

Table 1. Cotton insect loss estimates for South Alabama 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	190,013	65%	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Fall Armyworm	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cutworms	29,233	10%	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Saltmarsh Caterpillar	0	0%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Lygus	292,327	100%	277,711	95%	2.5	\$10.00	0.90%	2.38	\$23.80	0.90%	6,945	\$10,624,343	\$36.34	44.0%
Cotton Fleahopper	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)	292,327	100%	286,480	98%	1.5	\$8.50	0.70%	1.47	\$12.50	0.70%	5,401	\$6,504,354	\$22.25	27.0%
Brown Stink Bug	263,094	90%	146,164	50%	0.5	\$10.00	0.30%	0.25	\$2.50	0.27%	2,083	\$1,757,560	\$6.01	7.3%
Clouded Plant Bug	58,465	20%	29,233	10%	1.0	\$8.00	0.00%	0.10	\$0.80	0.00%	0	\$46,772	\$0.16	0.2%
Leaf Footed Bugs	146,164	50%	14,616	5%	1.0	\$10.00	0.00%	0.05	\$0.50	0.00%	0	\$73,082	\$0.25	0.3%
Spider Mites	190,013	65%	58,465	20%	1.5	\$11.00	0.10%	0.30	\$3.30	0.07%	502	\$892,097	\$3.05	3.7%
Thrips	292,327	100%	204,629	70%	1.0	\$7.25	0.50%	0.70	\$5.08	0.50%	3,858	\$3,520,584	\$12.04	14.6%
Aphids	146,164	50%	2,923	1%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$10,231	\$0.03	0.0%
Grasshoppers	219,245	75%	116,931	40%	1.0	\$8.00	0.00%	0.40	\$3.20	0.00%	0	\$701,585	\$2.40	2.9%
Banded Winged Whitefly	5,847	2%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	43,849	15%	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
TOTAL							2.50%	5.66	\$51.74	2.44%	18,789	\$24,130,608	\$82.55	

SUMMARY DATA

	Data Input		Yield and Management Results			Economic Results	
	Alabama	Region	Total Acres	Total Bales Harvested	Foliar Insecticide Costs	Total	Per Acre
State	Alabama	Southeast	292,327	532,888	\$15,124,999	\$15,124,999	\$51.74
Region							
Year	2022			18,789	\$3,478,691	\$3,478,691	\$11.90
Total Acres (Upland)	292,327	In-furrow cost/treated acre	\$15.00	Total Bales Lost to Insects			
Yield / Acre (Upland)	875	% acres in Boll Weevil Eradication	100%	Percent Yield Loss	2.4%	In-Furrow Costs	\$657,736
Price / lb	\$1.10	Cost/acre Boll Weevil Eradication	\$1.50	Yield w/o Insects (lb/acre)	897	Scouting Costs	\$2,112,063
yield potential (lb/acre)	1,267	% acres in Pink Bollworm Eradication	0%	Av. # Applications	5.66	Eradication Costs	\$438,491
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total Bales lost (all factors)	238,701	Bt Cotton	\$9,529,860
Yield / Acre (Pima)	0	% Insect apps by air	15%	Total % yield Loss	30.9%	Total Costs	\$31,341,840
% Acres Scouted	85%	No. apps by air	1	Transgenic Cotton (arthropods) (# acres)	292,327	Yield Loss to Insects	\$9,920,592
Fee / Scouted Acre	\$8.50	Cost/app by air	\$7.50	Boll Weevil Eradication (# acres)	292,327	Total Losses + Costs	\$41,262,432
No. times scouted/week	1	% insect apps by ground	85%	Pink Bollworm Eradication (# acres)	0		
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	4	# Scouted Acres	248,478		
Cost/treated acre (Bt) Cotton	\$32.60	Cost/app by ground	\$5.50	Seed Treatments (arthropods) (# acres)	248,478		
% acres with seed treatment	85%	% Loss to weather	25.0%	In-Furrow Applications (# acres)	43,849		
Seed trt. cost/ treated acre	\$14.00	% loss to non-arthropods	1.0%	Applications by Air (acres)	43,849		
% acres with in-furrow	15%	% loss to other (chemical injury, weeds, diseases, etc.)	2.5%	Applications by Ground (acres)	248,478		
				No. acres with no foliar insecticide applications	0		

Table 1. Cotton insect loss estimates for South Alabama 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	30.0%	87,698	\$60.00	\$35.00	0%	0	0.0
Bollgard III	50.0%	146,164	\$63.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	15.0%	43,849	\$48.00	\$18.00	0%	0	0.0
TwinLink	0.0%	0	\$0.00	\$0.00	0%	0	0.0
TwinLink Plus	5.0%	14,616	\$60.00	\$38.00	0%	0	0.0
Total Bt	100.0%	292,327	\$59.70	\$32.60	0.0%	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%	292,327	\$59.70	\$32.60	0.0%	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)		292,327	\$59.70	-	0.0%	0	0.0