

Table 3. Cotton insect loss estimates for Alabama 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	432,976	100%	69,063	16.0%	1.0	\$8.59	1.60%	0.16	\$1.37	1.60%	16,266	\$5,980,275	\$13.81	43.6%
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	16,425	4%	29,556	6.8%	1.0	\$5.99	0.00%	0.07	\$0.41	0.00%	0	\$6,769	\$0.02	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	224,009	52%	167,651	38.7%	1.4	\$7.38	0.36%	0.54	\$3.99	0.19%	1,888	\$1,519,425	\$3.51	11.1%
Cotton Fleahopper	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)	432,976	100%	217,556	50.2%	1.3	\$6.09	0.62%	0.65	\$3.98	0.62%	6,273	\$3,801,435	\$8.78	27.7%
Brown Stink Bug	432,976	100%	53,959	12.5%	1.0	\$6.98	0.06%	0.12	\$0.87	0.06%	619	\$581,926	\$1.34	4.2%
Clouded Plant Bug	82,123	19%	29,556	6.8%	1.0	\$6.39	0.06%	0.07	\$0.44	0.01%	117	\$74,715	\$0.17	0.5%
Leaf Footed Bugs	78,363	18%	130,605	30.2%	0.6	\$3.02	0.00%	0.18	\$0.55	0.00%	0	\$43,015	\$0.10	0.3%
Spider Mites	224,009	52%	8,695	2.0%	1.0	\$10.00	0.00%	0.02	\$0.20	0.00%	0	\$44,986	\$0.10	0.3%
Thrips	432,976	100%	112,360	26.0%	1.0	\$6.59	0.16%	0.26	\$1.71	0.16%	1,635	\$1,281,600	\$2.96	9.3%
Aphids	263,190	61%	13,060	3.0%	0.6	\$1.81	0.00%	0.02	\$0.03	0.00%	0	\$8,668	\$0.02	0.1%
Grasshoppers	82,479	19%	39,181	9.0%	0.6	\$4.22	0.00%	0.05	\$0.23	0.00%	0	\$19,015	\$0.04	0.1%
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	65,302	15%	52,242	12.1%	0.9	\$14.48	0.48%	0.11	\$1.58	0.07%	742	\$349,084	\$0.81	2.5%
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>								2.26	\$15.36	2.70%	27,541	\$13,710,914	\$31.67	

**SUMMARY DATA**

Data Input			Yield and Management Results			Economic Results		
State	Alabama		Total Acres	432,976		Total	Per Acre	
Region	Southeast		Total Bales Harvested	814,551		Foliar Insecticide Costs	\$15.36	
Year	2017		Total Bales Lost to Insects	27,541		Seed Treatment Costs	\$11.17	
Total Acres (Upland)	432,976	In-furrow cost/treated acre	\$12.00	Percent Yield Loss	2.7%		In-Furrow Costs	\$0.60
Yield / Acre (Upland)	903	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	928		Scouting Costs	\$6.70
Price / lb	\$0.69	Cost/acre Boll Weevil Eradication	\$3.50	Av. # Applications	2.3		Eradication Costs	\$3.50
yield potential (lb/acre)	1,131	% acres in Pink Bollworm Eradication	0%	Total Bales lost (all factors)	131,766		Bt Cotton	\$17.58
Acres (Pima)	0	Cost/acre Pink Bollworm Eradication	\$0.00	Total % yield Loss	20.1%		Total Costs	\$54.92
Yield / Acre (Pima)	0	% Insect apps by air	15%	Transgenic Cotton (arthropods) (# acres)	432,976		Yield Loss to Insects	\$21.07
% Acres Scouted	87%	No. apps by air	1	Boll Weevil Eradication (# acres)	432,976		Total Losses + Costs	\$75.99
Fee / Scouted Acre	\$7.71	Cost/app by air	\$5.50	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1	% insect apps by ground	85%	# Scouted Acres	376,618			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	2.7	Seed Treatments (arthropods) (# acres)	389,678			
Cost/treated acre (Bt) Cotton	\$17.58	Cost/app by ground	\$4.70	In-Furrow Applications (# acres)	21,649			
% acres with seed treatment	90%	% Loss to weather	10.4%	Applications by Air (acres)	64,946			
Seed trt. cost/ treated acre	\$12.41	% loss to non-arthropods	5.0%	Applications by Ground (acres)	368,030			
% acres with in-furrow	5%	% loss to other (chemical injury, weeds, diseases, etc.)	2.0%	No. acres with no foliar insecticide applications	13,813			

Table 3. Cotton insect loss estimates for Alabama 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%	324,732	\$36.20	\$19.21	16%	51,797	1.0	100%
Bollgard III	0%	0	-	-	-	-	-	-
WideStrike	15%	63,158	\$27.15	\$12.40	32%	20,200	1.2	100%
WideStrike 3	5%	23,438	\$0.00	\$7.54	0%	0	0.0	0%
TwinLink	5%	21,649	\$36.20	\$19.21	16%	3,453	1.0	100%
TwinLink Plus	0%	0	-	-	-	-	-	-
<b>Total Bt</b>	<b>100%</b>	<b>432,976</b>	<b>\$32.92</b>	<b>\$17.58</b>	<b>17.4%</b>	<b>75,450</b>	<b>1.0</b>	<b>94.6%</b>
Herbicide Traits Only	0%	0	-	-	-	-	-	-
Conventional	0%	0	-	-	-	-	-	-
Organic	0%	0	-	-	-	-	-	-
<b>Total Upland Cotton</b>	<b>100.0%</b>	<b>432,976</b>	<b>\$32.92</b>	<b>\$17.58</b>	<b>17.4%</b>	<b>75,450</b>	<b>1.0</b>	<b>94.6%</b>
Non Upland Cotton								
Pima	0%	0	-	-	-	-	-	-
Other	0%	0	-	-	-	-	-	-
Organic	0%	0	-	-	-	-	-	-
<b>Total (all Cotton)</b>		<b>432,976</b>	<b>\$32.92</b>		<b>17.4%</b>	<b>75,450</b>	<b>1.0</b>	