

Table 16. Cotton insect loss estimates for Louisiana during 2018.

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	189,000	100.0%	170,100	90.0%	1.4	\$22.00	3.50%	1.26	\$27.72	3.50%	26,460	\$14,637,672	\$77.45	38.0%
Beet 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%
Fall Armyworm	1,890	1.0%	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	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cutworms	1,890	1.0%	1,890	1.0%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$132	\$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	189,000	100.0%	189,000	100.0%	3.5	\$12.00	4.00%	3.50	\$42.00	4.00%	30,240	\$18,679,248	\$98.83	48.5%
Cotton Fleahopper	18,900	10.0%	18,900	10.0%	1.0	\$9.00	0.00%	0.10	\$0.90	0.00%	0	\$17,010	\$0.09	0.0%
Stink Bugs (other than brown stink bug)	18,900	10.0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Brown Stink Bug	141,750	75.0%	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	94,500	50.0%	85,050	45.0%	1.0	\$15.00	0.50%	0.45	\$6.75	0.25%	1,890	\$1,309,203	\$6.93	3.4%
Thrips	189,000	100.0%	47,250	25.0%	1.0	\$6.25	1.00%	0.25	\$1.56	1.00%	7,560	\$2,980,625	\$15.77	7.7%
Aphids	170,100	90.0%	85,050	45.0%	1.0	\$12.00	0.00%	0.45	\$5.40	0.00%	0	\$918,540	\$4.86	2.4%
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	0	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%
TOTAL								6.02	\$84.40	8.75%	66,150	\$38,542,430	\$203.93	

SUMMARY DATA

Data Input		Yield and Management Results			Economic Results	
State	Louisiana	Total Acres	189,000		Total	Per Acre
Region	Mid-South	Total Bales Harvested	413,438		Foliar Insecticide Costs	\$15,952,073
Year	2018	Total Bales Lost to Insects	66,150		Seed Treatment Costs	\$1,890,000
Total Acres (Upland)	189,000	In-furrow cost/treated acre	\$7.50		In-Furrow Costs	\$28,350
Yield / Acre (Upland)	1,050	% acres in Boll Weevil Eradication	100%		Scouting Costs	\$1,512,000
Price / lb	\$0.74	Cost/acre Boll Weevil Eradication	\$5.00		Eradication Costs	\$945,000
yield potential (lb/acre)	1,920	% acres in Pink Bollworm Eradication	0%		Bt Cotton	\$6,505,815
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00		Total Costs	\$26,833,238
Yield / Acre (Pima)	0	% Insect apps by air	40%		Yield Loss to Insects	\$23,496,480
% Acres Scouted	100%	No. apps by air	3		Total Losses + Costs	\$50,329,718
Fee / Scouted Acre	\$8.00	Cost/app by air	\$6.00			
No. times scouted/week	1	% insect apps by ground	60%		# Scouted Acres	189,000
% acres Transgenic (Bt) Cotton	99%	No. apps by ground	3		Seed Treatments (arthropods) (# acres)	189,000
Cost/treated acre (Bt) Cotton	\$34.77	Cost/app by ground	\$5.00		In-Furrow Applications (# acres)	3,780
% acres with seed treatment	100%	% Loss to weather	45.0%		Applications by Air (acres)	189,000
Seed trt. cost/ treated acre	\$10.00	% loss to non-arthropods	3.0%		Applications by Ground (acres)	189,000
% acres with in-furrow	2%	% loss to other (chemical injury, weeds, diseases, etc.)	1.0%		No. acres with no foliar insecticide applications	0

Table 16. Cotton insect loss estimates for Louisiana during 2018, 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	81.0%	153,090	\$85.00	\$35.00	95%	145,436	1.5
Bollgard III	2.0%	3,780	\$90.00	\$35.00	5%	189	0.2
WideStrike	3.5%	6,615	\$80.00	\$30.00	100%	6,615	2.0
WideStrike 3	11.0%	20,790	\$85.00	\$35.00	5%	1,040	0.5
TwinLink	1.0%	1,890	\$80.00	\$30.00	100%	1,890	1.5
TwinLink Plus	0.5%	945	\$85.00	\$35.00	5%	47	0.0
Total Bt	99.0%	187,110	\$84.87	\$34.77	83.0%	155,216	1.4
Herbicide Traits Only	0.3%	600	\$60.00	-	600	0.0	0
Conventional	0.7%	1,400	\$0.00	-	1,400	0.0	0
Organic	0.0%	0	\$0.00	-	0	0.0	0
Total Upland Cotton	100.0%	189,110	\$82.37	\$34.77	83.1%	157,216	1.4
Non Upland Cotton							
Pima	0%	0	\$0.00	-	0	0	0
Other	0%	0	\$0.00	-	0	0	0
Organic	0%	0	\$0.00	-	0	0	0
Total (all Cotton)		189,110	\$82.37		83.1%	157,216	1.4