

Table 28. Cotton insect loss estimates for Texas Rolling Plains-Trans Pecos 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	972,728	60.0%	64,849	4.0%	1.0	\$17.00	2.00%	0.04	\$0.68	1.20%	81,061	\$30,621,601	\$18.89	72.0%
Beet Armyworm	16,212	1.0%	0	0.0%	1.0	\$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	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	64,849	4.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cotton Fleahopper	1,134,849	70.0%	162,121	10.0%	1.2	\$11.00	0.50%	0.12	\$1.32	0.35%	23,643	\$10,236,454	\$6.31	24.1%
Stink Bugs (other than brown stink bug)	97,273	6.0%	16,212	1.0%	1.0	\$12.00	0.20%	0.01	\$0.12	0.01%	811	\$311,418	\$0.19	0.7%
Brown Stink 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%
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	0	0.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	0	0.0%	0	0.0%	1.0	\$16.00	15.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Thrips	1,296,970	80.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Aphids	810,607	50.0%	16,212	1.0%	1.0	\$16.00	0.10%	0.01	\$0.16	0.05%	3,378	\$1,378,206	\$0.85	3.2%
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%
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%
<b>TOTAL</b>								0.18	\$2.28	1.61%	108,893	\$42,547,679	\$26.24	

**SUMMARY DATA**

Data Input		Yield and Management Results			Economic Results	
	Texas	Total Acres	1,637,618	Total	Per Acre	
State	Texas	Total Acres	1,637,618	Total		
Region	Central	Total Bales Harvested	1,249,685	Foliar Insecticide Costs	\$3,696,366	\$2.28
Year	2018	Total Bales Lost to Insects	108,758	Seed Treatment Costs	\$15,401,524	\$9.50
Total Acres (Upland)	1,621,213	In-furrow cost/treated acre	\$20.00	Percent Yield Loss	\$0	\$0.00
Yield / Acre (Upland)	370	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	\$1,556,364	\$0.96
Price / lb	\$0.77	Cost/acre Boll Weevil Eradication	\$0.72	Av. # Applications	\$1,167,273	\$0.72
yield potential (lb/acre)	2,000	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	\$20,919,808	\$12.90
Acres (Pima)	16,405	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	\$42,741,335	\$26.36
Yield / Acre (Pima)	750	% Insect apps by air	8%	Transgenic Cotton (arthropods) (# acres)	\$40,246,853	\$24.83
% Acres Scouted	10%	No. apps by air	0.016	Boll Weevil Eradication (# acres)	\$82,988,188	\$51.19
Fee / Scouted Acre	\$9.60	Cost/app by air	\$7.20	Pink Bollworm Eradication (# acres)		
No. times scouted/week	1	% insect apps by ground	92%	# Scouted Acres	162,121	
% acres Transgenic (Bt) Cotton	91%	No. apps by ground	0.184	Seed Treatments (arthropods) (# acres)	1,540,152	
Cost/treated acre (Bt) Cotton	\$14.18	Cost/app by ground	\$3.00	In-Furrow Applications (# acres)	0	
% acres with seed treatment	95%	% Loss to weather	82.6%	Applications by Air (acres)	129,697	
Seed trt. cost/ treated acre	\$10.00	% loss to non-arthropods	4.0%	Applications by Ground (acres)	1,491,516	
% acres with in-furrow	0%	% loss to other (chemical injury, weeds, diseases, etc.)	2.0%	No. acres with no foliar insecticide applications	1,378,031	

Table 28. Cotton insect loss estimates for Texas Rolling Plains-Trans Pecos 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	38.0%	616,061	\$80.00	\$12.00	1%	6,161	1.0
Bollgard III	2.0%	32,424	\$90.00	\$20.00	0%	0	0.0
WideStrike	5.0%	81,061	\$60.00	\$5.00	2%	1,621	1.0
WideStrike 3	11.0%	178,333	\$90.00	\$15.00	0%	0	0.0
TwinLink	7.0%	113,485	\$80.00	\$12.00	1%	1,135	1.0
TwinLink Plus	28.0%	453,940	\$90.00	\$20.00	0%	0	0.0
<b>Total Bt</b>	<b>91.0%</b>	<b>1,475,304</b>	<b>\$81.43</b>	<b>\$14.18</b>	<b>.06%</b>	<b>8,917</b>	<b>0.5</b>
Herbicide Traits Only	8.0%	129,697	\$65.00	-	50%	64,849	2.0
Conventional	1.0%	16,212	\$25.00	-	50%	8,106	2.0
Organic	0%	0	\$0.00	-	0%	0	0.0
<b>Total Upland Cotton</b>	<b>100.0%</b>	<b>1,621,213</b>	<b>\$79.55</b>	<b>\$14.18</b>	<b>5.0%</b>	<b>81,872</b>	<b>0.7</b>
Non Upland Cotton							
Pima	1.1%	17,833	\$60.00	-	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>1,639,046</b>	<b>\$79.34</b>		<b>5.0%</b>	<b>81,872</b>	<b>0.7</b>