

County-Level Agricultural Losses from *Hurricane Debby*

The tropical system that would eventually become Hurricane Debby became a tropical depression on August 3, 2024 off of the coast of Cuba, moving north/northwest and strengthening into a tropical storm later that same day. It gradually intensified, attaining Category 1 strength on August 4 prior to making landfall near Steinhatchee, FL (Taylor County) on August 5. Hurricane Debby then moved northeast, impacting the southwestern peninsula and north central Florida before crossing into southeast Georgia as well as North and South Carolina and re-entering the Atlantic Ocean.

Hurricane Debby affected over 2.2 million acres of agricultural lands across 42 counties in Florida. The annual value of agricultural production on these affected lands is estimated at \$3.2 billion statewide. Estimated production losses in Florida associated with Hurricane Debby were over \$170 million (Court, Qiao, Koeneké, & McDaid, 2024). The affected agricultural land acreage and estimated losses vary across counties as illustrated in the maps below. The highest estimated losses were concentrated in areas with extensive, high value agricultural production and/or regions exposed to the most intense weather conditions.

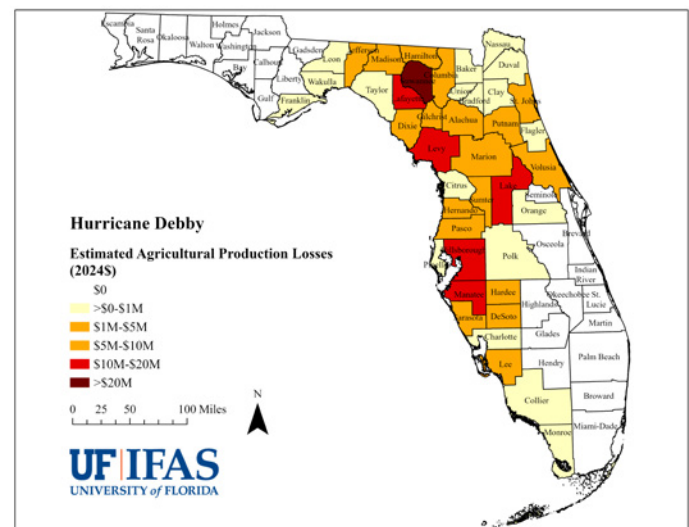
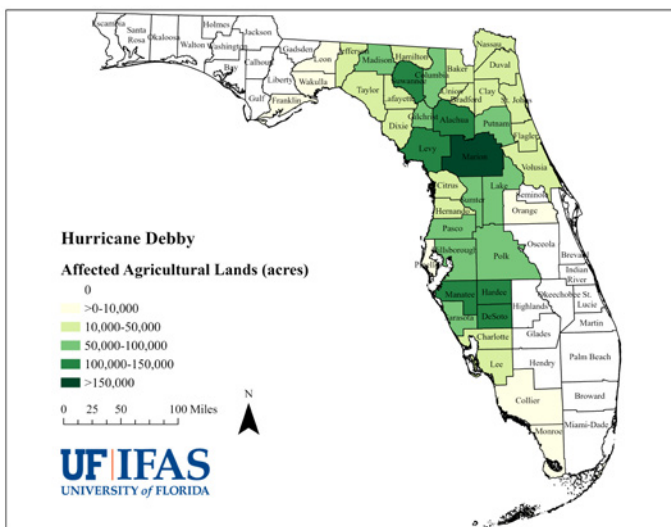


Figure 1. Estimated acreage of affected agricultural lands due to Hurricane Debby in each county of Florida.

Figure 2. Estimated agricultural losses (2024\$) due to Hurricane Debby in each county of Florida.



Table 1. Estimated county-level affected acreage, value of annual production on affected lands (2024\$, Thousands), and agricultural production losses (2024\$, Thousands) due to Hurricane Debby.

County (Listed In Descending Order by Estimated Agricultural Production Losses)	Affected Agricultural Lands (Acres)	Estimated Annual Value of Production on Affected Agricultural Lands (2024\$, Thousands)	Estimated Agricultural Production Losses (2024\$, Thousands)
Suwannee	127,888	\$295,410	\$27,496
Manatee	119,872	\$529,059	\$19,115
Hillsborough	87,531	\$268,348	\$15,539
Levy	146,945	\$140,367	\$10,436
Lake	85,153	\$189,506	\$10,102
Lafayette	40,988	\$91,034	\$10,058
Volusia	35,498	\$182,844	\$8,988
Gilchrist	66,704	\$107,252	\$8,631
Alachua	124,845	\$102,142	\$8,460
Madison	98,033	\$134,625	\$7,616
Marion	222,615	\$163,547	\$6,380
Columbia	63,530	\$58,349	\$5,155
Hamilton	46,641	\$62,317	\$2,853
Jefferson	44,204	\$55,117	\$2,725
Pasco	82,782	\$54,891	\$2,636
Sumter	94,941	\$63,424	\$2,473
Sarasota	67,863	\$67,951	\$2,221
Lee	10,677	\$43,406	\$1,955
Putnam	52,341	\$54,377	\$1,916
DeSoto	133,932	\$148,961	\$1,896
Hardee	112,919	\$101,594	\$1,700
Dixie	29,031	\$15,418	\$1,513
St. Johns	19,720	\$53,997	\$1,490
Hernando	34,398	\$28,495	\$1,474
Union	23,896	\$15,049	\$935
Baker	12,865	\$18,376	\$896
Nassau	18,753	\$15,790	\$876
Bradford	25,457	\$23,972	\$786
Polk	61,456	\$44,691	\$691
Duval	14,002	\$15,315	\$632
Citrus	29,686	\$11,806	\$564
Flagler	28,094	\$21,702	\$436
Taylor	19,448	\$4,913	\$395
Charlotte	40,496	\$21,351	\$373
Clay	15,851	\$8,447	\$293
Pinellas	533	\$2,322	\$187
Collier	556	\$1,941	<\$100
Franklin	<100	<\$100	<\$100
Leon	4,064	\$1,617	<\$100
Monroe	<100	\$2,249	<\$100
Orange	159	\$633	<\$100
Wakulla	1,675	\$1,220	<\$100
Total	2,246,052	\$3,223,835	\$170,122

Note: Affected agricultural lands less than 100 acres are represented as '<100'. Losses less than \$100,000 are represented as '<\$100' in the table.

Reference

Court, C. D., Qiao, X. Koeneke, R., & McDaid, K. (2025). Estimated Agricultural Losses Resulting from Hurricane Debby. UF/IFAS Economic Impact Analysis Program, Department of Food and Resource Economics, University of Florida.