

Table 12. Cotton insect loss estimates for California pima cotton 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	1,125	1.0%	0	0.0%	0.0	\$0.00	0.02%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Beet Armyworm	2,249	2.0%	1,125	1.0%	1.0	\$19.00	0.20%	0.01	\$0.19	0.00%	17	\$22,867	\$0.20	0.1%
Fall Armyworm	0	0.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Loopers	3,374	3.0%	1,687	1.5%	1.0	\$19.00	0.20%	0.02	\$0.38	0.01%	25	\$34,282	\$0.30	0.1%
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	0	0.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Lygus	101,209	90.0%	84,341	75.0%	2.0	\$27.00	5.00%	1.50	\$40.50	4.50%	18,713	\$28,800,108	\$256.11	87.5%
Cotton Fleahopper	0	0.0%	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)	2,249	2.0%	1,125	1.0%	1.0	\$18.00	0.40%	0.01	\$0.18	0.01%	33	\$43,965	\$0.39	0.1%
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	0	0.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	89,963	80.0%	61,850	55.0%	1.0	\$22.00	0.04%	0.55	\$12.10	0.03%	133	\$1,264,115	\$11.24	3.8%
Thrips	5,623	5.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Aphids	28,114	25.0%	16,868	15.0%	1.0	\$25.00	0.05%	0.15	\$3.75	0.01%	54	\$176,706	\$1.57	0.5%
Grasshoppers	0	0.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
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	50,604	45.0%	39,359	35.0%	1.7	\$36.00	0.60%	0.60	\$21.60	0.27%	1,123	\$2,575,413	\$22.90	7.8%
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					2.84	\$78.70			4.83%		20,098	\$32,917,456	\$292.72	

SUMMARY DATA

Data Input		Yield and Management Results			Economic Results		
State	California	Total Acres			Total	Per Acre	
Region	West	Total Bales Harvested		350,013	Foliar Insecticide Costs	\$8,850,130	
Year		Total Bales Lost to Insects		20,098	Seed Treatment Costs	\$910,877	
Total Acres (Pima)	112,454	In-furrow cost/treated acre	\$18.00	Percent Yield Loss	4.8%	In-Furrow Costs	\$202,417
Yield / Acre (Pima)	1,494	% acres in Boll Weevil Eradication	0%	Yield w/o Insects (lb/acre)	1,570	Scouting Costs	\$1,602,470
Price / lb	\$2.75	Cost/acre Boll Weevil Eradication	\$0.00	Av. # Applications	2.84	Eradication Costs	\$224,908
yield potential (lb/acre)	1,775	% acres in Pink Bollworm Eradication	100%	Total Bales lost (all factors)	65,841	Bt Cotton	\$0
Acres (Upland)	-	Cost/acre Pink Bollworm Eradication	\$2.00	Total % yield Loss	15.8%	Total Costs	\$11,790,802
Yield / Acre (Upland)	-	% Insect apps by air	70%	Transgenic Cotton (arthropods) (# acres)	0	Yield Loss to Insects	\$26,529,360
% Acres Scouted	95%	No. apps by air	2	Boll Weevil Eradication (# acres)	0	Total Losses + Costs	\$38,320,162
Fee / Scouted Acre	\$15.00	Cost/app by air	\$19.00	Pink Bollworm Eradication (# acres)	112,454		
No. times scouted/week	1.5	% insect apps by ground	55%	# Scouted Acres	106,861		
% acres Transgenic (Bt) Cotton	0%	No. apps by ground	2.5	Seed Treatments (arthropods) (# acres)	101,209		
Cost/treated acre (Bt) Cotton	\$0.00	Cost/app by ground	\$16.00	In-Furrow Applications (# acres)	11,245		
% acres with seed treatment	90%	% Loss to weather	5.0%	Applications by Air (acres)	78,718		
Seed trt. cost/ treated acre	\$9.00	% loss to non-arthropods	0.0%	Applications by Ground (acres)	61,850		
% acres with in-furrow	10%	% loss to other (chemical injury, weeds, diseases, etc.)	6.0%	No. acres with no foliar insecticide applications	5,623		