

Table 7. Insect loss estimates for Arizona Thryvon cotton 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	634	9%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Beet Armyworm	190	3%	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	381	6%	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	6,195	92%	720	10.7%	1.0	\$26.67	3.12%	0.11	\$2.93	2.89%	746	\$340,443	\$50.75	92.2%
Cotton Fleahopper	6,138	91%	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)	2,648	39%	0	0.0%	0.0	\$0.00	0.02%	0.00	\$0.00	0.01%	2	\$864	\$0.13	0.2%
Brown Stink Bug	4,488	67%	0	0.0%	0.0	\$0.00	0.09%	0.00	\$0.00	0.06%	16	\$6,912	\$1.03	1.9%
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	409	6%	409	6.1%	1.0	\$22.50	0.08%	0.06	\$1.35	0.01%	1	\$984	\$0.15	0.3%
Thrips	6,280	94%	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	1,127	17%	493	7.3%	1.0	\$10.00	0.00%	0.07	\$0.70	0.00%	0	\$789	\$0.12	0.2%
Banded Winged Whitefly	428	6%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Silverleaf Whitefly	3,949	59%	856	12.8%	1.0	\$29.00	0.06%	0.13	\$3.77	0.04%	9	\$18,776	\$2.80	5.1%
Silverleaf Whitefly	634	9%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Colaspis beetles	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cotton stainers	634	9%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Crickets	634	9%	507	7.6%	1.0	\$10.00	0.00%	0.08	\$0.80	0.00%	0	\$507	\$0.08	0.1%
Darkling Beetles	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
False Chinch Bug	1,459	22%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Pale-Striped Flea Beetle	619	9%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Potato leafhopper	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Thrips, Bean	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Cockroaches	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Mealybugs	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Thrips, Citrus	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
White-marked fleahopper	0	0%	0	0.0%	0.0	\$0.00	0.00%	0.00	\$0.00	0.00%	0	\$0	\$0.00	0.0%
Boil 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>								<b>0.45</b>	<b>\$9.55</b>	<b>3.00%</b>	<b>774</b>	<b>\$369,275</b>	<b>\$55.05</b>	

Table 7. Insect loss estimates for Arizona Thryvon cotton during 2021, continued.

SUMMARY DATA								
Data Input			Yield and Management Results			Economic Results		
State	Arizona			Total Acres	6,709			
Region	West			Total Bales Harvested	20,304	Foliar Insecticide Costs	\$64,089	\$9.55
Year	2021			Total Bales Lost to Insects	774	Seed Treatment Costs	\$50,314	\$7.50
Total Acres (Upland)	6,709	In-furrow cost/treated acre	\$20.00	Percent Yield Loss	3.0%	In-Furrow Costs	\$2,474	\$0.37
Yield / Acre (Upland)	1,453	% acres in Boll Weevil Eradication	100%	Yield w/o Insects (lb/acre)	1,498	Scouting Costs	\$69,768	\$10.40
Price / lb	\$0.90	Cost/acre Boll Weevil Eradication	\$3.37	Av. # Applications	0.45	Eradiation Costs	\$47,768	\$7.12
yield potential (lb/acre)	1,850	% acres in Pink Bollworm Eradication	100%	Total Bales lost (all factors)	5,550	Bt Cotton	\$234,798	\$35.00
Acres (Pima)	-	Cost/acre Pink Bollworm Eradication	\$3.75	Total % yield Loss	21.5%	Total Costs	\$469,211	\$69.94
Yield / Acre (Pima)	-	% Insect apps by air	71%	Transgenic Cotton (arthropods) (# acres)	6,709	Yield Loss to Insects	\$334,368	\$49.84
% Acres Scouted	100%	No. apps by air	0.95	Boll Weevil Eradication (# acres)	6,709	Total Losses + Costs	\$803,579	\$119.79
Fee / Scouted Acre	\$10.40	Cost/app by air	\$11.80	Pink Bollworm Eradication (# acres)	6,709			
No. times scouted/week	2	% insect apps by ground	17%	# Scouted Acres	6,709			
% acres Transgenic (Bt) Cotton	100%	No. apps by ground	1	Seed Treatments (arthropods) (# acres)	6,709			
Cost/treated acre (Bt) Cotton	\$35.00	Cost/app by ground	\$9.50	In-Furrow Applications (# acres)	124			
% acres with seed treatment	100%	% Loss to weather	12.0%	Applications by Air (acres)	4,785			
Seed trt. cost/ treated acre	\$7.50	% loss to non-arthropods	0.0%	Applications by Ground (acres)	1,154			
% acres with in-furrow	2%	% loss to other (chemical injury, weeds, diseases, etc.)	6.5%	No. acres with no foliar insecticide applications	4,181			

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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	-	-	-	-	-	-	-
Bollgard III	100.0%	6,709	-	\$35.00	0	0	0
WideStrike	-	-	-	-	-	-	-
WideStrike 3	-	-	-	-	-	-	-
TwinLink	-	-	-	-	-	-	-
TwinLink Plus	-	-	-	-	-	-	-
Total Bt	100.0%	6,709	\$0.00	\$35.00	0.0%	0	0.0