Table 14. Cotton insect loss estimates for Georgia during 2023.

Pest	Acres Infested	% Acres Infested	Acres Treated	% Acres Treated	# of apps /acres treated	Cost of 1 application	% loss /acre infested	# of apps/ total acres	cost/acre	overall % reduction	Bales lost / pest	Loss + cost	Loss + cost/acre	% Total Loss+Cost
Bollworm/Budworm	550,000	50%	19,800	1.8%	1.0	$11.00	0.01%	0.02	$0.22	0.01%	203	$198,952	$0.18	0.3%
Beet Armyworm	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	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Loopers	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	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Cotton Leaf Perforator	0	0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Saltmarsh Caterpillar	0	0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Lygus	825,000	75%	429,000	39.0%	1.4	$12.00	1.00%	0.55	$6.60	0.75%	30,422	$17,127,048	$15.57	23.4%
Cotton Fleahopper	0	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 brown stink bug)	990,000	90%	880,000	80.0%	1.2	$9.00	1.30%	0.96	$8.64	1.17%	47,458	$26,777,472	$24.34	36.6%
Brown Stink Bug	880,000	80%	770,000	70.0%	1.0	$11.00	1.00%	0.70	$7.70	0.80%	32,450	$19,236,800	$17.49	26.3%
Clouded Plant Bug	330,000	30%	22,000	2.0%	1.0	$9.00	0.50%	0.02	$0.18	0.15%	6,084	$2,395,656	$2.18	3.3%
Leaf Footed Bugs	11,000	1%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Spider Mites	550,000	50%	110,000	10.0%	1.0	$9.00	0.20%	0.10	$0.90	0.10%	4,056	$2,052,504	$1.87	2.8%
Thrips	1,089,000	99%	220,000	20.0%	1.0	$8.00	0.10%	0.20	$1.60	0.10%	4,016	$3,284,544	$2.99	4.5%
Aphids	825,000	75%	88,000	8.0%	1.0	$9.00	0.00%	0.08	$0.72	0.00%	0	$594,000	$0.54	0.8%
Grasshoppers	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 Whitefly	11,000	1%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Silverleaf Whitefly	440,000	40%	132,000	12.0%	1.9	$15.00	0.01%	0.23	$3.45	0.00%	162	$1,580,208	$1.44	2.2%
Boll Weevil	0		0					0.00	$0.00	0.00%	0	$0	$0.00	0.0%
TOTAL								2.86	$30.01	3.08%	124,851	$73,247,184	$66.59	

SUMMARY DATA

Data Input				Yield and Management Results		Economic Results		
State	Georgia			Total Acres	1,100,000		Total	Per Acre
Region	Southeast			Total Bales Harvested	2,348,958	Foliar Insecticide Costs	$33,011,000	$30.01
Year	2023			Total Bales Lost to Insects	124,851	Seed Treatment Costs	$6,160,000	$5.60
Total Acres (Upland)	1,100,000	In-furrow cost/treated acre	$18.00	Percent Yield Loss	3.1%	In-Furrow Costs	$5,940,000	$5.40
Yield / Acre (Upland)	1,025	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,058	Scouting Costs	$6,600,000	$6.00
Price / lb	$0.80	Cost/acre Boll Weevil Eradication	$2.05	Av. # Applications	2.86	Eradication Costs	$2,255,000	$2.05
yield potential (lb/acre)	1,770	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	1,706,789	Bt Cotton	$17,600,000	$16.00
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	$0.00	Total % yield Loss	42.1%	Total Costs	$71,566,000	$65.06
Yield / Acre (Pima)	0	% Insect apps by air	20%	Transgenic Cotton (arthropods) (# acres)	1,100,000	Yield Loss to Insects	$47,942,784	$43.58
% Acres Scouted	75%	No. apps by air	2	Boll Weevil Eradication (# acres)	1,100,000	Total Losses + Costs	$119,508,784	$108.64
Fee / Scouted Acre	$8.00	Cost/app by air	$8.00	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1.1	% insect apps by ground	85%	# Scouted Acres	825,000			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	2.5	Seed Treatments (arthropods) (# acres)	770,000			
Cost/treated acre (Bt) Cotton	$16.00	Cost/app by ground	$4.50	In-Furrow Applications (# acres)	330,000			
% acres with seed treatment	70%	% Loss to weather	20.0%	Applications by Air (acres)	220,000			
Seed trt. cost/ treated acre	$8.00	% loss to non-arthropods	5.0%	Applications by Ground (acres)	935,000			
% acres with in-furrow	30%	% loss to other (chemical injury, weeds, diseases, etc.)	14.0%	No. acres with no foliar insecticide applications	165,000			

Table 14. Cotton insect loss estimates for Georgia during 2023, continued.

Upland Cotton	% Acres	# Acres	Total cost/acre	Bt cost/acre	% acres treated for BW/TBW	# acres treated for BW/TBW	# apps for BW/TBW
Bollgard II	18.0%	198,000	$85.00	$15.00	10%	19,800	1.0
Bollgard III	69.0%	759,000	$90.00	$15.00	0%	0	0.0
Bollgard III/Thryvon	10.0%	110,000	$100.00	$15.00	0%	0	0.0
WideStrike	0.0%	0	$82.00	$15.00	0%	0	0.0
WideStrike 3	3.0%	33,000	$83.00	$15.00	0%	0	0.0
TwinLink	0.0%	0	$85.00	$15.00	0%	0	0.0
TwinLink Plus	0.0%	0	$90.00	$15.00	0%	0	0.0
Total Bt	100.0%	1,100,000	$89.89	$16.00	1.8%	19,800	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%	1,100,000	$89.89	$16.00	1.8%	19,800	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)		1,100,000	$89.89		1.8%	19,800	0.0

Upland Cotton	Thryvon Bt cost/acre	% acres treated for Thrips	# acres treated for Thrips	# apps for Thrips	% acres treated for Lygus	# acres treated for Lygus	# apps for Lygus
Bollgard III/Thryvon	$10.00	0%	0	0	20%	22,000	1.0