

Table 14. Cotton insect loss estimates for Kansas during 2017.

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	18,200	20%	4,550	5.0%	1.0	\$9.25	1.00%	0.05	\$0.46	0.20%	436	\$144,450	\$1.59	7.5%
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	1,820	2%	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	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	\$0.00	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	54,600	60%	13,650	15.0%	1.0	\$6.00	1.00%	0.15	\$0.90	0.60%	1,308	\$457,236	\$5.02	23.8%
Cotton Fleahopper	72,800	80%	22,750	25.0%	1.5	\$4.50	2.00%	0.38	\$1.71	1.60%	3,488	\$1,212,744	\$13.33	63.2%
Stink Bugs (other than brown stink bug)	13,650	15%	1,820	2.0%	1.0	\$4.50	1.00%	0.02	\$0.09	0.15%	327	\$103,253	\$1.13	5.4%
Brown Stink Bug	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	\$0.00	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	9,100	10%	1,820	2.0%	1.0	\$11.50	0.00%	0.02	\$0.23	0.00%	0	\$2,093	\$0.02	0.1%
Thrips	81,900	90%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Aphids	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
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								0.62	\$3.39	2.55%	5,559	\$1,919,776	\$21.10	

SUMMARY DATA

Data Input		Yield and Management Results			Economic Results			
State	Kansas	Total Acres	91,000	Total Bales Harvested	185,033	Foliar Insecticide Costs	\$308,718	Per Acre
Region	Central	Total Bales Lost to Insects	5,559	Seed Treatment Costs	\$682,500		\$7.50	
Year	2017	Percent Yield Loss	2.6%	In-Furrow Costs	\$59,150		\$0.65	
Total Acres (Upland)	91,000	Yield w/o Insects (lb/acre)	1,002	Scouting Costs	\$445,900		\$4.90	
Yield / Acre (Upland)	976	Av. # Applications	0.62	Eradication Costs	\$0		\$0.00	
Price / lb	\$0.65	Total Bales lost (all factors)	25,181	Bt Cotton	\$910,000		\$10.00	
yield potential (lb/acre)	1,150	Total % yield Loss	11.6%	Total Costs	\$2,406,268		\$26.44	
Acres (Pima)	0	Transgenic Cotton (arthropods) (# acres)	91,000	Yield Loss to Insects	\$1,734,408		\$19.06	
Yield / Acre (Pima)	0	Boll Weevil Eradication (# acres)	0	Total Losses + Costs	\$4,140,676		\$45.50	
% Acres Scouted	70%	Pink Bollworm Eradication (# acres)	0					
Fee / Scouted Acre	\$7.00	# Scouted Acres	63,700					
No. times scouted/week	1.5	Seed Treatments (arthropods) (# acres)	91,000					
% acres Transgenic (Bt) Cotton	100%	In-Furrow Applications (# acres)	9,100					
Cost/treated acre (Bt) Cotton	\$10.00	Applications by Air (acres)	59,150					
% acres with seed treatment	100%	Applications by Ground (acres)	31,850					
Seed trt. cost/ treated acre	\$7.50	No. acres with no foliar insecticide applications	84,450					
% acres with in-furrow	10%							

Table 14. Cotton insect loss estimates for Kansas during 2017, 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	% of Population Bollworm
Bollgard II	75.0%	68,250	\$65.00	\$10.00	5%	3,413	1.0	100%
Bollgard III	0.0%	0	-	-	-	-	-	-
WideStrike	2.0%	1,820	\$65.00	\$10.00	5%	91	1.0	100%
WideStrike 3	23.0%	20,930	\$75.00	\$10.00	5%	1,047	1.0	100%
TwinLink	0.0%	0	-	-	-	-	-	-
TwinLink Plus	0.0%	0	-	-	-	-	-	-
Total Bt	100%	91,000	\$67.30	\$10.00	5.0%	4,550	1.0	100.0%
Herbicide Traits Only	0%	0	-	-	-	-	-	-
Conventional	0%	0	-	-	-	-	-	-
Organic	0%	0	-	-	-	-	-	-
Total Upland Cotton	100%	91,000	\$67.30	\$10.00	5.0%	4,550	1.0	100.0%
Non Upland Cotton								
Pima	0%	0	-	-	-	-	-	-
Other	0%	0	-	-	-	-	-	-
Organic	0%	0	-	-	-	-	-	-
Total (all Cotton)		91,000	\$67.30		5.0%	4,550	1.0	