

Table 10. Cotton insect loss estimates for Florida 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	72,159	80%	0	0.0%	0.0	\$0.00	1.00%	0.00	\$0.00	0.80%	4,152	\$1,753,805	\$19.44	6.3%
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	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	36,080	40%	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	85,689	95%	81,179	90.0%	3.0	\$15.00	7.00%	2.70	\$40.50	6.65%	34,515	\$18,049,543	\$200.11	64.5%
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)	81,179	90%	76,669	85.0%	1.5	\$8.00	2.00%	1.27	\$10.16	1.80%	9,342	\$4,770,840	\$52.89	17.1%
Brown Stink Bug	45,100	50%	45,100	50.0%	1.0	\$8.50	1.00%	0.50	\$4.25	0.50%	2,595	\$1,287,801	\$14.28	4.6%
Clouded Plant Bug	27,060	30%	1,804	2.0%	1.0	\$10.00	0.00%	0.02	\$0.20	0.00%	0	\$5,412	\$0.06	0.0%
Leaf Footed Bugs	45,100	50%	9,020	10.0%	1.0	\$8.00	0.00%	0.10	\$0.80	0.00%	0	\$36,080	\$0.40	0.1%
Spider Mites	36,080	40%	54,119	60.0%	1.0	\$9.00	1.00%	0.60	\$5.40	0.40%	2,076	\$1,071,732	\$11.88	3.8%
Thrips	81,179	90%	72,159	80.0%	1.0	\$2.25	0.00%	0.80	\$1.80	0.00%	0	\$146,122	\$1.62	0.5%
Aphids	90,199	100%	81,179	90.0%	1.0	\$5.00	0.00%	0.90	\$4.50	0.00%	0	\$405,896	\$4.50	1.5%
Grasshoppers	18,040	20%	9,020	10.0%	1.0	\$6.00	1.00%	0.10	\$0.60	0.20%	1,038	\$449,275	\$4.98	1.6%
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								6.99	\$68.21	10.35%	53,718	\$27,976,506	\$310.16	

SUMMARY DATA

Data Input		Yield and Management Results			Economic Results	
State	Florida	Total Acres	90,199		Total	Per Acre
Region	Southeast	Total Bales Harvested	140,936		Foliar Insecticide Costs	\$6,152,474
Year	2021	Total Bales Lost to Insects	53,718		Seed Treatment Costs	\$1,298,866
Total Acres (Upland)	90,199	Percent Yield Loss	10.4%		In-Furrow Costs	\$1,582,992
Yield / Acre (Upland)	750	Yield w/o Insects (lb/acre)	837		Scouting Costs	\$405,896
Price / lb	\$0.88	Av. # Applications	6.99		Eradication Costs	\$180,398
yield potential (lb/acre)	2,762	Total Bales lost (all factors)	378,106		Bt Cotton	\$3,125,395
Acres (Pima)	0	Total % yield Loss	72.9%		Total Costs	\$12,746,021
Yield / Acre (Pima)	0	Transgenic Cotton (arthropods) (# acres)	90,199		Yield Loss to Insects	\$22,690,483
% Acres Scouted	50%	Boll Weevil Eradication (# acres)	90,199		Total Losses + Costs	\$35,436,504
Fee / Scouted Acre	\$9.00	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1	# Scouted Acres	45,100			
% acres Transgenic (Bt) Cotton	100%	Seed Treatments (arthropods) (# acres)	72,159			
Cost/treated acre (Bt) Cotton	\$34.65	In-Furrow Applications (# acres)	58,629			
% acres with seed treatment	80%	Applications by Air (acres)	4,510			
Seed trt. cost/ treated acre	\$18.00	Applications by Ground (acres)	85,689			
% acres with in-furrow	65%	No. acres with no foliar insecticide applications	0			

Table 10. Cotton insect loss estimates for Florida 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	75.0%	67,649	\$99.25	\$35.00	0%	0	0.0
Bollgard III	20.0%	18,040	\$98.31	\$35.00	0%	0	0.0
WideStrike	0.0%	0	\$0.00	\$0.00	0%	0	0.0
WideStrike 3	4.0%	3,608	-	\$35.00	0%	0	0.0
TwinLink	1.0%	902	-	-	0%	0	0.0
TwinLink Plus	0.0%	0	\$0.00	\$0.00	0%	0	0.0
Total Bt	100.0%	90,199	\$94.10	\$34.65	0.0%	0	0.00
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
Total Upland Cotton	100.0%	90,199	\$94.10	\$34.65	0.0%	0	0.00
Non Upland Cotton							
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
Total (all Cotton)		90,199	\$94.10		0.0%	0	0.00