

As news broke that Florida's citrus industry ended this year's growing season with its lowest production in eight decades, an unlikely union has formed between two University of Florida startup companies to help reverse the trend.

By combining [Agriculture Intelligence](#)'s expertise in precision agriculture with [Satlantis](#)' leading-edge aerospace technology, the two companies housed in one of UF's business incubators believe they can offer a powerful tool to help the state's growers more closely monitor their trees and manage problems faster.

Over the years, Florida's citrus fruits have been hit by a combination of diseases such as citrus greening, citrus canker and black spot disease, and extreme weather conditions.

Scientists' efforts to develop disease-tolerant or disease-resistant trees and to creating new nutritional applications to help existing trees have been in vain. Industry leaders believe tracking the impact of these new remedies is critical.

"The war for improving productivity starts with understanding the real inventory," said Matthew Donovan, CEO of Agriculture Intelligence and resident client at UF Innovate | Accelerate at The Hub. 'We need to know how many productive trees there are, and just as importantly, how many are missing.'

"Because Florida growers must contend with storms, freezes and acute events as well as the presence of disease, our goal is to shorten that time between data collections and analyses and, therefore, the decision loop for growers to take action to save their trees," Donovan added.

On one hand, Donovan and fellow UF startup Satlantis believe they can provide those vital signs through their satellites and on the other hand, Agriculture Intelligence can capture inventory data using drones, through Agrovie. Together, they could drastically speed up that data collection using a satellite pointed at Earth.

"Our alliance will enable us to develop one of the most on-demand applications for Earth observation, precision agriculture", stated Aitor Moríñigo, Executive Vice President of Satlantis LLC.

"The combination of our very high-resolution satellite systems with drone pictures and Agrovie software is the perfect fusion of data collection at different altitudes. Add the software that is capable of processing all that data, and we transform it into actionable information for farmers and growers," elaborated Moríñigo.

The companies could produce not just maps but data demonstrating the growth and health of the trees, including nutrient analysis that informs practical decisions to reduce per-field fertilization treatments, a crucial step in improving sustainability.

“By providing full-field data, not a sample, and aggregating that with our data, we can help every single grower in Florida fight the battle and, hopefully, win the productivity war for citrus,” Donovan concluded.