

Table 24. Cotton insect loss estimates for the Rolling Plains-Trans Pecos area of 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	487,862	75.0%	3,252	0.5%	1.0	\$19.50	0.40%	0.00	\$0.00	0.30%	7,863	\$2,641,968	\$4.06	27.4%
Beet Armyworm	6,505	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Fall Armyworm	6,505	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Loopers	32,524	5.0%	2,602	0.4%	1.0	\$19.50	0.20%	0.00	\$0.00	0.01%	262	\$88,032	\$0.14	0.9%
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	6,505	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Lygus	357,765	55.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cotton Fleahopper	357,765	55.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Stink Bugs (other than brown stink bug)	65,048	10.0%	9,757	1.5%	1.0	\$18.50	3.00%	0.01	\$0.19	0.30%	7,863	\$2,654,002	\$4.08	27.6%
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	65,048	10.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	3,252	0.5%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Thrips	195,145	30.0%	32,524	5.0%	1.0	\$12.50	0.10%	0.05	\$0.63	0.03%	786	\$386,061	\$0.59	4.0%
Aphids	214,659	33.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Grasshoppers	650,482	100.0%	13,010	2.0%	0.0	\$8.50	0.40%	0.00	\$0.00	0.40%	10,484	\$3,522,624	\$5.42	36.6%
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	12,359	1.9%	12,359	1.9%	1.5	\$12.50	2.00%	0.03	\$0.38	0.04%	996	\$339,291	\$0.52	3.5%
Wireworms	390,289	60.0%	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>								0.09	\$1.19	1.08%	28,254	\$9,631,978	\$14.81	

## SUMMARY DATA

Data Input				Yield and Management Results			Economic Results		
State	Texas			Total Acres	650,482			Total	Per Acre
Region	Central			Total Bales Harvested	650,482	Foliar Insecticide Costs		\$770,821	\$1.18
Year	2024			Total Bales Lost to Insects	28,254	Seed Treatment Costs		\$1,951,446	\$3.00
Total Acres (Upland)	650,482	In-furrow cost/treated acre	\$40.00	Percent Yield Loss	1.1%	In-Furrow Costs		\$780,578	\$1.20
Yield / Acre (Upland)	480	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	485	Scouting Costs		\$829,365	\$1.28
Price / lb	\$0.70	Cost/acre Boll Weevil Eradication	\$1.01	Av. # Applications	0.09	Eradication Costs		\$656,987	\$1.01
yield potential (lb/acre)	1,934	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	1,970,340	Bt Cotton		\$9,564,988	\$14.70
Acres (Pima)	20,183	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	75.2%	Total Costs		\$14,554,185	\$22.37
Yield / Acre (Pima)	1,250	% Insect apps by air	3%	Transgenic Cotton (arthropods) (# acres)	597,468	Yield Loss to Insects		\$9,493,344	\$14.59
% Acres Scouted	15%	No. apps by air	1	Boll Weevil Eradication (# acres)	650,482	Total Losses + Costs		\$24,047,529	\$36.97
Fee / Scouted Acre	\$8.50	Cost/app by air	\$9.25	Pink Bollworm Eradication (# acres)	0				
No. times scouted/week	1.5	% insect apps by ground	11%	# Scouted Acres	97,572				
% acres Transgenic (Bt) Cotton	92%	No. apps by ground	1	Seed Treatments (arthropods) (# acres)	195,145				
Cost/treated acre (Bt) Cotton	\$16.01	Cost/app by ground	\$8.50	In-Furrow Applications (# acres)	19,514				
% acres with seed treatment	30%	% Loss to weather	72.6%	Applications by Air (acres)	19,514				
Seed trt. cost/ treated acre	\$10.00	% loss to non-arthropods	0.5%	Applications by Ground (acres)	71,553				
% acres with in-furrow	3.00%	% loss to other (chemical injury, weeds, diseases, etc.)	1.0%	No. acres with no foliar insecticide applications	576,978				

Table 24. Cotton insect loss estimates for the Rolling Plains-Trans Pecos area of 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	6.3%	40,980	\$94.27	\$13.20	2.0%	820	1.0
Bollgard III	27.0%	175,630	\$98.73	\$14.82	0.0%	0	0.0
Bollgard III/Thryvon	13.0%	84,563	\$113.56	\$32.48	0.0%	0	0.0
WideStrike	0.1%	650	\$72.34	\$9.70	0.0%	0	0.0
WideStrike 3	23.5%	152,538	\$85.99	\$4.92	0.0%	0	0.0
TwinLink	7.0%	45,534	\$71.52	\$8.88	0.0%	0	0.0
TwinLink Plus	15.0%	97,572	\$75.40	\$12.76	0.0%	0	0.0
Total Bt	91.9%	597,467	\$91.36	\$16.01	0.1%	820	0.001
Herbicide Traits Only	8.1%	52,689	\$81.07	-	0%	0	0.0
Conventional	0.1%	325	\$25.20	-	0%	0	0.0
Organic	0.0%	0	\$25.20	-	0%	0	0.0
Total Upland Cotton	100.0%	650,481	\$90.49	\$16.01	0.1%	820	0.001
Non Upland Cotton							
Pima	1.9%	12,554	\$65.00	-	20%	2,511	1.0
Other	0.0%	0	\$0.00	-	0%	0	0.0
Organic	0.0%	0	\$0.00	-	0%	0	0.0
Total (all Cotton)		663,035	\$90.01		0.5%	3,331	0.005

  

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	\$15.00	0.0%	0	0.0