

Avocado trees toppled by Hurricane Irma on September 10, 2017. Growers must stump the toppled trees and prop up the stumps to get the trees to reroot.

Florida's Avocado Industry Hit Hard by Hurricane Irma

By Tim Spann, Ph.D., Research Program Director

> n Sunday, September 10, 2017, Hurricane Irma, a powerful category 4 hurricane, made landfall on Florida's southwest coast, sparing Florida's 7,500-acre avocado industry in southeast Florida from a direct hit. However,

what was once the most powerful storm ever recorded in the Atlantic did not spare the industry from significant damage as there were wind gusts of up to 109 miles per hour.

Florida's avocado industry was expected to harvest about one million bushels or 55 million pounds of avocados in the 2017-18 crop year, their largest crop since 2014-15. At the Florida Avocado Administrative Committee meeting on November 8, 2017, it was reported that just under 600,000 bushels had been harvested when Irma came through. The remaining 40 percent of the crop is now rotting on the ground, and estimates for the 2018-19 crop are for no more than 500,000 bushels or 27.5 million pounds.



Hurricane Irma as it approaches southern Florida on Sunday, Sept. 10, 2017. Hurricane Jose can be seen in the lower right corner. Photo by NOAA/NASA.



Jonathan Crane, UF TREC, next to an avocado tree showing early wilting symptoms of laurel wilt disease. The tree is on the edge of a clearing where previously infected trees were removed. Following Hurricane Irma, the grower was unable to maintain his grove sanitation practices, and trees adjacent to the cleared area began to exhibit disease symptoms.

In addition to the lost crop, virtually every grove has toppled trees and broken limbs that will affect production for several years to come. When I visited in early November, two months post-Irma, many growers were just beginning to get into their groves to assess the damage and try to prop trees up and remove broken limbs, having been preoccupied with fixing holes in their roofs and dealing with other storm damage.

On top of Hurricane Irma, Florida's avocado industry is still dealing with laurel wilt, a deadly disease spread by ambrosia beetles, which has been impacting their industry for several years. Since Irma struck, it has been difficult to routinely scout groves and immediately remove affected trees, making good grove sanitation — the only sustainable solution for this disease at this time — a near impossibility. As a result, there was an uptick in beetle activity in groves in late October and early November, likely due to the downed branches and debris available for the beetles to reproduce in after Irma.

I visited several groves with Jonathan Crane, horticulturist, and Daniel Carillo, entomologist, both with the University of Florida's Tropical Research and Education Center (UF TREC). These groves had been model examples of how rigorous scouting and sanitation can control the spread of laurel wilt in groves. Each of these groves had new trees showing very recent symptoms of laurel wilt because the grower's sanitation program had been disrupted.

There will likely be some growers, who were already struggling to manage laurel wilt, for whom it will not be possible to recover from Irma. However, there are many others who see this as an opportunity to replant new varieties, top work trees and generally get a fresh start.

Crane sees this as a learning experience for the industry, validating practices he's been advocating for years — mainly pruning. Groves that were regularly pruned and where trees were maintained at less than about 20 feet tall fared much better than groves with taller, unpruned trees. It is also much easier to scout for laurel wilt in smaller trees with open canopies.



Late-season fruit that was lost during Hurricane Irma rots on the grove floor. About 40 percent of Florida's 2017-18 avocado crop was lost.