
| Spray applications | 8.557        |
| Cost + loss        | \$39,739,985 |
| Cost + loss/acre   | \$153.87     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$54.95    |
| At planting        | \$6.35     |
| Bt use fees        | \$8.30     |
| Eradication        | \$0.00     |
| Scouting           | \$5.70     |
| Total              | \$75.30    |

Table 23b. Texas – Lower Coastal Bend. Cotton Insect Losses - 2000.

| <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             | 343,203               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Bollworm/budworm        | 381,337               | 222,447              | 0.583                 | \$9.90                  | \$5.78            | 1.000       | 7,945             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 381,337               | 286,000              | 0.750                 | \$4.76                  | \$3.57            | 0.000       | 0                 |
| Lygus                   | 10,000                | 1,000                | 0.003                 | \$8.15                  | \$0.02            | 0.000       | 0                 |
| Cotton Leafperforator   | 25,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 200,000               | 5,000                | 0.013                 | \$9.30                  | \$0.12            | 0.524       | 4,167             |
| Thrips, early season    | 381,337               | 228,800              | 0.600                 | \$6.50                  | \$3.90            | 3.000       | 23,834            |
| Beet Armyworm           | 152,534               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 53,387                | 1,800                | 0.005                 | \$7.40                  | \$0.03            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 52,000                | 18,000               | 0.047                 | \$6.70                  | \$0.32            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 19,500                | 1,000                | 0.003                 | \$6.70                  | \$0.02            | 0.000       | 0                 |
| Aphids                  | 381,337               | 205,922              | 1.080                 | \$7.00                  | \$7.56            | 4.000       | 31,778            |
| Bandedwinged Whitefly   | 12,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 11,000                | 500                  | 0.001                 | \$8.20                  | \$0.01            | 0.000       | 0                 |
| Cabbage Loopers         | 15,000                | 1,000                | 0.003                 | \$8.20                  | \$0.02            | 0.000       | 0                 |
| Western Flower Thrips   | 19,830                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 46,000                | 11,000               | 0.029                 | \$6.55                  | \$0.19            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 8.52         |
| Total Acres           | 381,337      |
| Total Bales lost      | 67,723       |
| Bales lost in dollars | \$19,504,176 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 728          |
| Spray applications | 3.116        |
| Cost + loss        | \$39,975,748 |
| Cost + loss/acre   | \$104.83     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$21.54    |
| At planting        | \$1.27     |
| Bt use fees        | \$2.96     |
| Eradication        | \$23.14    |
| Scouting           | \$4.77     |
| Total              | \$53.68    |



Table 23c. Texas – Northern rolling Plains. Cotton Insect Losses - 2000.

| <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             | 280,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Bollworm/budworm        | 60,000                | 48,000               | 0.136                 | \$7.90                  | \$1.07            | 0.522       | 3,000             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 60,000                | 45,000               | 0.098                 | \$4.90                  | \$0.48            | 0.078       | 450               |
| Lygus                   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 10,000                | 2,000                | 0.005                 | \$9.10                  | \$0.04            | 0.022       | 125               |
| Thrips, early season    | 90,000                | 30,000               | 0.072                 | \$4.10                  | \$0.29            | 0.010       | 56                |
| Beet Armyworm           | 110,000               | 80,000               | 0.209                 | \$11.68                 | \$2.44            | 1.196       | 6,875             |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 5,000                 | 500                  | 0.001                 | \$8.84                  | \$0.01            | 0.001       | 6                 |
| Grasshoppers            | 42,000                | 28,000               | 0.067                 | \$7.30                  | \$0.49            | 0.274       | 1,575             |
| Salt-marsh Caterpillars | 2,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 70,000                | 26,000               | 0.085                 | \$7.52                  | \$0.64            | 0.076       | 438               |
| Bandedwinged Whitefly   | 2,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 2,000                 | 400                  | 0.001                 | \$15.55                 | \$0.01            | 0.001       | 5                 |
| Western Flower Thrips   | 10,000                | 1,000                | 0.002                 | \$4.90                  | \$0.01            | 0.002       | 10                |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 2.18        |
| Total Acres           | 460,000     |
| Total Bales lost      | 12,540      |
| Bales lost in dollars | \$3,611,520 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 175          |
| Spray applications | 0.675        |
| Cost + loss        | \$11,681,440 |
| Cost + loss/acre   | \$25.39      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$5.49     |
| At planting        | \$0.19     |
| Bt use fees        | \$1.24     |
| Eradication        | \$10.30    |
| Scouting           | \$0.33     |
| Total              | \$17.54    |

Table 23d. Texas – High Plains. Cotton Insect Losses - 2000.

| <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             | 1,840,000             | 1,475,000            | 2.205                 | \$7.25                  | \$15.99           | 10.698      | 654,063           |
| Bollworm/budworm        | 3,010,000             | 600,000              | 0.159                 | \$11.50                 | \$1.83            | 1.000       | 61,141            |
| Pink Bollworm           | 50,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 2,500,000             | 50,000               | 0.017                 | \$5.50                  | \$0.09            | 0.415       | 25,391            |
| Lygus                   | 900,000               | 50,000               | 0.017                 | \$9.75                  | \$0.16            | 0.075       | 4,570             |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 100,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 3,010,000             | 225,000              | 0.075                 | \$5.00                  | \$0.37            | 0.100       | 6,114             |
| Beet Armyworm           | 3,010,000             | 2,317,700            | 1.386                 | \$14.50                 | \$20.10           | 9.500       | 580,836           |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 75,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 150,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 3,010,000             | 1,384,600            | 0.552                 | \$8.00                  | \$4.42            | 0.200       | 12,228            |
| Bandedwinged Whitefly   | 1,000,000             | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 300                   | 300                  | 0.000                 | \$15.00                 | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 2,000,000             | 300,000              | 0.100                 | \$12.75                 | \$1.27            | 0.100       | 6,094             |
| Western Flower Thrips   | 3,010,000             | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |               |
|-----------------------|---------------|
| Percent Lost          | 22.09         |
| Total Acres           | 3,010,000     |
| Total Bales lost      | 1,350,436     |
| Bales lost in dollars | \$388,925,550 |

|                    |               |
|--------------------|---------------|
| Est. yield/acre    | 366           |
| Spray applications | 4.510         |
| Cost + loss        | \$555,453,555 |
| Cost + loss/acre   | \$184.54      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$44.23    |
| At planting        | \$2.64     |
| Bt use fees        | \$1.84     |
| Eradication        | \$5.18     |
| Scouting           | \$1.42     |
| Total              | \$55.32    |

Table 23e. Texas – Far West. Cotton Insect Losses - 2000.

| <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             | 550,700               | 6,670                | 0.010                 | \$3.00                  | \$0.03            | 0.080       | 630               |
| Bollworm/budworm        | 103,000               | 33,200               | 0.082                 | \$13.01                 | \$1.07            | 0.435       | 3,416             |
| Pink Bollworm           | 261,000               | 16,700               | 0.056                 | \$9.34                  | \$0.52            | 0.722       | 5,672             |
| Cotton Fleahopper       | 563,000               | 7,500                | 0.019                 | \$9.20                  | \$0.17            | 0.820       | 6,439             |
| Lygus                   | 42,000                | 26,400               | 0.038                 | \$8.00                  | \$0.31            | 0.141       | 1,105             |
| Cotton Leafperforator   | 300,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 241,000               | 30,000               | 0.044                 | \$7.00                  | \$0.31            | 0.000       | 0                 |
| Beet Armyworm           | 532,500               | 30,500               | 0.089                 | \$17.90                 | \$1.59            | 2.945       | 23,144            |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 8,600                 | 830                  | 0.001                 | \$10.78                 | \$0.01            | 0.004       | 30                |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 2,500                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 46,650                | 10,825               | 0.024                 | \$8.00                  | \$0.19            | 0.024       | 192               |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 9,600                 | 2,640                | 0.004                 | \$24.00                 | \$0.09            | 0.029       | 226               |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 6,720                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 32,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 5.20         |
| Total Acres           | 687,000      |
| Total Bales lost      | 40,854       |
| Bales lost in dollars | \$11,765,904 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 176          |
| Spray applications | 0.366        |
| Cost + loss        | \$22,640,321 |
| Cost + loss/acre   | \$32.96      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$4.29     |
| At planting        | \$0.32     |
| Bt use fees        | \$2.89     |
| Eradication        | \$8.04     |
| Scouting           | \$0.29     |
| Total              | \$15.83    |

Table 23f. Texas – Lower Rio Grande Valley. Cotton Insect Losses - 2000.

| <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             | 244,000               | 224,000              | 5.508                 | \$8.00                  | \$44.07           | 3.800       | 15,453            |
| Bollworm/budworm        | 244,000               | 25,000               | 0.102                 | \$11.00                 | \$1.13            | 0.020       | 81                |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 244,000               | 180,000              | 0.738                 | \$6.15                  | \$4.54            | 0.020       | 81                |
| Lygus                   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Leafperforator   | 35,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 25,000                | 2,000                | 0.008                 | \$8.00                  | \$0.07            | 0.000       | 0                 |
| Thrips, early season    | 244,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Beet Armyworm           | 220,000               | 30,000               | 0.122951              | \$14.00                 | \$1.72            | 0.036       | 147               |
| Fall Armyworm           | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 244,000               | 70,000               | 0.287                 | \$7.00                  | \$2.01            | 0.020       | 81                |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 244,000               | 5,000                | 0.020                 | \$12.00                 | \$0.25            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 244,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 244,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 10,000                | 10,000               | 0.041                 | \$10.00                 | \$0.41            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 3.90        |
| Total Acres           | 244,000     |
| Total Bales lost      | 15,844      |
| Bales lost in dollars | \$4,563,072 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 491          |
| Spray applications | 6.828        |
| Cost + loss        | \$18,091,172 |
| Cost + loss/acre   | \$74.14      |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$54.18    |
| At planting        | \$0.00     |
| Bt use fees        | \$0.00     |
| Eradication        | \$0.00     |
| Scouting           | \$1.26     |
| Total              | \$55.44    |

Table 23g. Texas – Southern Rolling Plains. Cotton Insect Losses - 2000.

| <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        | 165,000               | 4,000                | 0.024                 | \$11.50                 | \$0.28            | 1.000       | 1,818             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 165,000               | 5,000                | 0.030                 | \$7.00                  | \$0.21            | 1.000       | 1,818             |
| Lygus                   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Leafperforator   | 30,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 165,000               | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Beet Armyworm           | 50,000                | 3,000                | 0.018                 | \$18.00                 | \$0.33            | 0.303       | 551               |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 32,500                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 65,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 165,000               | 1,000                | 0.006                 | \$9.00                  | \$0.05            | 0.000       | 0                 |
| Bandedwinged Whitefly   | 65,200                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 13,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 6,500                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 2.30        |
| Total Acres           | 165,000     |
| Total Bales lost      | 4,188       |
| Bales lost in dollars | \$1,206,120 |

|                    |             |
|--------------------|-------------|
| Est. yield/acre    | 200         |
| Spray applications | 0.079       |
| Cost + loss        | \$9,787,620 |
| Cost + loss/acre   | \$59.32     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$0.87     |
| At planting        | \$0.00     |
| Bt use fees        | \$3.53     |
| Eradication        | \$45.33    |
| Scouting           | \$2.27     |
| Total              | \$52.01    |

Table 23h. Texas – Northern Blacklands. Cotton Insect Losses - 2000.

| <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             | 143,000               | 110,000              | 1.100                 | \$6.50                  | \$7.15            | 1.907       | 2,979             |
| Bollworm/budworm        | 51,000                | 20,000               | 0.133                 | \$15.00                 | \$2.00            | 0.680       | 1,063             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 110,000               | 53,000               | 0.353                 | \$4.50                  | \$1.59            | 0.733       | 1,146             |
| Lygus                   | 20,000                | 1,000                | 0.007                 | \$6.50                  | \$0.04            | 0.067       | 104               |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 1,500                 | 800                  | 0.005                 | \$14.00                 | \$0.07            | 0.005       | 8                 |
| Thrips, early season    | 135,000               | 75,000               | 0.500                 | \$4.50                  | \$2.25            | 1.800       | 2,813             |
| Beet Armyworm           | 1,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 10,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 68,000                | 11,000               | 0.110                 | \$6.50                  | \$0.72            | 0.453       | 708               |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 135,000               | 8,000                | 0.053                 | \$7.00                  | \$0.37            | 0.450       | 703               |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 6.10        |
| Total Acres           | 150,000     |
| Total Bales lost      | 9,523       |
| Bales lost in dollars | \$2,742,750 |

|                    |             |
|--------------------|-------------|
| Est. yield/acre    | 340         |
| Spray applications | 2.262       |
| Cost + loss        | \$6,294,200 |
| Cost + loss/acre   | \$41.96     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$14.20    |
| At planting        | \$4.80     |
| Bt use fees        | \$1.68     |
| Eradication        | \$0.00     |
| Scouting           | \$3.00     |
| Total              | \$23.68    |

Table 23i. Texas – Southern Blacklands. Cotton Insect Losses - 2000.

| <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             | 131,000               | 110,000              | 3.359                 | \$7.00                  | \$23.51           | 5.000       | 19,104            |
| Bollworm/budworm        | 131,000               | 70,000               | 1.069                 | \$9.75                  | \$10.42           | 2.500       | 9,552             |
| Pink Bollworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cotton Fleahopper       | 100,000               | 75,000               | 1.145                 | \$6.00                  | \$6.87            | 1.145       | 4,375             |
| Lygus                   | 55,000                | 30,000               | 0.229                 | \$6.50                  | \$1.49            | 0.210       | 802               |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 95,000                | 20,000               | 0.305                 | \$10.00                 | \$3.05            | 0.363       | 1,385             |
| Thrips, early season    | 120,000               | 30,000               | 0.229                 | \$5.00                  | \$1.15            | 0.275       | 1,050             |
| Beet Armyworm           | 50,000                | 10,000               | 0.076                 | \$11.00                 | \$0.84            | 0.038       | 146               |
| Fall Armyworm           | 30,000                | 6,000                | 0.046                 | \$7.00                  | \$0.32            | 0.023       | 88                |
| European Corn Borer     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 5,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 35,000                | 10,000               | 0.076                 | \$6.00                  | \$0.46            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 85,000                | 12,000               | 0.092                 | \$7.50                  | \$0.69            | 0.195       | 744               |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 15,000                | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 4,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 30,000                | 8,000                | 0.061                 | \$8.00                  | \$0.49            | 0.046       | 175               |

|                       |              |
|-----------------------|--------------|
| Percent Lost          | 9.79         |
| Total Acres           | 131,000      |
| Total Bales lost      | 37,421       |
| Bales lost in dollars | \$10,777,200 |

|                    |              |
|--------------------|--------------|
| Est. yield/acre    | 955          |
| Spray applications | 6.687        |
| Cost + loss        | \$19,100,700 |
| Cost + loss/acre   | \$145.81     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$49.28    |
| At planting        | \$1.43     |
| Bt use fees        | \$10.08    |
| Eradication        | \$0.00     |
| Scouting           | \$2.75     |
| Total              | \$63.54    |

Table 24. Virginia Summary. Cotton Insect Losses - 2000.

| <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        | 106,000               | 106,000              | 1.981                 | \$11.00                 | \$21.79           | 0.857       | 1,530             |
| 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                   | 16,050                | 1,000                | 0.009                 | \$11.00                 | \$0.10            | 0.043       | 77                |
| Cotton Leafperforator   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Spider Mites            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Thrips, early season    | 107,000               | 93,500               | 1.311                 | \$5.50                  | \$7.21            | 1.154       | 2,060             |
| Beet Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Fall Armyworm           | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| European Corn Borer     | 1,000                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Stink Bugs              | 1,070                 | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Grasshoppers            | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Salt-marsh Caterpillars | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Aphids                  | 26,750                | 300                  | 0.003                 | \$16.00                 | \$0.04            | 0.000       | 0                 |
| Bandedwinged Whitefly   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Silverleaf Whitefly     | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Soybean Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cabbage Loopers         | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Western Flower Thrips   | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |
| Cutworms                | 0                     | 0                    | 0.000                 | N/A                     | \$0.00            | 0.000       | 0                 |

|                       |             |
|-----------------------|-------------|
| Percent Lost          | 2.05        |
| Total Acres           | 107,000     |
| Total Bales lost      | 3,667       |
| Bales lost in dollars | \$1,056,201 |

|                    |             |
|--------------------|-------------|
| Est. yield/acre    | 800         |
| Spray applications | 3.304       |
| Cost + loss        | \$6,808,526 |
| Cost + loss/acre   | \$63.63     |

|                    | Cost/ Acre |
|--------------------|------------|
| Foliar insecticide | \$29.15    |
| At planting        | \$11.78    |
| Bt use fees        | \$7.20     |
| Eradication        | \$3.25     |
| Scouting           | \$2.38     |
| Total              | \$53.76    |