

Table 3. Cotton insect loss estimates for 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	277,198	65%	1,341	0.3%	1.0	\$6.29	0.00%	0.00	\$0.02	0.00%	0	\$5,483	\$0.01	0.0%
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	42,646	10%	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	426,458	100%	405,135	95.0%	2.4	\$11.02	0.96%	2.30	\$25.35	0.96%	11,062	\$16,653,085	\$39.05	46.2%
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)	426,458	100%	373,666	87.6%	1.5	\$8.50	0.87%	1.31	\$11.17	0.87%	10,029	\$10,059,347	\$23.59	27.9%
Brown Stink Bug	383,812	90%	213,229	50.0%	0.5	\$10.00	0.28%	0.25	\$2.50	0.26%	2,939	\$2,511,375	\$5.89	7.0%
Clouded Plant Bug	71,879	17%	29,233	6.9%	1.0	\$5.48	0.00%	0.07	\$0.38	0.00%	0	\$27,020	\$0.06	0.1%
Leaf Footed Bugs	159,577	37%	14,616	3.4%	1.0	\$6.85	0.00%	0.03	\$0.23	0.00%	0	\$37,490	\$0.09	0.1%
Spider Mites	277,198	65%	65,172	15.3%	1.4	\$10.37	0.07%	0.22	\$2.30	0.04%	512	\$906,647	\$2.13	2.5%
Thrips	426,458	100%	311,934	73.1%	1.0	\$7.25	0.50%	0.73	\$5.30	0.50%	5,744	\$5,294,278	\$12.41	14.7%
Aphids	213,229	50%	2,923	0.7%	1.0	\$4.80	0.00%	0.01	\$0.03	0.00%	0	\$7,013	\$0.02	0.0%
Grasshoppers	239,365	56%	123,637	29.0%	1.0	\$8.00	0.00%	0.29	\$2.32	0.00%	0	\$555,170	\$1.30	1.5%
Banded Winged Whitefly	5,847	1%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	43,849	10%	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
TOTAL					5.22	\$49.61	2.64%				30,285	\$36,056,907	\$84.55	

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	426,458	805,341	\$21,155,603	\$49.61		
Region								
Year	2022			30,285	\$5,168,742	\$12.12		
Total Acres (Upland)	426,458	In-furrow cost/treated acre	\$15.00	Total Bales Lost to Insects	\$639,687	\$1.50		
Yield / Acre (Upland)	906	% acres in Boll Weevil Eradication	100%	Percent Yield Loss	\$858,932	\$2.01		
Price / lb	\$1.10	Cost/acre Boll Weevil Eradication	\$1.50	Yield w/o Insects (lb/acre)	\$3,081,159	\$7.23		
yield potential (lb/acre)	1,293	% acres in Pink Bollworm Eradication	0%	Av. # Applications	\$639,687	\$1.50		
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total Bales lost (all factors)	\$13,902,531	\$32.60		
Yield / Acre (Pima)	0	% Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	\$44,806,654	\$105.07		
% Acres Scouted	85%	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	\$15,990,479	\$37.50		
Fee / Scouted Acre	\$8.50	No. apps by air	1.0	Boll Weevil Eradication (# acres)	\$60,797,133	\$142.56		
No. times scouted/week	1.0	Cost/app by air	\$7.50	Pink Bollworm Eradication (# acres)				
% acres Transgenic (Bt) Cotton	100%	% insect apps by ground	85%	# Scouted Acres	362,489			
Cost/treated acre (Bt) Cotton	\$32.60	No. apps by ground	3.7	Seed Treatments (arthropods) (# acres)	369,196			
% acres with seed treatment	87%	Cost/app by ground	\$5.50	In-Furrow Applications (# acres)	57,262			
Seed trt. cost/ treated acre	\$14.00	% Loss to weather	23.7%	Applications by Air (acres)	63,969			
% acres with in-furrow	13%	% loss to non-arthropods	1.0%	Applications by Ground (acres)	362,489			
		% loss to other (chemical injury, weeds, diseases, etc.)	2.5%	No. acres with no foliar insecticide applications	0			

Table 3. Cotton insect loss estimates for 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%	127,937	\$60.00	\$35.00	0%	0	0.0
Bollgard III	50.0%	213,229	\$63.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	15.0%	63,969	\$48.00	\$18.00	0%	0	0.0
TwinLink	0.0%	0	\$0.00	\$0.00	0%	0	0.0
TwinLink Plus	5.0%	21,323	\$60.00	\$38.00	0%	0	0.0
Total Bt	100.0%	426,458	\$59.70	\$32.60	0.0%	0	0.000
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%	426,458	\$59.70	\$32.60	0.0%	0	0.000
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)		426,458	\$59.70	-	0.0%	0	0.000