

Table 1. Cotton insect loss estimates for South Alabama during 2024.

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								0.01		0.00%	17	\$18,465	\$0.08	0.2%
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	11,809	5.0%	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	236,174	100.0%	224,365	95.0%	2.0	\$10.00	0.67%	1.90	\$19.00	0.67%	3,712	\$5,734,538	\$24.28	50.6%
Cotton Fleahopper	0	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)	236,174	100.0%	212,557	90.0%	1.0	\$8.50	0.30%	0.90	\$7.65	0.30%	1,662	\$2,365,163	\$10.01	20.9%
Brown Stink Bug	188,939	80.0%	94,470	40.0%	0.5	\$10.00	0.10%	0.20	\$2.00	0.08%	443	\$526,726	\$2.23	4.7%
Clouded Plant Bug	118,087	50.0%	47,235	20.0%	1.0	\$8.00	0.10%	0.20	\$1.60	0.05%	277	\$282,011	\$1.19	2.5%
Leaf Footed Bugs	141,704	60.0%	23,617	10.0%	1.0	\$10.00	0.00%	0.10	\$1.00	0.00%	0	\$141,704	\$0.60	1.3%
Spider Mites	200,748	85.0%	82,661	35.0%	1.0	\$11.00	0.10%	0.35	\$3.85	0.09%	471	\$931,135	\$3.94	8.2%
Thrips	236,174	100.0%	70,852	30.0%	1.0	\$7.25	0.25%	0.30	\$2.18	0.25%	1,385	\$979,038	\$4.15	8.6%
Aphids	70,852	30.0%	2,362	1.0%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$4,960	\$0.02	0.0%
Grasshoppers	141,704	60.0%	70,852	30.0%	1.0	\$8.00	0.00%	0.30	\$2.40	0.00%	0	\$340,091	\$1.44	3.0%
Banded Winged Whitefly	2,362	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	23,617	10.0%	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%
<b>TOTAL</b>							1.53%	4.27	\$39.93	1.44%	7,967	\$11,323,831	\$47.95	

**SUMMARY DATA**

Data Input			Yield and Management Results			Economic Results		
State	Alabama		Total Acres	236,174		Total	Per Acre	
Region	Southeast		Total Bales Harvested	393,623		Foliar Insecticide Costs	\$9,429,247	\$39.93
Year	2024		Total Bales Lost to Insects	7,967		Seed Treatment Costs	\$2,810,471	\$11.90
Total Acres (Upland)	236,174	In-furrow cost/treated acre	\$15.00	Percent Yield Loss	1.4%	In-Furrow Costs	\$531,392	\$2.25
Yield / Acre (Upland)	800	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	812	Scouting Costs	\$1,806,731	\$7.65
Price / lb	\$0.70	Cost/acre Boll Weevil Eradication	\$1.50	Av. # Applications	4.27	Eradication Costs	\$354,261	\$1.50
yield potential (lb/acre)	1,126	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	160,324	Bt Cotton	\$8,336,941	\$35.30
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	28.9%	Total Costs	\$23,269,043	\$98.52
Yield / Acre (Pima)	0	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	236,174	Yield Loss to Insects	\$2,676,912	\$11.33
% Acres Scouted	90%	No. apps by air		Boll Weevil Eradication (# acres)	236,174	Total Losses + Costs	\$25,945,955	\$109.86
Fee / Scouted Acre	\$8.50	Cost/app by air	\$7.50	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1	% insect apps by ground	85%	# Scouted Acres	212,557			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground		Seed Treatments (arthropods) (# acres)	200,748			
Cost/treated acre (Bt) Cotton	\$35.30	Cost/app by ground	\$5.50	In-Furrow Applications (# acres)	35,426			
% acres with seed treatment	85%	% Loss to weather	25.0%	Applications by Air (acres)	35,426			
Seed trt. cost/ treated acre	\$14.00	% loss to non-arthropods	1.0%	Applications by Ground (acres)	200,748			
% acres with in-furrow	15%	% loss to other (chemical injury, weeds, diseases, etc.)	1.5%	No. acres with no foliar insecticide applications	0			

Table 1. Cotton insect loss estimates for South Alabama during 2024, 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	10.0%	23,617	\$60.00	\$35.00	12%	2,834	1.0
Bollgard III	70.0%	165,322	\$63.00	\$35.00	0%	0	0.0
Bollgard III/Thryvon	10.0%	23,617	\$83.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	10.0%	23,617	\$48.00	\$18.00	0%	0	0.0
TwinLink	0.0%	0	\$0.00	\$0.00	0%	0	0.0
TwinLink Plus	0.0%	0	\$60.00	\$38.00	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
			\$63.20	\$35.30	1.2%	2,834	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)		236,173	\$63.20		1.2%	2,834	0.0
	% acres treated for Thrips	# acres treated for Thrips	# apps for Thrips	Thryvon Bt cost/acre	% acres treated for Lygus	# acres treated for Lygus	# apps for Lygus
Upland Cotton							
Bollgard III/Thryvon	0.0%	0	0.0	\$20.00	100.0%	23,617	1.5