

Table 25. Cotton insect loss estimates for South Texas 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	338,328	50%	0	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	\$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	0	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	\$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	135,331	20%	33,833	5.0%	1.0	\$10.00	0.00%	0.05	\$0.50	0.00%	0	\$67,666	\$0.10	0.1%
Cotton Fleahopper	676,656	100%	608,990	90.0%	1.0	\$13.50	2.00%	0.90	\$12.15	2.00%	56,388	\$31,227,674	\$46.15	50.3%
Stink Bugs (other than brown stink bug)	202,997	30%	87,965	13.0%	1.0	\$12.75	0.00%	0.13	\$1.66	0.00%	0	\$336,467	\$0.50	0.5%
Brown Stink Bug	405,994	60%	135,331	20.0%	1.5	\$12.75	2.00%	0.30	\$3.83	1.20%	33,833	\$15,356,790	\$22.70	24.7%
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	101,498	15%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	236,830	35%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Thrips	676,656	100%	135,331	20.0%	1.0	\$15.00	1.00%	0.20	\$3.00	1.00%	28,194	\$13,533,120	\$20.00	21.8%
Aphids	676,656	100%	101,498	15.0%	1.0	\$15.50	0.00%	0.15	\$2.33	0.00%	0	\$1,573,225	\$2.32	2.5%
Grasshoppers	405,994	60%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Banded Winged Whitefly	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	270,662	40%	162,397	24.0%	0.0	\$17.50	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Verde Plant Bug	135,331	20%	33,833	5.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Boll Weevil	67,666	10%	67,666	10.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
TOTAL								1.73	\$23.46	4.20%	118,415	\$62,094,942	\$91.77	

SUMMARY DATA

Data Input		Yield and Management Results			Economic Results		
State	Texas	Total Acres		676,656			
Region	Central	Total Bales Harvested		1,463,269	Foliar Insecticide Costs	\$15,872,658	
Year	2022	Total Bales Lost to Insects		118,415	Seed Treatment Costs	\$5,413,248	
Total Acres (Upland)	676,656	In-furrow cost/treated acre	\$0.00	Percent Yield Loss		\$0	
Yield / Acre (Upland)	1,038	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,084	Scouting Costs	\$3,044,952
Price / lb	\$0.85	Cost/acre Boll Weevil Eradication	\$5.26	Av. # Applications	1.73	Eradication Costs	\$3,559,211
yield potential (lb/acre)	2,000	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	1,356,131	Bt Cotton	\$11,731,329
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	48.1%	Total Costs	\$39,621,398
Yield / Acre (Pima)	0	% Insect apps by air	20%	Transgenic Cotton (arthropods) (# acres)	676,656	Yield Loss to Insects	\$48,313,320
% Acres Scouted	60%	No. apps by air	1.2	Boll Weevil Eradication (# acres)	676,656	Total Losses + Costs	\$87,934,718
Fee / Scouted Acre	\$7.50	Cost/app by air	\$7.50	Pink Bollworm Eradication (# acres)	0		
No. times scouted/week	1	% insect apps by ground	95%	# Scouted Acres	405,994		
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	1.7	Seed Treatments (arthropods) (# acres)	541,325		
Cost/treated acre (Bt) Cotton	\$17.34	Cost/app by ground	\$5.50	In-Furrow Applications (# acres)	0		
% acres with seed treatment	80%	% Loss to weather	43.5%	Applications by Air (acres)	135,331		
Seed trt. cost/ treated acre	\$10.00	% loss to non-arthropods	0.0%	Applications by Ground (acres)	642,823		
% acres with in-furrow	0%	% loss to other (chemical injury, weeds, diseases, etc.)	0.4%	No. acres with no foliar insecticide applications	0		

Table 25. Cotton insect loss estimates for South Texas 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	8.0%	54,132	\$76.52	\$11.67	0%	0	0.0
Bollgard III	30.0%	202,997	\$86.48	\$21.63	0%	0	0.0
WideStrike	2.0%	13,533	\$67.24	\$2.39	0%	0	0.0
WideStrike 3	55.0%	372,161	\$81.08	\$16.23	0%	0	0.0
TwinLink	2.0%	13,533	\$67.12	\$9.17	0%	0	0.0
TwinLink Plus	3.0%	20,300	\$83.18	\$25.23	0%	0	0.0
Total Bt	100.0%	676,656	\$81.84	\$17.34	0.0%	0	0.00
Herbicide Traits Only	0.0%	0	\$41.14	-	0%	0	0.0
Conventional	0.0%	0	\$23.71	-	0%	0	0.0
Organic	0.0%	0	\$23.71	-	0%	0	0.0
Total Upland Cotton	100.0%	676,656	\$81.84	\$17.34	0.0%	0	0.00
Non Upland Cotton							
Pima	0%	0	\$0.00	-	0%	0	0.0
Other	0%	0	\$0.00	-	0%	0	0.0
Organic	0%	0	\$0.00	-	0%	0	0.0
Total (all Cotton)		676,656	\$81.84	-	0.0%	0	0.00