

Table 14. Cotton insect loss estimates for Georgia during 2022.

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	704,000	55%	16,640	1.3%	1.0	\$11.00	0.10%	0.01	\$0.11	0.06%	2,637	\$1,216,624	\$0.95	1.4%
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	768,000	60%	217,600	17.0%	1.1	\$9.00	0.30%	0.19	\$1.71	0.18%	8,630	\$5,041,440	\$3.94	5.8%
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)	1,216,000	95%	1,088,000	85.0%	1.4	\$9.00	1.00%	1.19	\$10.71	0.95%	45,549	\$32,700,528	\$25.55	37.3%
Brown Stink Bug	1,088,000	85%	960,000	75.0%	1.0	\$11.00	1.20%	0.75	\$8.25	1.02%	48,906	\$30,103,392	\$23.52	34.3%
Clouded Plant Bug	256,000	20%	12,800	1.0%	1.0	\$9.00	0.01%	0.01	\$0.09	0.00%	96	\$64,512	\$0.05	0.1%
Leaf Footed Bugs	25,600	2%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	512,000	40%	51,200	4.0%	1.0	\$8.00	0.00%	0.04	\$0.32	0.00%	0	\$163,840	\$0.13	0.2%
Thrips	1,267,200	99%	281,600	22.0%	1.0	\$7.00	0.02%	0.22	\$1.54	0.02%	959	\$2,365,776	\$1.85	2.7%
Aphids	1,024,000	80%	115,200	9.0%	1.0	\$9.00	0.02%	0.09	\$0.81	0.02%	767	\$1,160,784	\$0.91	1.3%
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	12,800	1%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	640,000	50%	179,200	14.0%	1.8	\$15.00	1.20%	0.25	\$3.75	0.60%	28,768	\$14,827,776	\$11.58	16.9%
Boll Weevil	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
TOTAL					2.75			\$27.29		2.84%	136,312	\$87,644,672	\$68.47	

SUMMARY DATA

Data Input		Yield and Management Results				Economic Results		
State	Georgia	Total Acres			1,280,000	Total	Per Acre	
Region	Southeast	Total Bales Harvested			2,501,333	Foliar Insecticide Costs	\$34,931,200	\$27.29
Year	2022	Total Bales Lost to Insects			136,312	Seed Treatment Costs	\$8,192,000	\$6.40
Total Acres (Upland)	1,280,000	In-furrow cost/treated acre	\$15.00	Percent Yield Loss	2.8%	In-Furrow Costs	\$4,800,000	\$3.75
Yield / Acre (Upland)	938	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	965	Scouting Costs	\$7,168,000	\$5.60
Price / lb	\$0.90	Cost/acre Boll Weevil Eradication	\$1.42	Av. # Applications	2.75	Eradication Costs	\$1,817,600	\$1.42
yield potential (lb/acre)	1,798	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	2,293,912	Bt Cotton	\$19,200,000	\$15.00
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	47.8%	Total Costs	\$76,108,800	\$59.46
Yield / Acre (Pima)	0	% Insect apps by air	20%	Transgenic Cotton (arthropods) (# acres)	1,280,000	Yield Loss to Insects	\$58,886,784	\$46.01
% Acres Scouted	70%	No. apps by air	2	Boll Weevil Eradication (# acres)	1,280,000	Total Losses + Costs	\$134,995,584	\$105.47
Fee / Scouted Acre	\$8.00	Cost/app by air	\$7.50	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1.1	% insect apps by ground	85%	# Scouted Acres	896,000			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	2.7	Seed Treatments (arthropods) (# acres)	1,024,000			
Cost/treated acre (Bt) Cotton	\$15.00	Cost/app by ground	\$4.50	In-Furrow Applications (# acres)	320,000			
% acres with seed treatment	80%	% Loss to weather	30.0%	Applications by Air (acres)	256,000			
Seed trt. cost/ treated acre	\$8.00	% loss to non-arthropods	5.0%	Applications by Ground (acres)	1,088,000			
% acres with in-furrow	25%	% loss to other (chemical injury, weeds, diseases, etc.)	10.0%	No. acres with no foliar insecticide applications	153,600			

Table 14. Cotton insect loss estimates for Georgia during 2022, 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	20.0%	256,000	\$85.00	\$15.00	7%	17,920	1.0
Bollgard III	77.0%	985,600	\$90.00	\$15.00	0%	0	0.0
WideStrike	0.1%	640	\$82.00	\$15.00	50%	320	1.0
WideStrike 3	3.0%	37,760	\$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%	1,280,000	\$88.79	\$15.00	1.4%	18,240	0.01
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%	1,280,000	\$88.79	\$15.00	1.4%	18,240	0.01
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)		1,280,000	\$88.79	-	1.4%	18,240	0.01