Table 9. Cotton insect loss estimates for California pima 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	2,940	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	7,350	5.0%	4,410	3.0%	1.0	$11.53	0.30%	0.03	$0.35	0.02%	81	$51,142	$0.35	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	7,350	5.0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Cutworms	1,470	1.0%	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	132,300	90.0%	110,250	75.0%	2.0	$22.03	6.00%	1.50	$33.05	5.40%	29,023	$21,785,654	$148.20	89.4%
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)	4,410	3.0%	2,940	2.0%	1.0	$20.40	0.20%	0.02	$0.41	0.01%	32	$20,999	$0.14	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	36,750	25.0%	14,700	10.0%	1.0	$17.85	0.50%	0.10	$1.79	0.13%	672	$468,799	$3.19	1.9%
Thrips	14,700	10.0%	0	0.0%	0.0	$0.00	0.00%	0.00	$0.00	0.00%	0	$0	$0.00	0.0%
Aphids	44,100	30.0%	22,050	15.0%	1.0	$20.40	1.00%	0.15	$3.06	0.30%	1,612	$1,102,146	$7.50	4.5%
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	66,150	45.0%	51,450	35.0%	1.2	$33.60	0.00%	0.42	$14.11	0.00%	0	$933,509	$6.35	3.8%
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								2.22	$52.76	5.85%	31,420	$24,362,249	$165.73	

SUMMARY DATA

Data Input				Yield and Management Results		Economic Results		
State	California			Total Acres	147,000		Total	Per Acre
Region	West			Total Bales Harvested	448,044	Foliar Insecticide Costs	$7,755,117	$52.76
Year	2020			Total Bales Lost to Insects	31,420	Seed Treatment Costs	$1,008,420	$6.86
Total Acres (Pima)	147,000	In-furrow cost/treated acre	$21.00	Percent Yield Loss	5.8%	In-Furrow Costs	$154,350	$1.05
Yield / Acre (Pima)	1,463	% acres in Boll Weevil Eradication	0%	Yield w/o Insects (lb/acre)	1,554	Scouting Costs	$1,675,800	$11.40
Price / lb	$1.25	Cost/acre Boll Weevil Eradication	$0.00	Av. # Applications	2.22	Eradication Costs	$294,000	$2.00
yield potential (lb/acre)	1,755	% acres in Pink Bollworm Eradication	100%	Total Bales lost (all factors)	89,467	Bt Cotton	-	-
Acres (Upland)	-	Cost/acre Pink Bollworm Eradication	$2.00	Total % yield Loss	16.6%	Total Costs	$10,887,687	$74.07
Yield / Acre (Upland)	-	% Insect apps by air	80%	Transgenic Cotton (arthropods) (# acres)	-	Yield Loss to Insects	$18,852,000	$128.24
% Acres Scouted	95%	No. apps by air	1.5	Boll Weevil Eradication (# acres)	0	Total Losses + Costs	$29,739,687	$202.31
Fee / Scouted Acre	$12.00	Cost/app by air	$16.00	Pink Bollworm Eradication (# acres)	147,000			
No. times scouted/week	1.5	% insect apps by ground	60%	# Scouted Acres	139,650			
% acres Transgenic (Bt) Cotton	0%	No. apps by ground	2	Seed Treatments (arthropods) (# acres)	144,060			
Cost/treated acre (Bt) Cotton	$0.00	Cost/app by ground	$13.00	In-Furrow Applications (# acres)	7,350			
% acres with seed treatment	98%	% Loss to weather	6.0%	Applications by Air (acres)	117,600			
Seed trt. cost/ treated acre	$7.00	% loss to non-arthropods	0.0%	Applications by Ground (acres)	88,200			
% acres with in-furrow	5%	% loss to other (chemical injury, weeds, diseases, etc.)	4.8%	No. acres with no foliar insecticide applications	0			