

Table 12. Cotton insect loss estimates for California pima cotton during 2023.

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	840	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	1,680	2.0%	840	1.0%	1.0	\$19.00	0.20%	0.01	\$0.19	0.00%	13	\$8,743	\$0.10	0.0%
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	2,520	3.0%	1,260	1.5%	1.0	\$19.00	0.20%	0.02	\$0.38	0.01%	20	\$13,918	\$0.17	0.0%
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	75,600	90.0%	67,200	80.0%	3.5	\$30.00	16.00%	2.80	\$84.00	14.40%	47,376	\$37,050,048	\$441.07	96.1%
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)	1,680	2.0%	840	1.0%	1.0	\$18.00	0.40%	0.01	\$0.18	0.01%	26	\$17,150	\$0.20	0.0%
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	67,200	80.0%	46,200	55.0%	1.0	\$22.00	0.04%	0.55	\$12.10	0.03%	105	\$881,160	\$10.49	2.3%
Thrips	4,200	5.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Aphids	21,000	25.0%	16,800	20.0%	1.0	\$25.00	0.05%	0.20	\$5.00	0.01%	43	\$132,864	\$1.58	0.3%
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	25,200	30.0%	15,120	18.0%	1.5	\$36.00	0.30%	0.27	\$9.72	0.09%	296	\$436,752	\$5.20	1.1%
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%
<b>TOTAL</b>								<b>3.86</b>	<b>\$111.57</b>	<b>14.55%</b>	<b>47,879</b>	<b>\$38,540,635</b>	<b>\$458.82</b>	

**SUMMARY DATA**

Data Input		Yield and Management Results				Economic Results	
State	California	Total Acres			84,000	Total	Per Acre
Region	West	Total Bales Harvested			235,025	Foliar Insecticide Costs	\$9,371,880
Year	2023	Total Bales Lost to Insects			47,879	Seed Treatment Costs	\$680,400
Total Acres (Pima)	84,000	In-furrow cost/treated acre	\$18.00	Percent Yield Loss	14.6%	In-Furrow Costs	\$45,360
Yield / Acre (Pima)	1,343	% acres in Boll Weevil Eradication	0%	Yield w/o Insects (lb/acre)	1,572	Scouting Costs	\$1,197,000
Price / lb	\$1.35	Cost/acre Boll Weevil Eradication	\$0.00	Av. # Applications	3.86	Eradication Costs	\$168,000
yield potential (lb/acre)	1,880	% acres in Pink Bollworm Eradication	100%	Total Bales lost (all factors)	93,939	Bt Cotton	-
Acres (Upland)	-	Cost/acre Pink Bollworm Eradication	\$2.00	Total % yield Loss	28.6%	Total Costs	\$11,462,640
Yield / Acre (Upland)	-	% Insect apps by air	75%	Transgenic Cotton (arthropods) (# acres)	-	Yield Loss to Insects	\$31,025,592
% Acres Scouted	95%	No. apps by air	2	Boll Weevil Eradication (# acres)	0	Total Losses + Costs	\$42,488,232
Fee / Scouted Acre	\$15.00	Cost/app by air	\$19.00	Pink Bollworm Eradication (# acres)	84,000		
No. times scouted/week	1.5	% insect apps by ground	60%	# Scouted Acres	79,800		
% acres Transgenic (Bt) Cotton	0%	No. apps by ground	2.5	Seed Treatments (arthropods) (# acres)	75,600		
Cost/treated acre (Bt) Cotton	\$0.00	Cost/app by ground	\$16.00	In-Furrow Applications (# acres)	2,520		
% acres with seed treatment	90%	% Loss to weather	10.0%	Applications by Air (acres)	63,000		
Seed trt. cost/ treated acre	\$9.00	% loss to non-arthropods	0.0%	Applications by Ground (acres)	50,400		
% acres with in-furrow	3%	% loss to other (chemical injury, weeds, diseases, etc.)	4.0%	No. acres with no foliar insecticide applications	-		