Table 15. Cotton insect loss estimates for Louisiana during 2017.

_	Acres	% Acres		% Acres	# of apps	Cost of 1	% loss /acre	# of apps/		overall %	Bales lost /		Loss +	% Total
Pest	Infested	Infested	Acres Treated	Treated	/acres treated	application	infested	total acres	cost/acre	reduction	pest	Loss + cost	cost/acre	Loss+Cost
Bollworm/Budworm	200,000	100%	190,000	95.0%	2.0	\$22.00	5.00%	1.90	\$41.80	5.00%	40,000	\$22,184,000	\$110.92	52.5%
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	10,000	5%	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	2,000	1%	2,000	1.0%	1.0	\$7.00	0.00%	0.01	\$0.07	0.00%	0	\$140	\$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	200,000	100%	200,000	100.0%	4.0	\$12.00	3.00%	4.00	\$48.00	3.00%	24,000	\$17,894,400	\$89.47	42.4%
Cotton Fleahopper	20,000	10%	20,000	10.0%	1.0	\$9.00	0.00%	0.10	\$0.90	0.00%	0	\$18,000	\$0.09	0.0%
Stink Bugs (other than brown stink bug)	20,000	10%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Brown Stink Bug	150,000	75%	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	\$0.00	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	100,000	50%	50,000	25.0%	1.0	\$15.00	0.50%	0.25	\$3.75	0.25%	2,000	\$1,066,200	\$5.33	2.5%
Thrips	200,000	100%	50,000	25.0%	1.0	\$11.00	0.00%	0.25	\$2.75	0.00%	0	\$550,000	\$2.75	1.3%
Aphids	180,000	90%	50,000	25.0%	1.0	\$12.00	0.00%	0.25	\$3.00	0.00%	0	\$540,000	\$2.70	1.3%
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%
TOTAL								6.76	\$100.27	8.25%	66,000	\$42,252,740	\$211.26	

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·	Data	a Input		Yield and Management Results	Economic Results			
State	Louisiana	-		Total Acres	200,000		Total	Per Acre
Region	Midsouth			Total Bales Harvested	416,667	Foliar Insecticide Costs	\$20,054,000	\$100.27
Year	2017			Total Bales Lost to Insects	66,000	Seed Treatment Costs	\$3,000,000	\$15.00
Total Acres (Upland)	200,000	In-furrow cost/treated acre	\$9.00	Percent Yield Loss	8.3%	In-Furrow Costs	\$36,000	\$0.18
Yield / Acre (Upland)	1,000	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,090	Scouting Costs	\$1,400,000	\$7.00
Price / lb	\$0.72	Cost/acre Boll Weevil Eradication	\$6.00	Av. # Applications	6.76	Eradication Costs	\$1,200,000	\$6.00
yield potential (lb/acre)	1,920	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	442,000	Bt Cotton	\$2,368,000	\$11.84
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	55.3%	Total Costs	\$28,058,000	\$140.29
Yield / Acre (Pima)	0	% Insect apps by air	80%	Transgenic Cotton (arthropods) (# acres)	198,000	Yield Loss to Insects	\$22,809,600	\$114.05
% Acres Scouted	100%	No. apps by air	5	Boll Weevil Eradication (# acres)	200,000	Total Losses + Costs	\$50,867,600	\$254.34
Fee / Scouted Acre	\$7.00	Cost/app by air	\$6.00	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1	% insect apps by ground	20%	# Scouted Acres	200,000			
% acres Transgenic (Bt) Cotton	99%	No. apps by ground	5	Seed Treatments (arthropods) (# acres)	200,000			
Cost/treated acre (Bt) Cotton	\$11.96	Cost/app by ground	\$5.00	In-Furrow Applications (# acres)	4,000			
% acres with seed treatment	100%	% Loss to weather	43.0%	Applications by Air (acres)	160,000			
Seed trt. cost/ treated acre	\$15.00	% loss to non-arthropods	3.0%	Applications by Ground (acres)	40,000			
% acres with in-furrow	2%	% loss to other (chemical injury, weeds, diseases, etc.)	1.0%	No. acres with no foliar insecticide applications	0			

Table 15. Cotton insect loss estimates for Louisiana during 2017, continued.

					% acres treated	# acres treated	# apps	% of Population
Upland Cotton	% Acres	# Acres	Total cost/acre	Bt cost/acre	for BW/TBW	for BW/TBW	for BW/TBW	Bollworm
Bollgard II	55.0%	110,000	\$60.00	\$12.00	70%	77,000	1.2	100%
Bollgard III	1.0%	2,000	\$70.00	\$15.00	5%	100	0.0	100%
WideStrike	10.0%	20,000	\$40.00	\$10.00	100%	20,000	2.0	100%
WideStrike 3	5.0%	10,000	\$66.00	\$14.00	75%	7,500	0.5	100%
TwinLink	27.0%	54,000	\$64.00	\$12.00	70%	37,800	1.2	100%
TwinLink Plus	1.0%	2,000	\$75.00	\$15.00	5%	100	0.0	100%
Total Bt	99%	198,000	\$59.63	\$11.96	72.0%	142,500	1.2	100.0%
Herbicide Traits Only	0.3%	600	\$60.00	-	100%	600	3.0	100%
Conventional	0.7%	1,400	\$25.00	-	100%	1,400	3.0	100%
Organic	0.0%	0	-	-	-	-	-	-
Total Upland Cotton	100.0%	200,000	\$58.69	\$11.96	72.3%	144,500	1.3	100.0%
Non Upland Cotton								
Pima	0%	0	-	-	-	-	-	-
Other	0%	0	-	-	-	-	-	-
Organic	0%	0	-	-	-	-	-	-
Total (all Cotton)		200,000	\$58.69		72.3%	144,500	1.3	