

Table 8. Cotton insect loss estimates for California upland cotton during 2020.

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	832	2.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Beet Armyworm	2,080	5.0%	832	2.0%	1.0	\$11.53	0.25%	0.02	\$0.23	0.01%	21	\$8,544	\$0.21	0.2%
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	1,248	3.0%	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	\$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	35,360	85.0%	29,120	70.0%	1.5	\$22.03	4.00%	1.05	\$23.13	3.40%	5,543	\$2,946,442	\$70.83	74.1%
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)	2,496	6.0%	832	2.0%	1.0	\$16.32	0.50%	0.02	\$0.33	0.03%	49	\$19,631	\$0.47	0.5%
Brown Stink Bug	416	1.0%	416	1.0%	0.0	\$0.00	0.50%	0.00	\$0.00	0.01%	8	\$3,072	\$0.07	0.1%
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	14,560	35.0%	10,400	25.0%	1.0	\$17.85	2.00%	0.25	\$4.46	0.70%	1,141	\$503,118	\$12.09	12.7%
Thrips	20,800	50.0%	4,160	10.0%	1.0	\$9.18	0.50%	0.10	\$0.92	0.25%	408	\$175,766	\$4.23	4.4%
Aphids	8,320	20.0%	6,240	15.0%	1.0	\$20.40	1.00%	0.15	\$3.06	0.20%	326	\$150,643	\$3.62	3.8%
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	16,640	40.0%	10,400	25.0%	1.2	\$33.66	0.00%	0.30	\$10.10	0.00%	0	\$168,031	\$4.04	4.2%
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					1.89			\$42.23		4.60%	7,496	\$3,975,247	\$95.56	

SUMMARY DATA

Data Input		Yield and Management Results				Economic Results	
State	California	Total Acres			Total	Per Acre	
Region	West	Total Bales Harvested			\$1,756,643	\$42.23	
Year	2020	Total Bales Lost to Insects			\$285,376	\$6.86	
Total Acres (Upland)	41,600	Percent Yield Loss			\$45,760	\$1.10	
Yield / Acre (Upland)	1,620	Yield w/o Insects (lb/acre)			\$474,240	\$11.40	
Price / lb	\$0.80	Av. # Applications			\$83,200	\$2.00	
yield potential (lb/acre)	1,881	Total Bales lost (all factors)			-	-	
Acres (Pima)	-	Total % yield Loss			\$2,645,219	\$63.59	
Yield / Acre (Pima)	-	Transgenic Cotton (arthropods) (# acres)			\$2,878,464	\$69.19	
% Acres Scouted	95%	Boll Weevil Eradication (# acres)			\$5,523,683	\$132.78	
Fee / Scouted Acre	\$12.00	Pink Bollworm Eradication (# acres)					
No. times scouted/week	1.5	# Scouted Acres					
% acres Transgenic (Bt) Cotton	91%	Seed Treatments (arthropods) (# acres)					
Cost/treated acre (Bt) Cotton	\$0.00	In-Furrow Applications (# acres)					
% acres with seed treatment	98%	Applications by Air (acres)					
Seed trt. cost/ treated acre	\$7.00	Applications by Ground (acres)					
% acres with in-furrow	5%	No. acres with no foliar insecticide applications					
		% loss to other (chemical injury, weeds, diseases, etc.)					

Table 8. Cotton insect loss estimates for California upland cotton during 2020, 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%	5,445	-	-	-	-	-
Bollgard III	7.9%	3,270	-	-	-	-	-
WideStrike	48.5%	20,172	-	-	-	-	-
WideStrike 3	7.0%	2,904	-	-	-	-	-
TwinLink	4.4%	1,814	-	-	-	-	-
TwinLink Plus	10.2%	4,247	-	-	-	-	-
Total Bt	91.0%	37,852	-	-	-	-	-
Herbicide Traits Only	5.0%	2,080	-	-	-	-	-
Conventional	4.0%	1,664	-	-	-	-	-
Organic	0.0%	0	-	-	-	-	-
Total Upland Cotton	100.0%	41,596	-	-	-	-	-
Non Upland Cotton							
Pima	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Organic	-	-	-	-	-	-	-
Total (all Cotton)							