

Table 11. Cotton insect loss estimates for Georgia during 2020.

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	595,000	50%	23,800	2.0%	1.0	\$8.00	0.20%	0.02	\$0.16	0.10%	3,687	\$1,334,032	\$1.12	2.6%
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	714,000	60%	130,900	11.0%	1.0	\$8.00	0.10%	0.11	\$0.88	0.06%	2,212	\$1,371,552	\$1.15	2.6%
Cotton Fleahopper	11,900	1%	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)	1,071,000	90%	952,000	80.0%	1.0	\$8.00	1.00%	0.80	\$6.40	0.90%	33,179	\$18,002,544	\$15.13	34.6%
Brown Stink Bug	1,071,000	90%	892,500	75.0%	1.0	\$9.00	1.00%	0.75	\$6.75	0.90%	33,179	\$18,377,394	\$15.44	35.4%
Clouded Plant Bug	178,500	15%	1,190	0.1%	0.0	\$8.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Leaf Footed Bugs	11,900	1%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	416,500	35%	23,800	2.0%	1.0	\$8.00	0.10%	0.02	\$0.16	0.04%	1,290	\$500,080	\$0.42	1.0%
Thrips	1,178,100	99%	297,500	25.0%	1.0	\$6.00	0.20%	0.25	\$1.50	0.20%	7,299	\$4,219,614	\$3.55	8.1%
Aphids	1,130,500	95%	142,800	12.0%	1.0	\$8.00	0.00%	0.12	\$0.96	0.00%	0	\$1,085,280	\$0.91	2.1%
Grasshoppers	11,900	1%	5,950	0.5%	1.0	\$8.00	0.00%	0.01	\$0.08	0.00%	0	\$952	\$0.00	0.0%
Banded Winged Whitefly	23,800	2%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	476,000	40%	261,800	22.0%	1.7	\$12.00	1.00%	0.37	\$4.44	0.40%	14,746	\$7,068,096	\$5.94	13.6%
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					2.45			\$21.33		2.59%	95,592	\$51,959,544	\$43.66	

SUMMARY DATA

	Data Input		Yield and Management Results			Economic Results		
	Georgia	Region	Total Acres	Total Bales Harvested	Foliar Insecticide Costs	Total	Per Acre	
State	Georgia	Southeast	1,190,000	2,300,667	\$25,382,700	\$25,382,700	\$21.33	
Region								
Year	2020			Total Bales Lost to Insects	95,592	Seed Treatment Costs	\$6,426,000	\$5.40
Total Acres (Upland)	1,190,000	In-furrow cost/treated acre	\$10.00	Percent Yield Loss	2.6%	In-Furrow Costs	\$1,785,000	\$1.50
Yield / Acre (Upland)	928	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	953	Scouting Costs	\$6,664,000	\$5.60
Price / lb	\$0.70	Cost/acre Boll Weevil Eradication	\$1.44	Av. # Applications	2.45	Eradication Costs	\$1,713,600	\$1.44
yield potential (lb/acre)	1,487	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	1,385,874	Bt Cotton	\$17,832,150	\$14.99
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	37.6%	Total Costs	\$59,803,450	\$50.26
Yield / Acre (Pima)	0	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	1,188,810	Yield Loss to Insects	\$32,118,912	\$26.99
% Acres Scouted	70%	No. apps by air	2	Boll Weevil Eradication (# acres)	1,190,000	Total Losses + Costs	\$91,922,362	\$77.25
Fee / Scouted Acre	\$8.00	Cost/app by air	\$7.00	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1.1	% insect apps by ground	85%	# Scouted Acres	833,000			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	2.5	Seed Treatments (arthropods) (# acres)	1,071,000			
Cost/treated acre (Bt) Cotton	\$15.00	Cost/app by ground	\$4.00	In-Furrow Applications (# acres)	178,500			
% acres with seed treatment	90%	% Loss to weather	25.0%	Applications by Air (acres)	178,500			
Seed trt. cost/ treated acre	\$6.00	% loss to non-arthropods	5.0%	Applications by Ground (acres)	1,011,500			
% acres with in-furrow	15%	% loss to other (chemical injury, weeds, diseases, etc.)	5.0%	No. acres with no foliar insecticide applications	178,500			

Table 11. Cotton insect loss estimates for Georgia during 2020, 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	41.0%	487,900	\$85.00	\$15.00	5%	24,395	1.0
Bollgard III	55.0%	654,500	\$90.00	\$15.00	0%	0	0.0
WideStrike	0.4%	4,760	\$82.00	\$15.00	30%	1,428	1.0
WideStrike 3	3.0%	35,700	\$83.00	\$15.00	0%	0	0.0
TwinLink	0.4%	4,760	\$85.00	\$15.00	5%	238	1.0
TwinLink Plus	0.1%	1,190	\$90.00	\$15.00	0%	0	0.0
Total Bt	99.9%	1,188,810	\$87.69	\$15.00	2.2%	26,061	0.02
Herbicide Traits Only	0.0%	0	\$0.00	-	0%	0	0.0
Conventional	0.1%	1,190	\$0.00	-	0%	0	0.0
Organic	0.0%	0	\$0.00	-	0%	0	0.0
Total Upland Cotton	100.0%	1,190,000	\$87.60	\$15.00	2.2%	26,061	0.02
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)		1,190,000	\$87.60	-	2.2%	26,061	0.02