

Table 13. Cotton insect loss estimates for Florida during 2022.

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	73,187	70%	1,046	1.0%	1.0	\$11.00	0.03%	0.01	\$0.11	0.02%	86	\$41,075	\$0.39	0.1%
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	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	104,553	100%	94,098	90.0%	3.0	\$9.00	15.00%	2.70	\$24.30	15.00%	61,784	\$26,265,694	\$251.22	66.9%
Cotton Fleahopper	83,642	80%	84	0.1%	1.0	\$3.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Stink Bugs (other than brown stink bug)	94,098	90%	94,098	90.0%	1.0	\$7.00	2.00%	0.90	\$6.30	1.80%	7,414	\$3,439,792	\$32.90	8.8%
Brown Stink Bug	94,098	90%	94,098	90.0%	1.0	\$7.00	2.00%	0.90	\$6.30	1.80%	7,414	\$3,439,792	\$32.90	8.8%
Clouded Plant Bug	20,911	20%	5,228	5.0%	0.0	\$0.00	2.00%	0.00	\$0.00	0.40%	1,648	\$632,832	\$6.05	1.6%
Leaf Footed Bugs	83,642	80%	83,642	80.0%	1.0	\$7.00	2.00%	0.80	\$5.60	1.60%	6,590	\$2,998,957	\$28.68	7.6%
Spider Mites	62,732	60%	41,821	40.0%	1.0	\$9.50	0.00%	0.40	\$3.80	0.00%	0	\$238,381	\$2.28	0.6%
Thrips	104,553	100%	88,870	85.0%	1.0	\$2.00	0.00%	0.85	\$1.70	0.00%	0	\$177,740	\$1.70	0.5%
Aphids	104,553	100%	88,870	85.0%	1.0	\$5.00	1.00%	0.85	\$4.25	1.00%	4,119	\$2,026,046	\$19.38	5.2%
Grasshoppers	2,091	2%	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								7.41	\$52.36	21.62%	89,055	\$39,260,309	\$375.51	

SUMMARY DATA

Data Input		Yield and Management Results			Economic Results	
State	Florida	Total Acres	104,553		Total	Per Acre
Region	Southeast	Total Bales Harvested	141,582	Foliar Insecticide Costs	\$5,474,395	\$52.36
Year	2022	Total Bales Lost to Insects	89,055	Seed Treatment Costs	\$1,087,351	\$10.40
Total Acres (Upland)	104,553	Percent Yield Loss	21.6%	In-Furrow Costs	\$601,180	\$5.75
Yield / Acre (Upland)	650	Yield w/o Insects (lb/acre)	829	Scouting Costs	\$695,277	\$6.65
Price / lb	\$0.80	Av. # Applications	7.41	Eradication Costs	\$0	\$0.00
yield potential (lb/acre)	1,891	Total Bales lost (all factors)	270,290	Bt Cotton	\$1,568,295	\$15.00
Acres (Pima)	0	Total % yield Loss	65.6%	Total Costs	\$9,426,498	\$90.16
Yield / Acre (Pima)	0	Transgenic Cotton (arthropods) (# acres)	104,553	Yield Loss to Insects	\$34,197,120	\$327.08
% Acres Scouted	70%	Boll Weevil Eradication (# acres)	104,533	Total Losses + Costs	\$43,623,618	\$417.24
Fee / Scouted Acre	\$9.50	Pink Bollworm Eradication (# acres)	0			
No. times scouted/week	1	# Scouted Acres	73,187			
% acres Transgenic (Bt) Cotton	100%	Seed Treatments (arthropods) (# acres)	86,642			
Cost/treated acre (Bt) Cotton	\$15.00	In-Furrow Applications (# acres)	26,138			
% acres with seed treatment	80%	Applications by Air (acres)	9,410			
Seed trt. cost/ treated acre	\$13.00	Applications by Ground (acres)	95,143			
% acres with in-furrow	25%	No. acres with no foliar insecticide applications	0			

Table 13. Cotton insect loss estimates for Florida during 2022, 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	70.0%	73,187	\$85.00	\$15.00	1.4%	1,046	1.0
Bollgard III	25.0%	26,138	\$90.00	\$15.00	0%	0	0.0
WideStrike	0.0%	0	\$82.00	\$15.00	0%	0	0.0
WideStrike 3	5.0%	5,228	\$83.00	\$15.00	0%	0	0.0
TwinLink	0.0%	0	\$85.00	\$15.00	0%	0	0.0
TwinLink Plus	0.0%	0	\$90.00	\$15.00	0%	0	0.0
Total Bt	100.0%	104,553	\$86.15	\$15.00	1.0%	1,046	0.01
Herbicide Traits Only	0.0%	0	\$0.00	-		0	0.0
Conventional	0.0%	0	\$0.00	-		0	0.0
Organic	0.0%	0	\$0.00	-		0	0.0
Total Upland Cotton	100.0%	104,553	\$86.15	\$15.00	1.0%	1,046	0.01
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)		104,553	\$86.15	-	1.0%	1,046	0.01