

Table 3. Cotton insect loss estimates for 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	112,096	30.0%	3,209	0.9%	0.7	\$11.38	0.01%	0.01	\$0.07	0.00%	18	\$14,029	\$0.04	0.1%
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	15,933	4.3%	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	373,652	100.0%	354,969	95.0%	2.4	\$11.20	0.70%	2.25	\$25.19	0.70%	6,468	\$11,583,864	\$31.00	61.6%
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)	373,652	100.0%	281,296	75.3%	1.0	\$8.50	0.37%	0.75	\$6.40	0.37%	3,455	\$3,551,856	\$9.51	18.9%
Brown Stink Bug	312,669	83.7%	135,713	36.3%	0.5	\$10.00	0.14%	0.18	\$1.82	0.12%	1,080	\$930,728	\$2.49	4.9%
Clouded Plant Bug	145,583	39.0%	54,109	14.5%	1.0	\$8.00	0.08%	0.14	\$1.16	0.03%	292	\$266,857	\$0.71	1.4%
Leaf Footed Bugs	155,452	41.6%	23,617	6.3%	1.0	\$6.32	0.00%	0.06	\$0.40	0.00%	0	\$62,104	\$0.17	0.3%
Spider Mites	248,865	66.6%	89,535	24.0%	1.0	\$10.26	0.08%	0.24	\$2.46	0.05%	497	\$779,028	\$2.08	4.1%
Thrips	373,652	100.0%	118,970	31.8%	1.0	\$7.25	0.19%	0.32	\$2.31	0.19%	1,802	\$1,467,858	\$3.93	7.8%
Aphids	112,096	30.0%	3,737	1.0%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$7,848	\$0.02	0.0%
Grasshoppers	155,452	41.6%	70,852	19.0%	1.0	\$5.06	0.00%	0.19	\$0.96	0.00%	0	\$149,052	\$0.40	0.8%
Banded Winged Whitefly	2,362	0.6%	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	6.3%	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								4.16	\$40.83	1.47%	13,611	\$18,813,224	\$50.35	

SUMMARY DATA

Data Input		Yield and Management Results				Economic Results	
State	Alabama	Total Acres	373,652			Total	Per Acre
Region	Southeast	Total Bales Harvested	622,753			Foliar Insecticide Costs	\$15,255,322
Year	2024	Total Bales Lost to Insects	13,611			Seed Treatment Costs	\$4,542,693
Total Acres (Upland)	373,652	Percent Yield Loss	1.5%			In-Furrow Costs	\$737,609
Yield / Acre (Upland)	800	Yield w/o Insects (lb/acre)	812			Scouting Costs	\$2,800,010
Price / lb	\$0.70	Av. # Applications	4.2			Eradication Costs	\$560,478
yield potential (lb/acre)	1,188	Total Bales lost (all factors)	306,988			Bt Cotton	\$13,319,145
Acres (Pima)	0	Total % yield Loss	32.7%			Total Costs	\$37,215,256
Yield / Acre (Pima)	0	Transgenic Cotton (arthropods) (# acres)	373,652			Yield Loss to Insects	\$4,573,464
% Acres Scouted	88%	Boll Weevil Eradication (# acres)	373,652			Total Losses + Costs	\$41,788,720
Fee / Scouted Acre	\$8.50	Pink Bollworm Eradication (# acres)	0				
No. times scouted/week	1.0	# Scouted Acres	329,413				
% acres Transgenic (Bt) Cotton	100%	Seed Treatments (arthropods) (# acres)	324,478				
Cost/treated acre (Bt) Cotton	\$35.65	In-Furrow Applications (# acres)	49,174				
% acres with seed treatment	87%	Applications by Air (acres)	56,048				
Seed trt. cost/ treated acre	\$14.00	Applications by Ground (acres)	317,604				
% acres with in-furrow	13%	No. acres with no foliar insecticide applications	0				
		% loss to non-arthropods	1.0%				
		% loss to other (chemical injury, weeds, diseases, etc.)	1.5%				

Table 3. Cotton insect loss estimates for 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	8.2%	30,491	\$60.00	\$35.00	12%	3,659	1.0
Bollgard III	71.5%	267,056	\$63.00	\$35.00	0%	0	0.0
Bollgard III/Thryvon	11.1%	41,490	\$83.00	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$45.00	\$0.00	0%	0	0.0
WideStrike 3	9.3%	34,616	\$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%	373,652	\$63.59	\$35.65	1.0%	3,659	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%	373,652	\$63.59	\$35.65	1.0%	3,659	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)		373,652	\$63.59		1.0%	3,659	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%	41,489	1.9