



# Examining history for HLB answers

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In our search for a cure to HLB, we've tried just about everything short of turning the clock back to before the first Florida detection of citrus greening in 2005 and the arrival of the psyllid in the 1990s.

Now the University of Florida/Institute of Food and Agricultural Sciences is even attempting to go back in history. The hope is that maybe we'll find a breakthrough insight from the citrus equivalent of the Mayflower.



Budwood is collected from one of the few remaining Parson Brown trees on the former site of the J.L. Carney homestead on Lake Weir.

## UNIQUE ORANGE ORIGINS

Folklore has it that in the 1860s, Parson Brown gave shelter to a traveler at his Sumter County home. When the traveler asked for his bill the next morning, Brown said there would be none. The parson had many times depended on the kindness of strangers during his days as a circuit rider of the Methodist ministry, and he intended to pay forward that hospitality.

The traveler grabbed a handful of orange seedlings from his wagon. He told Brown that he'd grown them from seeds he'd acquired the previous year in Savannah from an orange off a ship just in from China.

Some 14 years later, Brown got another visitor, Captain J.L. Carney, who was on a search for citrus budwood. He got some from one of Brown's trees for \$80 worth of sheep. Descendants of Carney's trees are on the family homestead property in Marion County to this day.

## INVESTIGATING HLB-TOLERANT TREES

IFAS believes these trees may have remarkable tolerance to HLB. We aim to find out why. One of our citrus Extension agents, Gary England, visits the trees periodically and arranges for budwood samples to be sent to our researchers.

Fred Gmitter is among those who are investigating whether that ship to Savannah carried with it a genetic key that will unlock the mystery of HLB.

It's way too early to know if that's the case. But it's never too early to start asking questions. In addition to studying psyllids and soil, pathology and planting patterns, irrigation and engineering, we're bringing a little bit of history to bear on our quest.

We believe we have a pretty strong pedigree in the descendants of that orange that crossed the world 150 years ago. There's a whole lot of science to be done to determine if this history has anything to teach us. That's what we're setting out to do.

It's not going to distract Gmitter from the rest of his groundbreaking work toward conventional and GMO (genetically modified organism) breeding of trees that are promising candidates for modern times in the age of HLB.

Instead, we think of it as another possible path toward the same goal. If we already knew which path was the shortest and surest, then we wouldn't have to do research at all. That's why we pursue so many avenues simultaneously.

Part of our job as scientists is to separate fact from fable. If a tale of a long-ago journey can inspire a new direction in our all-encompassing search, so be it.

The descendants of the original Parson Brown budwood are just the starting point. Who knows where it'll come out? Maybe the Florida citrus leaders of the mid-22<sup>nd</sup> century (yes, we believe there will be Florida citrus leaders 150 years from now!) will look back at what England and Gmitter are doing now and say they helped steer the good ship IFAS into port with information that was key to continuing the citrus industry.

We'll never know unless we give it a try. 🍊

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