

Table 12. Cotton insect loss estimates for Louisiana during 2021.

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	110,000	100%	49,500	45.0%	0.7	\$22.00	2.50%	0.32	\$7.04	2.50%	11,006	\$6,321,424	\$57.47	25.1%
Beet Armyworm	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Fall Armyworm	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Loopers	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cutworms	1,100	1%	550	0.5%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$77	\$0.00	0.0%
Cotton Leaf Perforator	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Lygus	110,000	100%	110,000	100.0%	4.0	\$14.00	4.00%	4.00	\$56.00	4.00%	17,609	\$15,034,936	\$136.68	59.7%
Cotton Fleahopper	11,000	10%	5,500	5.0%	1.0	\$8.00	0.00%	0.05	\$0.40	0.00%	0	\$4,400	\$0.04	0.0%
Stink Bugs (other than brown stink bug)	5,500	5%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Brown Stink Bug	5,500	5%	5,500	5.0%	1.0	\$12.00	0.00%	0.05	\$0.60	0.00%	0	\$3,300	\$0.03	0.0%
Clouded Plant Bug	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Spider Mites	33,000	30%	16,500	15.0%	1.0	\$15.00	0.50%	0.15	\$2.25	0.15%	660	\$406,890	\$3.70	1.6%
Thrips	110,000	100%	110,000	100.0%	1.0	\$7.25	1.00%	1.00	\$7.25	1.00%	4,402	\$3,016,108	\$27.42	12.0%
Aphids	110,000	100%	16,500	15.0%	1.0	\$11.50	0.10%	0.15	\$1.73	0.10%	440	\$411,510	\$3.74	1.6%
Grasshoppers	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Boll Weevil	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>								5.73	\$75.34	7.75%	34,117	\$25,198,645	\$229.08	

**SUMMARY DATA**

	Data Input		Yield and Management Results			Economic Results	
	Louisiana		Total Acres		110,000	Total	Per Acre
State	Louisiana		Total Acres		110,000		
Region	Midsouth		Total Bales Harvested		252,083	Foliar Insecticide Costs	\$8,286,850
Year	2021		Total Bales Lost to Insects		34,117	Seed Treatment Costs	\$1,089,000
Total Acres (Upland)	110,000	In-furrow cost/treated acre	\$7.50	Percent Yield Loss	7.8%	In-Furrow Costs	\$8,250
Yield / Acre (Upland)	1,100	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,192	Scouting Costs	\$1,100,000
Price / lb	\$1.05	Cost/acre Boll Weevil Eradication	\$5.00	Av. # Applications	5.73	Eradication Costs	\$550,000
yield potential (lb/acre)	1,921	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	188,198	Bt Cotton	\$2,083,400
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	42.8%	Total Costs	\$13,117,500
Yield / Acre (Pima)	0	% Insect apps by air	80%	Transgenic Cotton (arthropods) (# acres)	110,000	Yield Loss to Insects	\$17,194,968
% Acres Scouted	100%	No. apps by air	3.5	Boll Weevil Eradication (# acres)	110,000	Total Losses + Costs	\$30,312,468
Fee / Scouted Acre	\$10.00	Cost/app by air	\$7.00	Pink Bollworm Eradication (# acres)	0		
No. times scouted/week	1.5	% insect apps by ground	80%	# Scouted Acres	110,000		
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	2.5	Seed Treatments (arthropods) (# acres)	108,900		
Cost/treated acre (Bt) Cotton	\$18.94	Cost/app by ground	\$6.00	In-Furrow Applications (# acres)	1,100		
% acres with seed treatment	99%	% Loss to weather	20.0%	Applications by Air (acres)	88,000		
Seed trt. cost/ treated acre	\$10.00	% loss to non-arthropods	5.0%	Applications by Ground (acres)	88,000		
% acres with in-furrow	1%	% loss to other (chemical injury, weeds, diseases, etc.)	10.0%	No. acres with no foliar insecticide applications	0		

Table 12. Cotton insect loss estimates for Louisiana during 2021, 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	55.0%	60,500	\$85.00	\$16.00	80%	48,400	1.5
Bollgard III	33.5%	36,850	\$91.00	\$23.00	2%	737	1.0
WideStrike	0.0%	0	\$70.00	\$0.00	0%	0	0.0
WideStrike 3	10.5%	11,550	\$91.00	\$21.00	2%	231	1.0
TwinLink	0.0%	0	\$77.00	\$0.00	0%	0	0.0
TwinLink Plus	1.0%	1,100	\$84.00	\$23.00	2%	22	0.0
<b>Total Bt</b>	<b>100.0%</b>	<b>110,000</b>	<b>\$87.63</b>	<b>\$18.94</b>	<b>44.9%</b>	<b>49,390</b>	<b>0.7</b>
Herbicide Traits Only	0.0%	0	\$0.00	-	0%	0	0.0
Conventional	0.0%	0	\$0.00	-	0%	0	0.0
Organic	0.0%	0	\$0.00	-	0%	0	0.0
<b>Total Upland Cotton</b>	<b>100.0%</b>	<b>110,000</b>	<b>\$87.63</b>	<b>\$18.94</b>	<b>44.9%</b>	<b>49,390</b>	<b>0.7</b>
<b>Non Upland Cotton</b>							
Pima	0.0%	0	\$0.00	-	0%	0	0
Other	0.0%	0	\$0.00	-	0%	0	0
Organic	0.0%	0	\$0.00	-	0%	0	0
<b>Total (all Cotton)</b>		<b>110,000</b>	<b>\$87.63</b>		<b>44.9%</b>	<b>49,390</b>	<b>0.7</b>