



From Gainesville to the grove

By J. Scott Angle, jangle@ufl.edu, @IFAS_VP

like to think of the miles I put in crisscrossing the state as doing my part to shrink the distance between Gainesville and growers. Citrus producers have turned out Pierce, Sebring, even the Panhandle, and more recently, Lake Alfred.

FRUSTRATION

My last stop was at the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Citrus Research and Education Center, where I met with a group of growers to hear their thoughts about the needs of the industry and discuss these challenges. They emphasized that HLB is foremost among them. Their frustration was clear, and I don't take it personally when they say HLB has fueled desperation for a moonshot among growers whose livelihood is in jeopardy after decades of a 24/7 work life.

Meanwhile, progress occurs in increments as scientists build upon continual discoveries delivering shortterm interim measures, while at the same time looking for long-term solutions. Just like growers, our scientists are also frustrated. They have also been searching for answers for the past 15 years.

That said, we cannot let frustration cloud our judgment or obstruct our goals of long-term sustainable solutions. Let's keep talking and sharing ideas. Together, we will work toward closing the gaps. The knowledge gaps where we don't completely understand HLB and how to prevent susceptibility. The economic gap the industry needs to survive in the face of so many challenges. The funding gap between what we have and what we could use to keep working together to support meaningful research projects regardless of our frustrations. And the unknown future

gaps that we have not identified. After all, HLB is not going to resolve itself!

IMAGINATION

I also realized over the course of our conversations there's another important component that producers bring to citrus science, namely, imagination.

Imagine if snapping photos of a diseased leaf with your smartphone immediately recorded its location in a centralized database that allows computer and human alike to spot the smallest incidence of disease. Yes, we have HLB, but there are other diseases we want to avoid as well, and early detection and intervention give us a shot at eradication of the next pathogen or pest.

Imagine that artificial intelligence could identify specific genes that make citrus susceptible to HLB. Imagine that these susceptibility genes could be edited to make citrus tolerant to HLB. Imagine what new technology is just around the corner. This kind of thinking inspires us to ask important scientific questions.

COLLABORATION

Research is most relevant when done in consultation with its beneficiaries. Our grower-scientist partnership has shaped the development of new varieties, management techniques and technologies that have kept HLBinfected groves going. It will also be crucial to addressing the many challenges beyond HLB.

The partnership relies upon a relationship of trust. I'll continue to do my best to earn that trust by coming to see you. Let me know which highway exit leads to your grove or association office and I'll do my best to visit.

The land-grant partnership between academia and industry has long served you who need to profit and those of us who provide the science that helps make that happen.

Reducing the gaps, solving the problems and developing solutions is why we have research stations and Extension offices in your communities. And it's why I gladly log those miles. You'll be seeing a lot of me in person.

Scott Angle is the University of Florida's vice president for agriculture and natural resources and leader of UF/IFAS.

