

Table 26. Cotton insect loss estimates for Texas 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	2,978,909	80.9%	83,713	2%	1.0	\$7.85	1.28%	0.02	\$0.18	1.04%	175,861	\$59,620,655	\$16.19	19.8%
Beet Armyworm	978,720	26.6%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Fall Armyworm	1,322,616	35.9%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Loopers	1,017,956	27.6%	2,602	0%	1.0	\$3.45	0.00%	0.00	\$0.00	0.00%	0	\$2,479	\$0.00	0.0%
Cutworms	216,048	5.9%	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	62,931	1.7%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Lygus	3,167,374	86.0%	258,372	7%	1.0	\$14.16	0.69%	0.07	\$0.99	0.59%	100,246	\$36,831,196	\$10.00	12.2%
Cotton Fleahopper	3,388,932	92.0%	1,157,834	31%	1.4	\$13.07	1.25%	0.45	\$5.83	1.15%	194,076	\$84,951,812	\$23.07	28.2%
Stink Bugs (other than brown stink bug)	2,948,510	80.1%	581,062	16%	1.0	\$13.56	0.02%	0.16	\$2.14	0.02%	3,038	\$7,331,820	\$1.99	2.4%
Brown Stink Bug	870,689	23.6%	609,482	17%	1.0	\$2.66	2.15%	0.17	\$0.45	0.51%	86,144	\$29,340,017	\$7.97	9.7%
Clouded Plant Bug	0	0.0%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Leaf Footed Bugs	2,845,502	77.3%	14,771	0%	1.0	\$2.41	0.00%	0.00	\$0.01	0.00%	0	\$27,481	\$0.01	0.0%
Spider Mites	857,970	23.3%	36,926	1%	1.0	\$2.61	0.00%	0.01	\$0.03	0.00%	0	\$22,440	\$0.01	0.0%
Thrips	3,226,312	87.6%	1,023,927	28%	1.0	\$9.86	0.09%	0.28	\$2.74	0.08%	13,147	\$13,264,002	\$3.60	4.4%
Aphids	2,597,683	70.6%	123,670	3%	1.0	\$14.11	0.01%	0.03	\$0.47	0.01%	1,215	\$1,639,606	\$0.45	0.5%
Grasshoppers	3,497,018	95.0%	56,219	2%	0.8	\$8.54	0.00%	0.01	\$0.10	0.00%	0	\$350,659	\$0.10	0.1%
Banded Winged Whitefly	2,167,086	58.9%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	572,862	15.6%	86,212	2%	1.9	\$5.02	1.93%	0.05	\$0.23	0.30%	50,935	\$17,244,006	\$4.68	5.7%
	3,203,784	87.0%	0	0%	0.0	\$0.00	0.67%	0.00	\$0.00	0.59%	99,337	\$33,377,225	\$9.07	11.1%
Other Insect Pests	553,895	15.0%	184,632	5%	0.0	\$3.01	2.00%	0.00	\$0.00	0.30%	50,935	\$17,114,232	\$4.65	5.7%
Boll Weevil	36,926	1.0%	0	0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
TOTAL								1.25	\$13.17	4.58%	774,935	\$301,117,630	\$81.79	

SUMMARY DATA

Data Input				Yield and Management Results			Economic Results		
State	Texas			Total Acres	3,681,649		Total		Per Acre
Region	Central			Total Bales Harvested	4,398,478	Foliar Insecticide Costs	\$48,501,339		\$13.17
Year	2024			Total Bales Lost to Insects	774,935	Seed Treatment Costs	\$26,492,658		\$7.20
Total Acres (Upland)	3,681,649	In-furrow cost/treated acre	\$39.28	Percent Yield Loss	4.6%	In-Furrow Costs	\$2,779,994		\$0.76
Yield / Acre (Upland)	573	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	601	Scouting Costs	\$19,582,626		\$5.32
Price / lb	\$0.70	Cost/acre Boll Weevil Eradication	\$1.61	Av. # Applications	1.3	Eradication Costs	\$5,910,873		\$1.61
yield potential (lb/acre)	2,207	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	14,217,697	Bt Cotton	\$46,813,861		\$12.72
Acres (Pima)	35,183	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	74.0%	Total Costs	\$150,081,351		\$40.76
Yield / Acre (Pima)	1,079	% Insect apps by air	26%	Transgenic Cotton (arthropods) (# acres)	3,050,663	Yield Loss to Insects	\$260,378,215		\$70.72
% Acres Scouted	55%	No. apps by air	1.3	Boll Weevil Eradication (# acres)	3,681,649	Total Losses + Costs	\$410,459,566		\$111.49
Fee / Scouted Acre	\$9.73	Cost/app by air	\$11.04	Pink Bollworm Eradication (# acres)	0				
No. times scouted/week	1.2	% insect apps by ground	70%	# Scouted Acres	2,011,574				
% acres Transgenic (Bt) Cotton	83%	No. apps by ground	1.5	Seed Treatments (arthropods) (# acres)	2,649,266				
Cost/treated acre (Bt) Cotton	\$15.35	Cost/app by ground	\$6.56	In-Furrow Applications (# acres)	70,770				
% acres with seed treatment	72%	% Loss to weather	63.2%	Applications by Air (acres)	974,023				
Seed trt. cost/ treated acre	\$10.00	% loss to non-arthropods	0.7%	Applications by Ground (acres)	2,590,164				
% acres with in-furrow	2%	% loss to other (chemical injury, weeds, diseases, etc.)	5.5%	No. acres with no foliar insecticide applications	1,694,143				

Table 26. Cotton insect loss estimates for Texas 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	4.82%	177,542	\$94.27	\$13.20	12.5%	22,198	1.0
Bollgard III	31.47%	1,158,791	\$98.73	\$14.82	0.0%	0	0.0
Bollgard III/Thryvon	8.02%	295,379	\$113.56	\$37.19	0.0%	0	0.0
WideStrike	0.02%	650	\$72.34	\$9.70	0.0%	0	0.0
WideStrike 3	20.50%	754,807	\$85.99	\$4.92	0.4%	2,954	1.0
TwinLink	4.57%	168,328	\$71.52	\$8.88	0.2%	295	1.0
TwinLink Plus	13.45%	495,165	\$75.40	\$12.76	0.0%	0	0.0
Total Bt	82.9%	3,050,663	\$91.46	\$15.35	0.8%	25,448	0.008
Herbicide Traits Only	12.40%	456,346	\$81.07	-	3.1%	14,032	1.0
Conventional	4.16%	153,036	\$25.20	-	0.9%	1,403	1.0
Organic	0.59%	21,605	\$25.20	-	0.0%	0	0.0
Total Upland Cotton	100.0%	3,681,649	\$87.03	\$15.35	1.1%	40,883	0.011
Non Upland Cotton							
Pima	0.95%	35,183	\$62.67	-	7.1%	2,511	1.0
Other	0.6%	22,709	\$0.00	-	0.0%	0	0.0
Organic	0.0%	0	\$0.00	-	0.0%	0	0.0
Total (all Cotton)		3,739,541	\$86.27	-	1.2%	43,394	0.012

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	\$16.18	8.18%	24,150	1.0