

Table 20. Cotton insect loss estimates for upland cotton in New Mexico during 2022.

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	11,040	23%	6,096	12.7%	1.0	\$10.87	1.50%	0.13	\$1.41	0.35%	465	\$236,569	\$4.93	9.0%
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	1,920	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	27,360	57%	2,400	5.0%	1.0	\$12.84	0.80%	0.05	\$0.64	0.46%	615	\$309,813	\$6.45	11.7%
Cotton Fleahopper	11,520	24%	1,680	3.5%	1.0	\$10.85	1.00%	0.04	\$0.43	0.24%	324	\$158,964	\$3.31	6.0%
Stink Bugs (other than brown stink bug)	4,320	9%	384	0.8%	1.0	\$9.93	1.00%	0.01	\$0.10	0.09%	121	\$57,928	\$1.21	2.2%
Brown Stink Bug	480	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	1,440	3%	0	0.0%	0.0	\$0.00	2.00%	0.00	\$0.00	0.06%	81	\$38,491	\$0.80	1.5%
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	43,200	90%	37,920	79.0%	1.1	\$10.52	2.50%	0.87	\$9.15	2.25%	3,035	\$1,837,616	\$38.28	69.6%
Aphids	960	2%	480	1.0%	1.0	\$10.57	0.00%	0.01	\$0.11	0.00%	0	\$101	\$0.00	0.0%
Grasshoppers	1,440	3%	240	0.5%	0.0	\$10.74	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Banded Winged Whitefly	960	2%	576	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					1.11			\$11.85		3.44%	4,641	\$2,639,482	\$54.99	

SUMMARY DATA

	Data Input		Yield and Management Results				Economic Results	
		New Mexico					Total	Per Acre
State		New Mexico	Total Acres		48,000			
Region		West	Total Bales Harvested		120,000	Foliar Insecticide Costs	\$568,632	\$11.85
Year		2022	Total Bales Lost to Insects		4,641	Seed Treatment Costs	\$316,349	\$6.59
Total Acres (Upland)		48,000	In-furrow cost/treated acre		\$2.03	Percent Yield Loss	\$5,846	\$0.12
Yield / Acre (Upland)		1,200	% acres in Boll Weevil Eradication		100%	Yield w/o Insects (lb/acre)	\$290,362	\$6.05
Price / lb		\$0.99	Cost/acre Boll Weevil Eradication		\$5.95	Av. # Applications	\$285,600	\$5.95
yield potential (lb/acre)		1,349	% acres in Pink Bollworm Eradication		0%	Total Bales lost (all factors)	\$591,456	\$12.32
Acres (Pima)		-	Cost/acre Pink Bollworm Eradication		\$0.00	Total % yield Loss	\$2,058,245	\$42.88
Yield / Acre (Pima)		-	% Insect apps by air		21%	Transgenic Cotton (arthropods) (# acres)	\$2,205,403	\$45.95
% Acres Scouted		71%	No. apps by air		0	Boll Weevil Eradication (# acres)	\$4,263,648	\$88.83
Fee / Scouted Acre		\$8.52	Cost/app by air		\$21.50	Pink Bollworm Eradication (# acres)		
No. times scouted/week		1	% insect apps by ground		3%	# Scouted Acres		
% acres Transgenic (Bt) Cotton		81%	No. apps by ground		0	Seed Treatments (arthropods) (# acres)		
Cost/treated acre (Bt) Cotton		\$15.21	Cost/app by ground		\$6.20	In-Furrow Applications (# acres)		
% acres with seed treatment		62%	% Loss to weather		4.0%	Applications by Air (acres)		
Seed trt. cost/ treated acre		\$10.63	% loss to non-arthropods		2.0%	Applications by Ground (acres)		
% acres with in-furrow		6%	% loss to other (chemical injury, weeds, diseases, etc.)		1.6%	No. acres with no foliar insecticide applications		

Table 20. Cotton insect loss estimates for upland cotton in New Mexico during 2022, 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%	3,840	\$40.25	\$14.24	2%	77	1.0
Bollgard III	36.0%	17,280	\$42.10	\$16.22	0%	0	0.0
WideStrike	4.0%	1,920	\$35.03	\$12.11	2%	38	1.0
WideStrike 3	28.0%	13,440	\$37.24	\$14.21	0%	0	0.0
TwinLink	2.0%	960	\$45.25	\$16.51	3%	29	1.0
TwinLink Plus	3.0%	1,440	\$48.77	\$18.34	0%	0	0.0
Total Bt	81.0%	38,880	\$40.21	\$15.21	0.4%	144	0.004
Herbicide Traits Only	11.0%	5,280	\$26.44	-	31%	1,637	1.0
Conventional	7.0%	3,360	\$12.22	-	21%	706	1.0
Organic	1.0%	480	\$12.22	-	0%	0	0.0
Total Upland Cotton	100.0%	48,000	\$36.46	\$15.21	5.2%	2,487	0.052