

Table 2. Cotton insect loss estimates for North 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	87,185	65%	1,341	1%	1.0	\$20.00	0.00%	0.01	\$0.20	0.00%	0	\$17,437	\$0.13	0.1%
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	13,413	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	134,131	100%	127,424	95%	2.3	\$13.25	1.10%	2.14	\$28.36	1.10%	4,137	\$5,987,621	\$44.64	49.2%
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)	134,131	100%	87,185	65%	1.5	\$8.50	1.25%	0.97	\$8.25	1.25%	4,702	\$3,588,566	\$26.75	29.5%
Brown Stink Bug	120,718	90%	67,066	50%	0.5	\$10.00	0.25%	0.25	\$2.50	0.23%	846	\$748,483	\$5.58	6.2%
Clouded Plant Bug	13,413	10%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Leaf Footed Bugs	13,413	10%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	87,185	65%	6,707	5%	1.0	\$9.00	0.00%	0.05	\$0.45	0.00%	0	\$39,233	\$0.29	0.3%
Thrips	134,131	100%	107,305	80%	1.0	\$7.25	0.50%	0.80	\$5.80	0.50%	1,881	\$1,771,128	\$13.20	14.6%
Aphids	67,066	50%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Grasshoppers	20,120	15%	6,707	5%	1.0	\$8.00	0.00%	0.05	\$0.40	0.00%	0	\$8,048	\$0.06	0.1%
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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
<b>TOTAL</b>							3.10%	4.27	\$45.95	3.08%	11,566	\$12,160,516	\$90.66	

**SUMMARY DATA**

	Data Input		Yield and Management Results			Economic Results	
State	Alabama		Total Acres	134,131		Total	Per Acre
Region	Southeast		Total Bales Harvested	272,454		Foliar Insecticide Costs	\$6,163,319
Year	2022		Total Bales Lost to Insects	11,566		Seed Treatment Costs	\$1,690,051
Total Acres (Upland)	134,131	In-furrow cost/treated acre	\$15.00	Percent Yield Loss	3.1%	In-Furrow Costs	\$201,197
Yield / Acre (Upland)	975	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,006	Scouting Costs	\$969,096
Price / lb	\$1.10	Cost/acre Boll Weevil Eradication	\$1.50	Av. # Applications	4.27	Eradication Costs	\$201,197
yield potential (lb/acre)	1,346	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	103,717	Bt Cotton	\$4,372,668
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	27.6%	Total Costs	\$13,597,528
Yield / Acre (Pima)	0	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	134,131	Yield Loss to Insects	\$6,106,848
% Acres Scouted	85%	No. apps by air	1	Boll Weevil Eradication (# acres)	134,131	Total Losses + Costs	\$19,704,376
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	114,011		
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	3	Seed Treatments (arthropods) (# acres)	120,718		
Cost/treated acre (Bt) Cotton	\$32.60	Cost/app by ground	\$5.50	In-Furrow Applications (# acres)	13,413		
% acres with seed treatment	90%	% Loss to weather	21.0%	Applications by Air (acres)	20,120		
Seed trt. cost/ treated acre	\$14.00	% loss to non-arthropods	1.0%	Applications by Ground (acres)	114,011		
% 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 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%	40,239	\$60.00	\$35.00	0%	0	0.0
Bollgard III	50.0%	67,066	\$63.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	15.0%	20,120	\$48.00	\$18.00	0%	0	0.0
TwinLink	0.0%	0	\$0.00	\$0.00	0%	0	0.0
TwinLink Plus	5.0%	6,707	\$60.00	\$38.00	0%	0	0.0
<b>Total Bt</b>	<b>100.0%</b>	<b>134,132</b>	<b>\$59.70</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>134,132</b>	<b>\$59.70</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>134,132</b>	<b>\$59.70</b>	<b>-</b>	<b>0.0%</b>	<b>0</b>	<b>0.0</b>