

Table 2. Cotton insect loss estimates for North 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
	0	0.0%									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	4,124	3.0%	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	137,478	100.0%	130,604	95.0%	3.0	\$13.25	0.75%	2.85	\$37.76	0.75%	2,818	\$6,138,361	\$44.65	74.2%
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)	137,478	100.0%	68,739	50.0%	1.0	\$8.50	0.50%	0.50	\$4.25	0.50%	1,879	\$1,215,626	\$8.84	14.7%
Brown Stink Bug	123,730	90.0%	41,243	30.0%	0.5	\$10.00	0.20%	0.15	\$1.50	0.18%	676	\$412,731	\$3.00	5.0%
Clouded Plant Bug	27,496	20.0%	6,874	5.0%	1.0	\$8.00	0.00%	0.05	\$0.40	0.00%	0	\$10,998	\$0.08	0.1%
Leaf Footed Bugs	13,748	10.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	48,117	35.0%	6,874	5.0%	1.0	\$9.00	0.00%	0.05	\$0.45	0.00%	0	\$21,653	\$0.16	0.3%
Thrips	137,478	100.0%	48,117	35.0%	1.0	\$7.25	0.10%	0.35	\$2.54	0.10%	376	\$475,186	\$3.46	5.7%
Aphids	41,243	30.0%	1,375	1.0%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$2,887	\$0.02	0.0%
Grasshoppers	13,748	10.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Banded Winged Whitefly	0	0.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	0	0.0%	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%
TOTAL							1.55%	3.96	\$46.97	1.53%	5,749	\$8,277,442	\$60.21	

SUMMARY DATA

Data Input			Yield and Management Results			Economic Results		
State	Alabama		Total Acres	137,478		Total	Per Acre	
Region	Southeast		Total Bales Harvested	229,130		Foliar Insecticide Costs	\$6,457,342	\$46.97
Year	2024		Total Bales Lost to Insects	5,749		Seed Treatment Costs	\$1,732,223	\$12.60
Total Acres (Upland)	137,478	In-furrow cost/treated acre	\$15.00	Percent Yield Loss	1.5%	In-Furrow Costs	\$206,217	\$1.50
Yield / Acre (Upland)	800	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	812	Scouting Costs	\$993,279	\$7.23
Price / lb	\$0.70	Cost/acre Boll Weevil Eradication	\$1.50	Av. # Applications	3.96	Eradication Costs	\$206,217	\$1.50
yield potential (lb/acre)	1,312	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	146,664	Bt Cotton	\$4,982,204	\$36.24
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	39.0%	Total Costs	\$14,577,482	\$106.04
Yield / Acre (Pima)	0	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	137,478	Yield Loss to Insects	\$1,931,664	\$14.05
% Acres Scouted	85%	No. apps by air		Boll Weevil Eradication (# acres)	137,478	Total Losses + Costs	\$16,509,146	\$120.09
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	116,856			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground		Seed Treatments (arthropods) (# acres)	123,730			
Cost/treated acre (Bt) Cotton	\$36.24	Cost/app by ground	\$5.50	In-Furrow Applications (# acres)	13,748			
% acres with seed treatment	90%	% Loss to weather	35.0%	Applications by Air (acres)	20,622			
Seed trt. cost/ treated acre	\$14.00	% loss to non-arthropods	1.0%	Applications by Ground (acres)	116,856			
% acres with in-furrow	10%	% loss to other (chemical injury, weeds, diseases, etc.)	1.5%	No. acres with no foliar insecticide applications	0			

Table 2. Cotton insect loss estimates for North 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	5.0%	6,874	\$60.00	\$35.00	12%	825	1.0
Bollgard III	74.0%	101,734	\$63.00	\$35.00	0%	0	0.0
Bollgard III/Thryvon	13.0%	17,872	\$83.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	8.0%	10,998	\$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
Total Bt	100.0%	137,478	\$64.25	\$36.24	0.6%	825	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%	137,478	\$64.25	\$36.24	0.6%	825	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)		137,478	\$64.25		0.6%	825	0.0

Upland Cotton	% 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
Bollgard III/Thryvon	0.0%	0	0.0	\$20.00	100.0%	17,872	2.5