Table 20. Cotton insect loss estimates for New Mexico during 2017.

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	2,907	14%	415	2.0%	1.0	$10.78	1.10%	0.02	$0.22	0.15%	85	$32,451	$1.56	5.1%
Beet Armyworm	21	0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Fall Armyworm	830	4%	208	1.0%	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	7,889	38%	1,246	6.0%	1.0	$12.42	1.60%	0.06	$0.75	0.61%	337	$132,052	$6.36	20.8%
Cotton Fleahopper	5,813	28%	208	1.0%	1.0	$10.85	0.80%	0.01	$0.11	0.22%	124	$47,056	$2.27	7.4%
Stink Bugs (other than brown stink bug)	2,491	12%	208	1.0%	1.0	$9.92	1.70%	0.01	$0.10	0.20%	113	$42,554	$2.05	6.7%
Brown Stink Bug	208	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	208	1%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Leaf Footed Bugs	208	1%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Spider Mites	62	0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Thrips	17,854	86%	3,737	18.0%	1.0	$6.89	2.00%	0.18	$1.24	1.72%	954	$379,321	$18.27	59.9%
Aphids	208	1%	42	0.2%	1.0	$10.57	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Grasshoppers	415	2%	62	0.3%	1.0	$10.72	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Banded Winged Whitefly	415	2%	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	$0.00	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								0.28	$2.41	2.91%	1,613	$633,434	$30.51	

SUMMARY DATA

Data Input				Yield and Management Results		Economic Results		
State	New Mexico			Total Acres	22,886		Total	Per Acre
Region	West			Total Bales Harvested	47,750	Foliar Insecticide Costs	$50,007	$2.41
Year	2017			Total Bales Lost to Insects	1,613	Seed Treatment Costs	$136,014	$6.55
Total Acres (Upland)	20,761	In-furrow cost/treated acre	$1.96	Percent Yield Loss	2.9%	In-Furrow Costs	$2,441	$0.12
Yield / Acre (Upland)	1,104	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,137	Scouting Costs	$111,242	$5.36
Price / lb	$0.78	Cost/acre Boll Weevil Eradication	$5.95	Av. # Applications	0.28	Eradication Costs	$223,087	$10.75
yield potential (lb/acre)	1,282	% acres in Pink Bollworm Eradication	69%	Total Bales lost (all factors)	8,046	Bt Cotton	$237,411	$11.44
Acres (Pima)	2,125	Cost/acre Pink Bollworm Eradication	$6.95	Total % yield Loss	14.5%	Total Costs	$760,202	$36.62
Yield / Acre (Pima)	1,182	% Insect apps by air	31%	Transgenic Cotton (arthropods) (# acres)	15,986	Yield Loss to Insects	$603,907	$29.09
% Acres Scouted	73%	No. apps by air	1.1	Boll Weevil Eradication (# acres)	20,761	Total Losses + Costs	$1,364,109	$65.71
Fee / Scouted Acre	$7.34	Cost/app by air	$6.37	Pink Bollworm Eradication (# acres)	14,325			
No. times scouted/week	1	% insect apps by ground	21%	# Scouted Acres	15,156			
% acres Transgenic (Bt) Cotton	77%	No. apps by ground	1	Seed Treatments (arthropods) (# acres)	12,664			
Cost/treated acre (Bt) Cotton	$14.85	Cost/app by ground	$4.69	In-Furrow Applications (# acres)	1,246			
% acres with seed treatment	61%	% Loss to weather	7.0%	Applications by Air (acres)	6,436			
Seed trt. cost/ treated acre	$10.74	% loss to non-arthropods	2.6%	Applications by Ground (acres)	4,360			
% acres with in-furrow	6%	% loss to other (chemical injury, weeds, diseases, etc.)	2.0%	No. acres with no foliar insecticide applications	11,003			

Table 20. Cotton insect loss estimates for New Mexico during 2017, 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	% of Population Bollworm
Bollgard II	25.0%	5,190	$40.25	$14.24	2%	93	1.0	92%
Bollgard III	28.0%	5,813	$42.10	$16.22	0%	0	0.0	92%
WideStrike	10.0%	2,076	$35.03	$12.11	3%	52	1.0	92%
WideStrike 3	11.0%	2,284	$37.24	$14.21	0%	0	0.0	92%
TwinLink	1.0%	208	$55.22	$17.51	0%	0	1.0	92%
TwinLink Plus	2.0%	415	$58.31	$19.23	0%	0	0.0	92%
Total Bt	77.0%	15,986	$40.48	$14.85	0.9%	145	0.5	92.0%
Herbicide Traits Only	14.0%	2,907	$26.31	-	43%	1,250	1.0	92%
Conventional	8.0%	1,661	$12.10	-	28%	465	1.0	92%
Organic	1.0%	208	$12.10	-	0%	0	0.0	92%
Total Upland Cotton	100.0%	20,762	$24.15	$14.85	9.0%	1,860	0.7	92.0%
Non Upland Cotton								
Pima	10%	2,124	$38.31	-	2%	42	1.0	-
Other	0%	0	-	-	-	-	-	-
Organic	0%	0	-	-	-	-	-	-
Total (all Cotton)		22,886	$25.47		8.3%	1,902	0.7	