

Table 9. Cotton insect loss estimates for California upland cotton during 2024.

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	246	2.0%	246	2.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Beet Armyworm	246	2.0%	246	2.0%	1.0	\$19.00	0.02%	0.02	\$0.38	0.00%	0	\$93	\$0.01	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	368	3.0%	0	0.0%	1.0	\$19.00	0.50%	0.00	\$0.00	0.02%	7	\$2,352	\$0.19	0.2%
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	8,593	70.0%	7,365	60.0%	2.0	\$30.00	7.00%	1.20	\$36.00	4.90%	2,332	\$1,092,882	\$89.03	82.7%
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)	368	3.0%	246	2.0%	1.0	\$18.00	1.00%	0.02	\$0.36	0.03%	14	\$4,837	\$0.39	0.4%
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	6,751	55.0%	4,296	35.0%	1.0	\$22.00	0.04%	0.35	\$7.70	0.02%	10	\$55,345	\$4.51	4.2%
Thrips	3,069	25.0%	1,228	10.0%	1.0	\$13.00	0.05%	0.10	\$1.30	0.01%	6	\$6,005	\$0.49	0.5%
Aphids	3,683	30.0%	2,455	20.0%	1.0	\$25.00	0.05%	0.20	\$5.00	0.02%	7	\$20,765	\$1.69	1.6%
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	6,138	50.0%	4,296	35.0%	1.3	\$36.00	0.50%	0.45	\$16.20	0.25%	119	\$139,412	\$11.36	10.5%
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>					2.34	\$66.94			5.25%		2,495	\$1,321,691	\$107.67	

**SUMMARY DATA**

Data Input			Yield and Management Results			Economic Results		
State	California		Total Acres	12,275		Total	Per Acre	
Region	West		Total Bales Harvested	36,058	Foliar Insecticide Costs	\$821,689	\$66.94	
Year	2024		Total Bales Lost to Insects	2,495	Seed Treatment Costs	\$104,951	\$8.55	
Total Acres (Upland)	12,275	In-furrow cost/treated acre	\$18.00	Percent Yield Loss	5.2%	In-Furrow Costs	\$6,629	\$0.54
Yield / Acre (Upland)	1,410	% acres in Boll Weevil Eradication	0%	Yield w/o Insects (lb/acre)	1,488	Scouting Costs	\$174,919	\$14.25
Price / lb	\$0.70	Cost/acre Boll Weevil Eradication	\$0.00	Av. # Applications	2.34	Eradication Costs	\$24,550	\$2.00
yield potential (lb/acre)	1,861	% acres in Pink Bollworm Eradication	100%	Total Bales lost (all factors)	11,538	Bt Cotton	\$502,606	\$40.95
Acres (Pima)		Cost/acre Pink Bollworm Eradication	\$2.00	Total % yield Loss	24.2%	Total Costs	\$1,635,344	\$133.23
Yield / Acre (Pima)		% Insect apps by air	65%	Transgenic Cotton (arthropods) (# acres)	11,169	Yield Loss to Insects	\$838,320	\$68.29
% Acres Scouted	95%	No. apps by air	2	Boll Weevil Eradication (# acres)	0	Total Losses + Costs	\$2,473,664	\$201.52
Fee / Scouted Acre	\$15.00	Cost/app by air	\$19.00	Pink Bollworm Eradication (# acres)	12,275			
No. times scouted/week	1.5	% insect apps by ground	55%	# Scouted Acres	11,661			
% acres Transgenic (Bt) Cotton	91%	No. apps by ground	2.5	Seed Treatments (arthropods) (# acres)	11,661			
Cost/treated acre (Bt) Cotton	\$45.00	Cost/app by ground	\$16.00	In-Furrow Applications (# acres)	368			
% acres with seed treatment	95%	% Loss to weather	15.0%	Applications by Air (acres)	7,979			
Seed trt. cost/ treated acre	\$9.00	% loss to non-arthropods	0.0%	Applications by Ground (acres)	6,751			
% acres with in-furrow	3%	% loss to other (chemical injury, weeds, diseases, etc.)	4.0%	No. acres with no foliar insecticide applications	491			

Table 9. Cotton insect loss estimates for California upland cotton during 2024, 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	13.1%	1,607	-	\$45.00	0%	0	0.0
Bollgard III	7.9%	965	-	\$45.00	0%	0	0.0
Bollgard III/Thryvon	0.0%	0	-	\$45.00	0%	0	0.0
WideStrike	48.5%	5,952	-	\$45.00	0%	0	0.0
WideStrike 3	7.0%	857	-	\$45.00	0%	0	0.0
TwinLink	4.4%	535	-	\$45.00	0%	0	0.0
TwinLink Plus	10.2%	1,253	-	\$45.00	0%	0	0.0
Total Bt	91.0%	11,169	\$0.00	\$45.00	0.0%	0	0.0
Herbicide Traits Only	4.8%	589	-	-	0%	0	0.0
Conventional	4.2%	516	-	-	0%	0	0.0
Organic	0.0%	0	-	-	0%	0	0.0
Total Upland Cotton	100.0%	12,274	\$0.00	\$45.00	0.0%	0	0.0
Non Upland Cotton							
Pima	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Organic	-	-	-	-	-	-	-
Total (all Cotton)		12,274	\$0.00		0.0%	0	0.0

  

Upland Cotton	% acres treated for Thrips	# acres treated for Thrips	# apps for Thrips	Thryvon Bt cost/acre	% acres treated for Lygus	# acres treated for Lygus	# apps for Lygus
Bollgard III/Thryvon	0	0	0.0	-	0	0	0.0