

Table 25. Cotton insect loss estimates for South / Gulf Coast Texas during 2023.

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	634,378	100%	39,966	6.3%	1.0	\$18.00	0.50%	0.06	\$1.08	0.50%	13,540	\$5,884,488	\$9.28	5.5%
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	126,876	20%	158,595	25.0%	1.0	\$15.00	2.00%	0.25	\$3.75	0.40%	10,832	\$4,635,272	\$7.31	4.3%
Cotton Fleahopper	634,378	100%	602,659	95.0%	1.5	\$15.00	3.00%	1.42	\$21.30	3.00%	81,240	\$44,708,411	\$70.48	41.8%
Stink Bugs (other than brown stink bug)	507,502	80%	444,065	70.0%	1.0	\$12.75	0.00%	0.70	\$8.93	0.00%	0	\$4,529,459	\$7.14	4.2%
Brown Stink Bug	634,378	100%	570,940	90.0%	1.0	\$12.75	2.00%	0.90	\$11.48	2.00%	54,160	\$28,076,928	\$44.26	26.3%
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	507,502	80%	12,688	2.0%	1.0	\$12.75	0.00%	0.02	\$0.26	0.00%	0	\$129,413	\$0.20	0.1%
Spider Mites	380,627	60%	63,438	10.0%	1.0	\$13.00	0.00%	0.10	\$1.30	0.00%	0	\$494,815	\$0.78	0.5%
Thrips	634,378	100%	190,313	30.0%	1.0	\$12.50	0.00%	0.30	\$3.75	0.00%	0	\$2,378,918	\$3.75	2.2%
Aphids	634,378	100%	63,438	10.0%	1.0	\$13.00	0.00%	0.10	\$1.30	0.00%	0	\$824,691	\$1.30	0.8%
Grasshoppers	634,378	100%	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	57,094	9%	63,438	10.0%	2.0	\$12.50	2.00%	0.20	\$2.50	0.18%	4,874	\$2,014,351	\$3.18	1.9%
Verde Plant Bug	253,751	40%	126,876	20.0%	1.0	\$15.00	3.00%	0.20	\$3.00	1.20%	32,496	\$13,239,718	\$20.87	12.4%
Boll Weevil	31,719	5%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
<b>TOTAL</b>								4.25	\$58.64	7.28%	197,142	\$106,916,464	\$168.54	

**SUMMARY DATA**

Data Input		Yield and Management Results			Economic Results	
State	Texas	Total Acres		634,378		
Region	Central	Total Bales Harvested		859,054	Foliar Insecticide Costs	\$37,196,754
Year	2023	Total Bales Lost to Insects		197,142	Seed Treatment Costs	\$5,423,932
Total Acres (Upland)	634,378	In-furrow cost/treated acre	\$40.00	Percent Yield Loss		\$126,876
Yield / Acre (Upland)	650	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	701	\$6,026,591
Price / lb	\$0.80	Cost/acre Boll Weevil Eradication	\$5.64	Av. # Applications	4.25	\$3,577,892
yield potential (lb/acre)	2,049	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	1,849,023	\$19,173,467
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	68.3%	\$71,525,512
Yield / Acre (Pima)	0	% Insect apps by air	60%	Transgenic Cotton (arthropods) (# acres)	621,690	\$75,702,528
% Acres Scouted	95%	No. apps by air	2	Boll Weevil Eradication (# acres)	334,378	\$147,228,040
Fee / Scouted Acre	\$10.00	Cost/app by air	\$8.00	Pink Bollworm Eradication (# acres)	0	
No. times scouted/week	1.5	% insect apps by ground	90%	# Scouted Acres	602,659	
% acres Transgenic (Bt) Cotton	98%	No. apps by ground	3	Seed Treatments (arthropods) (# acres)	602,659	
Cost/treated acre (Bt) Cotton	\$30.84	Cost/app by ground	\$6.50	In-Furrow Applications (# acres)	3,172	
% acres with seed treatment	95%	% Loss to weather	49.0%	Applications by Air (acres)	380,627	
Seed trt. cost/ treated acre	\$9.00	% loss to non-arthropods	2.0%	Applications by Ground (acres)	570,940	
% acres with in-furrow	1%	% loss to other (chemical injury, weeds, diseases, etc.)	10.0%	No. acres with no foliar insecticide applications	12,688	

Table 25. Cotton insect loss estimates for South / Gulf Coast Texas during 2023, 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	10.0%	63,438	\$89.02	\$13.89	40%	25,375	1.0
Bollgard III	35.0%	222,032	\$95.67	\$20.54	0%	0	1.0
Bollgard III/Thryvon	30.0%	190,313	\$115.67	\$40.54	0%	0	0.0
WideStrike	0.0%	0	\$0.00	\$0.00	0%	0	0.0
WideStrike 3	20.0%	126,876	\$88.84	\$13.71	2%	2,538	1.0
TwinLink	2.0%	12,688	\$71.89	\$0.00	2%	254	1.0
TwinLink Plus	1.0%	6,344	\$89.34	\$14.21	0%	0	0.0
<b>Total Bt</b>	<b>98.0%</b>	<b>621,691</b>	<b>\$99.17</b>	<b>\$30.84</b>	<b>4.5%</b>	<b>28,166</b>	<b>0.0</b>
Herbicide Traits Only	1.8%	11,419	\$75.13		95%	10848	1.0
Conventional	0.2%	1,269	\$25.08		95%	1206	1.0
Organic	0.0%	0	\$25.08		0%	0	0.0
<b>Total Upland Cotton</b>	<b>100.0%</b>	<b>634,379</b>	<b>\$98.59</b>	<b>\$30.84</b>	<b>6.3%</b>	<b>40,220</b>	<b>0.1</b>
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
<b>Total (all Cotton)</b>		<b>634,379</b>	<b>\$98.59</b>		<b>6.3%</b>	<b>40,220</b>	<b>0.1</b>

  

Upland Cotton	Thryvon Bt cost/acre	% acres treated for Thrips	# acres treated for Thrips	# apps for Thrips	% acres treated for Lygus	# acres treated for Lygus	# apps for Lygus
Bollgard III/Thryvon	\$22.00	0%	0	0	0%	0	0