

Table 21. Cotton insect loss estimates for New Mexico 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	28,486	82.0%	4,863	14.0%	1.0	\$10.89	4.30%	0.14	\$1.52	3.53%	3,271	\$1,205,289	\$34.70	62.7%
Beet Armyworm	347	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	695	2.0%	347	1.0%	1.0	\$0.00	1.00%	0.01	\$0.00	0.02%	19	\$6,749	\$0.19	0.4%
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	174	1.0%	0	0.0%	0.0	\$0.00	0.50%	0.00	\$0.00	0.00%	3	\$1,066	\$0.03	0.1%
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	174	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Lygus	13,548	39.0%	2,779	8.0%	1.0	\$12.46	1.80%	0.08	\$1.00	0.70%	651	\$244,740	\$7.05	12.7%
Cotton Fleahopper	10,769	31.0%	695	2.0%	1.0	\$10.91	0.70%	0.02	\$0.22	0.22%	201	\$73,745	\$2.12	3.8%
Stink Bugs (other than brown stink bug)	4,863	14.0%	347	1.0%	1.0	\$0.00	0.40%	0.01	\$0.00	0.06%	52	\$18,470	\$0.53	1.0%
Brown Stink Bug	347	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Clouded Plant Bug	347	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Leaf Footed Bugs	347	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	347	1.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Thrips	30,223	87.0%	4,863	14.0%	1.0	\$6.94	1.20%	0.14	\$0.97	1.04%	969	\$373,553	\$10.75	19.4%
Aphids	695	2.0%	174	0.5%	1.0	\$10.56	0.00%	0.01	\$0.11	0.00%	0	\$73	\$0.00	0.0%
Grasshoppers	695	2.0%	0	0.0%	0.0	\$10.78	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Banded Winged Whitefly	347	1.0%	0	0.0%	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	\$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%
TOTAL								0.41	\$3.82	5.57%	5,166	\$1,923,685	\$55.38	

SUMMARY DATA

State	Data Input		Yield and Management Results				Economic Results		
	New Mexico		Total Acres	Total Bales Harvested	Total Bales Lost to Insects	Percent Yield Loss	Total % yield Loss	Total	Per Acre
Region	West		34,739	85,111	5,168	5.6%	17.1%	\$132,592	\$3.82
Year	2018							\$253,706	\$7.30
Total Acres (Upland)	34,739	In-furrow cost/treated acre	\$1.96	Yield w/o Insects (lb/acre)	1,245	Scouting Costs	\$186,139	\$5.36	
Yield / Acre (Upland)	1,176	% acres in Boll Weevil Eradication	100%	Av. # Applications	0.41	Eradication Costs	\$300,856	\$8.66	
Price / lb	\$0.74	Cost/acre Boll Weevil Eradication	\$5.95	Total Bales lost (all factors)	15,838	Bt Cotton	\$397,254	\$11.44	
yield potential (lb/acre)	1,282	% acres in Pink Bollworm Eradication	39%	Total % yield Loss	17.1%	Total Costs	\$1,274,632	\$36.69	
Acres (Pima)	-	Cost/acre Pink Bollworm Eradication	\$6.95	Transgenic Cotton (arthropods) (# acres)	26,749	Yield Loss to Insects	\$1,834,963	\$52.82	
Yield / Acre (Pima)	-	% Insect apps by air	38%	Boll Weevil Eradication (# acres)	34,739	Total Losses + Costs	\$3,109,595	\$89.51	
% Acres Scouted	73%	No. apps by air	1.1	Pink Bollworm Eradication (# acres)	13,548				
Fee / Scouted Acre	\$7.34	Cost/app by air	\$6.78	# Scouted Acres	25,359				
No. times scouted/week	1	% insect apps by ground	21%	Seed Treatments (arthropods) (# acres)	23,623				
% acres Transgenic (Bt) Cotton	77%	No. apps by ground	1	In-Furrow Applications (# acres)	2,084				
Cost/treated acre (Bt) Cotton	\$14.85	Cost/app by ground	\$4.89	Applications by Air (acres)	13,201				
% acres with seed treatment	68%	% Loss to weather	7.1%	Applications by Ground (acres)	7,295				
Seed trt. cost/ treated acre	\$10.74	% loss to non-arthropods	2.4%	No. acres with no foliar insecticide applications	16,327				
% acres with in-furrow	6%	% loss to other (chemical injury, weeds, diseases, etc.)	2.0%						

Table 21. Cotton insect loss estimates New Mexico 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	25.0%	8,685	\$40.25	\$14.24	6%	521	1.0
Bollgard III	28.0%	9,727	\$42.10	\$16.22	2%	146	0.0
WideStrike	10.0%	3,474	\$35.03	\$12.11	9%	313	1.0
WideStrike 3	11.0%	3,821	\$37.24	\$14.21	0%	0	0.0
TwinLink	1.0%	347	\$55.22	\$17.51	8%	28	1.0
TwinLink Plus	2.0%	695	\$58.31	\$19.23	0%	0	0.0
Total Bt	77.0%	26,749	\$40.48	\$14.85	3.8%	1,007	0.5
Herbicide Traits Only	14.0%	4,863	\$26.31	-	43%	2,091	1.0
Conventional	8.0%	2,779	\$12.10	-	28%	778	1.0
Organic	1.0%	347	\$12.10	-	0%	0	0.0
Total Upland Cotton	100.0%	34,738	\$24.15	\$14.85	11.2%	3,876	0.7
Non Upland Cotton							
Pima	10%	3,474	\$38.31	-	16%	556	1.0
Other	0%	0	\$0.00	-	0%	0	0
Organic	0%	0	\$0.00	-	0%	0	0
Total (all Cotton)		38,212	\$25.44		11.6%	4,432	0.7