Table 13. Cotton insect loss estimates for Louisiana during 2024.

| | Acres | % Acres | | % Acres | # of apps | Cost of 1 | % loss /acre | # of apps/ | | overall % | Bales lost / | | Loss + | % Total |
|------------------------|----------|----------|---------------|---------|----------------|-------------|--------------|-------------|-----------|-----------|--------------|--------------|-----------|-----------|
| Pest | Infested | Infested | Acres Treated | Treated | /acres treated | application | infested | total acres | cost/acre | reduction | pest | Loss + cost | cost/acre | Loss+Cost |
| Bollworm/Budworm | 150,000 | 100.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Beet Armyworm | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Fall Armyworm | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Loopers | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Cutworms | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Cotton Leaf Perforator | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Saltmarsh Caterpillar | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Lygus | 150,000 | 100.0% | 150,000 | 100.0% | 3.0 | \$16.00 | 5.00% | 3.00 | \$48.00 | 5.00% | 23,672 | \$15,721,920 | \$104.81 | 81.8% |
| Cotton Fleahopper | 7,500 | 5.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Stink Bugs (other than | 7,500 | 5.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| brown stink bug) | | | | | | | | | | | | | | |
| Brown Stink Bug | 7,500 | 5.0% | 15,000 | 10.0% | 1.0 | \$16.00 | 0.50% | 0.10 | \$1.60 | 0.03% | 118 | \$54,480 | \$0.36 | 0.3% |
| Clouded Plant Bug | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Leaf Footed Bugs | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Spider Mites | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Thrips | 90,000 | 60.0% | 45,000 | 30.0% | 1.0 | \$16.00 | 1.00% | 0.30 | \$4.80 | 0.60% | 2,841 | \$1,454,760 | \$9.70 | 7.6% |
| Aphids | 112,500 | 75.0% | 60,000 | 40.0% | 1.0 | \$16.00 | 1.00% | 0.40 | \$6.40 | 0.75% | 3,551 | \$1,998,360 | \$13.32 | 10.4% |
| Grasshoppers | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Banded Winged | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Whitefly | | | | | | | | | | | | | | |
| Silverleaf Whitefly | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| Boll Weevil | 0 | 0.0% | 0 | 0.0% | 0.0 | \$0.00 | 0.00% | 0.00 | \$0.00 | 0.00% | 0 | \$0 | \$0.00 | 0.0% |
| TOTAL | | | | | | | | 3.80 | \$60.80 | 6.38% | 30,182 | \$19,229,520 | \$128.20 | |

SUMMARY DATA

| | Da | ta Input | Yield and Management Results | Economic Results | | | | |
|--------------------------------|----------|----------------------------------------------------------|------------------------------|------------------------------------------|---------|--------------------------|--------------|----------|
| State Louisiana | | | | Total Acres | 150,000 | | Total | Per Acre |
| Region | Midsouth | | | Total Bales Harvested | 334,375 | Foliar Insecticide Costs | \$9,120,000 | \$60.80 |
| Year | 2024 | | | Total Bales Lost to Insects | 30,182 | Seed Treatment Costs | \$2,250,000 | \$15.00 |
| Total Acres (Upland) | 150,000 | In-furrow cost/treated acre | \$15.00 | Percent Yield Loss | 6.4% | In-Furrow Costs | \$45,000 | \$0.30 |
| Yield / Acre (Upland) | 1,070 | % acres in Boll Weevil Eradication | 100% | Yield w/o Insects (lb/acre) | 1,143 | Scouting Costs | \$1,710,000 | \$11.40 |
| Price / lb | \$0.75 | Cost/acre Boll Weevil Eradication | \$4.00 | Av. # Applications | 3.8 | Eradication Costs | \$600,000 | \$4.00 |
| yield potential (lb/acre) | 1,515 | % acres in Pink Bollworm Eradication | 0% | Total Bales lost (all factors) | 139,072 | Bt Cotton | \$6,525,000 | \$43.50 |
| Acres (Pima) | 0 | Cost/acre Pink Bollworm Eradication | \$0.00 | Total % yield Loss | 29.4% | Total Costs | \$20,250,000 | \$135.00 |
| Yield / Acre (Pima) | 0 | % Insect apps by air | 70% | Transgenic Cotton (arthropods) (# acres) | 150,000 | Yield Loss to Insects | \$10,865,520 | \$72.44 |
| % Acres Scouted | 95% | No. apps by air | 1 | Boll Weevil Eradication (# acres) | 150,000 | Total Losses + Costs | \$31,115,520 | \$207.44 |
| Fee / Scouted Acre | \$12.00 | Cost/app by air | \$10.00 | Pink Bollworm Eradication (# acres) | 0 | | | |
| No. times scouted/week | 1 | % insect apps by ground | 95% | # Scouted Acres | 142,500 | | | |
| % acres Transgenic (Bt) Cotton | 100% | No. apps by ground | 4 | Seed Treatments (arthropods) (# acres) | 150,000 | | | |
| Cost/treated acre (Bt) Cotton | \$43.50 | Cost/app by ground | \$5.00 | In-Furrow Applications (# acres) | 3,000 | | | |
| % acres with seed treatment | 100% | % Loss to weather | 20.0% | Applications by Air (acres) | 105,000 | | | |
| Seed trt. cost/ treated acre | \$15.00 | % loss to non-arthropods | 1.0% | Applications by Ground (acres) | 142,500 | | | |
| % acres with in-furrow | 2% | % loss to other (chemical injury, weeds, diseases, etc.) | 2.0% | No. acres with no foliar insecticide | 0 | | | |

Table 13. Cotton insect loss estimates for Louisiana during 2024, continued.

| | 24. | | | - / | % acres treated | # acres treated | # apps |
|-----------------------|---------|---------|-----------------|--------------|-----------------|-----------------|------------|
| Upland Cotton | % Acres | # Acres | Total cost/acre | Bt cost/acre | for BW/TBW | for BW/TBW | for BW/TBW |
| Bollgard II | 0.0% | 0 | \$0.00 | \$0.00 | 0% | 0 | 0.0 |
| Bollgard III | 45.0% | 67,500 | \$115.00 | \$30.00 | 0% | 0 | 0.0 |
| Bollgard III/Thryvon | 45.0% | 67,500 | \$145.00 | \$30.00 | 0% | 0 | 0.0 |
| WideStrike | 0.0% | 0 | \$0.00 | \$0.00 | 0% | 0 | 0.0 |
| WideStrike 3 | 9.0% | 13,500 | \$115.00 | \$30.00 | 0% | 0 | 0.0 |
| TwinLink | 0.0% | 0 | \$0.00 | \$0.00 | 0% | 0 | 0.0 |
| TwinLink Plus | 1.0% | 1,500 | \$115.00 | \$30.00 | 0% | 0 | 0.0 |
| Total Bt | 100.0% | 150,000 | \$128.50 | \$43.50 | 0.0% | 0 | |
| Herbicide Traits Only | 0.0% | 0 | \$0.00 | - | 0% | 0 | 0.0 |
| Conventional | 0.0% | 0 | \$0.00 | - | 0% | 0 | 0.0 |
| Organic | 0.0% | 0 | \$0.00 | - | 0% | 0 | 0.0 |
| Total Upland Cotton | 100.0% | 150,000 | \$128.50 | \$43.50 | 0.0% | 0 | |
| Non Upland Cotton | | | | | | | |
| Pima | 0.0% | 0 | \$0.00 | - | 0% | 0 | 0.0 |
| Other | 0.0% | 0 | \$0.00 | - | 0% | 0 | 0.0 |
| Organic | 0.0% | 0 | \$0.00 | - | 0% | 0 | 0.0 |
| Total (all Cotton) | | 150,000 | \$128.50 | | 0.0% | 0 | |
| | | | | | | | |
| | | | | | | | |

| | % acres treated | # acres treated | # apps | Thryvon | % acres treated | # acres treated | # apps |
|----------------------|-----------------|-----------------|------------|--------------|-----------------|-----------------|-----------|
| Upland Cotton | for Thrips | for Thrips | for Thrips | Bt cost/acre | for Lygus | for Lygus | for Lygus |
| Bollgard III/Thryvon | 0.0% | 0 | 0.0 | \$30.00 | 45.0% | 30,375 | 2.0 |