Table 16. Cotton insect loss estimates for upland cotton in New Mexico during 2021.

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	15,806	23%	8,727	12.7%	1.0	$10.87	1.50%	0.13	$1.41	0.35%	506	$287,074	$4.18	8.8%
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	2,749	4%	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	39,170	57%	3,436	5.0%	1.0	$12.84	0.80%	0.05	$0.64	0.46%	669	$375,168	$5.46	11.5%
Cotton Fleahopper	16,493	24%	2,405	3.5%	1.0	$10.85	1.00%	0.03	$0.33	0.24%	352	$189,535	$2.76	5.8%
Stink Bugs (other than brown stink bug)	6,185	9%	550	0.8%	1.0	$9.93	1.00%	0.01	$0.10	0.09%	132	$69,677	$1.01	2.1%
Brown Stink Bug	687	1%	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	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Leaf Footed Bugs	2,062	3%	0	0.0%	0.0	$0.00	2.00%	0.00	$0.00	0.06%	88	$46,042	$0.67	1.4%
Spider Mites	0	0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Thrips	61,848	90%	54,289	79.0%	1.1	$10.52	2.50%	0.87	$9.15	2.25%	3,302	$2,293,664	$33.38	70.3%
Aphids	1,374	2%	687	1.0%	1.0	$10.57	0.00%	0.01	$0.11	0.00%	0	$145	$0.00	0.0%
Grasshoppers	1,718	3%	344	0.5%	0.0	$10.74	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Banded Winged Whitefly	1,374	2%	825	1.2%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Silverleaf Whitefly	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	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
TOTAL								1.10	$11.74	3.44%	5,049	$3,261,305	$47.46	

SUMMARY DATA

Data Input				Yield and Management Results		Economic Results		
State	New Mexico			Total Acres	68,720		Total	Per Acre
Region	West			Total Bales Harvested	130,568	Foliar Insecticide Costs	$806,635	$11.74
Year	2021			Total Bales Lost to Insects	5,049	Seed Treatment Costs	$452,906	$6.59
Total Acres (Upland)	68,720	In-furrow cost/treated acre	$2.03	Percent Yield Loss	3.4%	In-Furrow Costs	$8,370	$0.12
Yield / Acre (Upland)	912	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	945	Scouting Costs	$366,910	$5.34
Price / lb	$1.09	Cost/acre Boll Weevil Eradication	$5.95	Av. # Applications	1.1	Eradication Costs	$408,884	$5.95
yield potential (lb/acre)	1,025	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	16,202	Bt Cotton	$846,767	$12.32
Acres (Pima)	4,948	Cost/acre Pink Bollworm Eradication	$0.00	Total % yield Loss	11.0%	Total Costs	$2,890,472	$42.06
Yield / Acre (Pima)	892	% Insect apps by air	21%	Transgenic Cotton (arthropods) (# acres)	55,663	Yield Loss to Insects	$2,641,637	$38.44
% Acres Scouted	71%	No. apps by air	0	Boll Weevil Eradication (# acres)	68,720	Total Losses + Costs	$5,532,109	$80.50
Fee / Scouted Acre	$7.52	Cost/app by air	$21.50	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1	% insect apps by ground	3%	# Scouted Acres	48,791			
% acres Transgenic (Bt) Cotton	81%	No. apps by ground	0	Seed Treatments (arthropods) (# acres)	42,606			
Cost/treated acre (Bt) Cotton	$15.21	Cost/app by ground	$6.20	In-Furrow Applications (# acres)	4,123			
% acres with seed treatment	62%	% Loss to weather	4.0%	Applications by Air (acres)	14,431			
Seed trt. cost/ treated acre	$10.63	% loss to non-arthropods	2.0%	Applications by Ground (acres)	2,062			
% acres with in-furrow	6%	% loss to other (chemical injury, weeds, diseases, etc.)	1.6%	No. acres with no foliar insecticide applications	47,417			

Table 16. Cotton insect loss estimates for upland cotton New Mexico during 2021, 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%	5,498	$40.25	$14.24	2%	82	1.0
Bollgard III	36.0%	24,739	$42.10	$16.22	0%	0	0.0
WideStrike	4.0%	2,749	$35.03	$12.11	2%	49	1.0
WideStrike 3	28.0%	19,242	$37.24	$14.21	0%	0	0.0
TwinLink	2.0%	1,374	$45.25	$16.51	3%	41	1.0
TwinLink Plus	3.0%	2,062	$48.77	$18.34	0%	0	0.0
Total Bt	81.0%	55,664	$40.21	$15.21	0.3%	173	0.003
Herbicide Traits Only	11.0%	7,559	$26.44	-	31%	2,343	1.0
Conventional	7.0%	4,810	$12.22	-	21%	1,010	1.0
Organic	1.0%	687	$12.22	-	0%	0	0.0
Total Upland Cotton	100.0%	68,720	$36.46	$15.21	5.1%	3,526	0.051
Non Upland Cotton							
Pima	7.2%	4,948	$38.47	-	28%	1,385	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)		73,668	$36.59		6.7%	4,911	0.067