

Table 2. Cotton insect loss estimates for North Alabama during 2021.

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	6,276	5%	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	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	\$0.00	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	125,515	100%	119,239	95%	2.5	\$12.75	1.25%	2.37	\$30.22	1.25%	4,504	\$5,522,286	\$44.00	49.1%
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)	125,515	100%	62,758	50%	1.5	\$8.00	1.50%	0.75	\$6.00	1.50%	5,405	\$2,828,610	\$22.54	25.1%
Brown Stink Bug	112,964	90%	50,206	40%	0.5	\$9.50	0.50%	0.20	\$1.90	0.45%	1,621	\$837,095	\$6.67	7.4%
Clouded Plant Bug	12,552	10%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Leaf Footed Bugs	12,552	10%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	62,758	50%	2,510	2%	1.0	\$8.50	0.00%	0.02	\$0.17	0.00%	0	\$10,669	\$0.09	0.1%
Thrips	125,515	100%	100,412	80%	1.0	\$6.50	1.00%	0.80	\$5.20	1.00%	3,603	\$2,036,230	\$16.22	18.1%
Aphids	12,552	10%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Grasshoppers	25,103	20%	12,552	10%	1.0	\$7.50	0.00%	0.10	\$0.75	0.00%	0	\$18,827	\$0.15	0.2%
Banded Winged Whitefly	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	\$0.00	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%
<b>TOTAL</b>							<b>4.25%</b>	<b>4.24</b>	<b>\$44.24</b>	<b>4.20%</b>	<b>15,133</b>	<b>\$11,253,717</b>	<b>\$89.66</b>	

**SUMMARY DATA**

Data Input		Yield and Management Results			Economic Results		
State	Alabama	Total Acres		125,515	Total	Per Acre	
Region	Southeast	Total Bales Harvested		235,341	Foliar Insecticide Costs	\$5,552,470	
Year	2021	Total Bales Lost to Insects		15,133	Seed Treatment Costs	\$1,581,489	
Total Acres (Upland)	125,515	In-furrow cost/treated acre	\$15.00	Percent Yield Loss	4.2%	In-Furrow Costs	\$188,273
Yield / Acre (Upland)	900	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	939	Scouting Costs	\$906,846
Price / lb	\$0.80	Cost/acre Boll Weevil Eradication	\$1.50	Av. # Applications	4.24	Eradication Costs	\$188,273
yield potential (lb/acre)	1,378	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	125,035	Bt Cotton	\$4,091,794
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	34.7%	Total Costs	\$12,509,145
Yield / Acre (Pima)	0	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	125,515	Yield Loss to Insects	\$5,811,072
% Acres Scouted	85%	No. apps by air	2	Boll Weevil Eradication (# acres)	125,515	Total Losses + Costs	\$18,320,217
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	106,688		
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	4.5	Seed Treatments (arthropods) (# acres)	112,964		
Cost/treated acre (Bt) Cotton	\$32.60	Cost/app by ground	\$5.00	In-Furrow Applications (# acres)	12,552		
% acres with seed treatment	90%	% Loss to weather	27.00%	Applications by Air (acres)	18,827		
Seed trt. cost/ treated acre	\$14.00	% loss to non-arthropods	1.0%	Applications by Ground (acres)	106,688		
% acres with in-furrow	10%	% loss to other (chemical injury, weeds, diseases, etc.)	2.5%	No. acres with no foliar insecticide applications	0		

Table 2. Cotton insect loss estimates for North Alabama during 2021, 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	45.0%	56,482	\$60.00	\$35.00	0%	0	0.0
Bollgard III	35.0%	43,930	\$63.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	15.0%	18,827	\$48.00	\$18.00	0%	0	0.0
TwinLink	0.0%	0	\$0.00	\$0.00	0%	0	0.0
TwinLink Plus	5.0%	6,276	\$60.00	\$38.00	0%	0	0.0
<b>Total Bt</b>	<b>100.0%</b>	<b>125,515</b>	<b>\$59.25</b>	<b>\$32.60</b>	<b>0.0%</b>	<b>0</b>	<b>0.0</b>
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
<b>Total Upland Cotton</b>	<b>100.0%</b>	<b>125,515</b>	<b>\$59.25</b>	<b>\$32.60</b>	<b>0.0%</b>	<b>0</b>	<b>0.0</b>
<b>Non Upland Cotton</b>							
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
<b>Total (all Cotton)</b>		<b>125,515</b>	<b>\$59.25</b>		<b>0.0%</b>	<b>0</b>	<b>0.0</b>