

Table 26. Cotton insect loss estimates for South Texas during 2018.

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	462,356	50.0%	277,414	30.0%	1.1	\$24.00	3.00%	0.33	\$7.92	1.50%	57,795	\$25,022,892	\$27.06	17.0%
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	9,247	1.0%	9,247	1.0%	1.0	\$24.00	0.50%	0.01	\$0.24	0.01%	193	\$73,552	\$0.08	0.1%
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	0	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	\$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	184,942	20.0%	184,942	20.0%	1.0	\$15.00	0.00%	0.20	\$3.00	0.00%	0	\$554,827	\$0.60	0.4%
Cotton Fleahopper	924,712	100.0%	878,476	95.0%	2.0	\$11.00	2.00%	1.90	\$20.90	2.00%	77,059	\$47,807,487	\$51.70	32.5%
Stink Bugs (other than brown stink bug)	647,298	70.0%	554,827	60.0%	1.0	\$11.00	3.00%	0.60	\$6.60	2.10%	80,912	\$34,177,245	\$36.96	23.2%
Brown Stink Bug	138,707	15.0%	138,707	15.0%	1.0	\$11.00	0.50%	0.15	\$1.65	0.08%	2,890	\$1,297,010	\$1.40	0.9%
Clouded Plant Bug	0	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	92,471	10.0%	92,471	10.0%	1.0	\$0.00	0.00%	0.10	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	92,471	10.0%	27,741	3.0%	1.0	\$14.00	2.50%	0.03	\$0.42	0.25%	9,632	\$3,598,825	\$3.89	2.4%
Thrips	924,712	100.0%	924,712	100.0%	1.0	\$11.00	1.00%	1.00	\$11.00	1.00%	38,530	\$24,412,520	\$26.40	16.6%
Aphids	924,712	100.0%	184,942	20.0%	1.0	\$16.00	0.50%	0.20	\$3.20	0.50%	19,265	\$10,079,422	\$10.90	6.9%
Grasshoppers	0	0.0%	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	490,097	53.0%	138,707	15.0%	1.0	\$0.00	0.00%	0.15	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Boll Weevil	277,414	30.0%	277,414	30.0%	2.0	\$0.00	0.00%	0.60	\$0.00	0.00%	0	\$0	\$0.00	0.0%
<b>TOTAL</b>								5.27	\$54.93	7.43%	286,276	\$147,023,780	\$158.99	

**SUMMARY DATA**

Data Input		Yield and Management Results			Economic Results			
State	Texas	Total Acres	924,712	Total Bales Harvested	1,637,511	Foliar Insecticide Costs	\$50,794,430	Per Acre
Region	Central	Total Bales Lost to Insects	286,660	Seed Treatment Costs	\$9,247,120		\$10.00	
Year	2018	Percent Yield Loss	7.4%	In-Furrow Costs	\$203,437		\$0.22	
Total Acres (Upland)	924,712	Yield w/o Insects (lb/acre)	918	Scouting Costs	\$5,548,272		\$6.00	
Yield / Acre (Upland)	850	Av. # Applications	5.27	Eradication Costs	\$5,548,272		\$6.00	
Price / lb	\$0.77	Total Bales lost (all factors)	2,976,031	Bt Cotton	\$9,645,671		\$10.43	
yield potential (lb/acre)	2,000	Total % yield Loss	77.2%	Total Costs	\$80,987,202		\$87.58	
Acres (Pima)	-	Transgenic Cotton (arthropods) (# acres)	878,476	Yield Loss to Insects	\$105,807,610		\$114.42	
Yield / Acre (Pima)	-	Boll Weevil Eradication (# acres)	924,712	Total Losses + Costs	\$186,794,812		\$202.00	
% Acres Scouted	60%	Pink Bollworm Eradication (# acres)	0					
Fee / Scouted Acre	\$10.00	# Scouted Acres	554,827					
No. times scouted/week	1.3	Seed Treatments (arthropods) (# acres)	924,712					
% acres Transgenic (Bt) Cotton	95%	In-Furrow Applications (# acres)	18,494					
Cost/treated acre (Bt) Cotton	\$10.98	Applications by Air (acres)	277,414					
% acres with seed treatment	100%	Applications by Ground (acres)	647,298					
Seed trt. cost/ treated acre	\$10.00	No. acres with no foliar insecticide applications	18,494					
% acres with in-furrow	2%							

Table 26. Cotton insect loss estimates for South Texas during 2018, 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	49.0%	453,109	\$80.00	\$12.00	25%	113,277	1.0
Bollgard III	5.0%	46,236	\$90.00	\$20.00	0%	0	0.0
WideStrike	25.0%	231,178	\$60.00	\$5.00	60%	138,707	1.5
WideStrike 3	10.0%	92,471	\$90.00	\$15.00	0%	0	0.0
TwinLink	5.0%	46,236	\$80.00	\$12.00	25%	11,559	1.0
TwinLink Plus	1.0%	9,247	\$90.00	\$20.00	0%	0	0.0
<b>Total Bt</b>	<b>95.0%</b>	<b>878,777</b>	<b>\$76.42</b>	<b>\$10.98</b>	<b>30.0%</b>	<b>263,543</b>	<b>1.0</b>
Herbicide Traits Only	1.0%	9,247	\$65.00	-	80%	7,398	2.0
Conventional	3.0%	27,741	\$25.00	-	80%	22,193	2.0
Organic	1.0%	9,247	\$25.00	-	0%	0	0.0
<b>Total Upland Cotton</b>	<b>100.0%</b>	<b>924,712</b>	<b>\$69.75</b>	<b>\$10.98</b>	<b>31.7%</b>	<b>293,134</b>	<b>1.1</b>
<b>Non Upland Cotton</b>							
Pima	0%	0	\$0.00	-	0%	0	0
Other	0%	0	\$0.00	-	0%	0	0
Organic	0%	0	\$0.00	-	0%	0	0
<b>Total (all Cotton)</b>		<b>924,712</b>	<b>\$69.75</b>		<b>31.7%</b>	<b>293,134</b>	<b>1.1</b>