

Data-Driven Planting Decisions



By Rick Dantzler

Prior to HLB, the urgency for creating new citrus scions and rootstocks was not as great as it is now. When HLB showed up, everything changed, and researchers found themselves facing new and significant pressure to develop trees resistant or tolerant to greening.

Time itself became a meaningful factor. Breeders accustomed to having more time to combine years of data with professional judgment and observation to make recommendations have seen the equation shift toward the data side. Why? Simply put, because growing citrus has become so expensive and speculative. These factors have forced growers to become more bottom-line driven than ever before when making planting decisions, and it is good data that drive these decisions.

Plant breeding by its very nature is not a fast process, and plant breeders are generally uncomfortable releasing new cultivars before sufficient data are available to pronounce a new cultivar to be a good choice for Florida in the HLB era. However, they understand that growers need solutions now and are sensitive to the financial havoc greening is creating for growers. Therefore, plant breeders have begun cooperative field evaluation sooner than usual in the pipeline process.

Working with grower-cooperators who are willing to step forward in the face of greater risk, plant breeders have field evaluations underway across all the citrus-growing regions of Florida. Consequently, the board of directors of the Citrus Research and Development Foundation (CRDF) recently held a lengthy workshop with the plant breeders from the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) to see where things stand.

We learned there are 54 UF/IFAS field trials underway in Florida where new selections are being evaluated. Most of these trials have been funded entirely or partially by CRDF, and nearly all are being conducted in grower-cooperator arrangements.

Forty-eight of the 54 trials are designed with replicates of the treatments (scions or rootstocks), meaning the trees are laid out in a statistically relevant fashion and are being compared to standard industry varieties. Such trials are important because data coming from them are meaningful enough that they can factor into a grower's thought process regarding what to plant.

CRDF and UF/IFAS recognize the need to get the data to growers, so UF/IFAS created a website (<https://citrusresearch.ifas.ufl.edu/>) for this purpose. Data from 10 of the trials are already posted, and more information is on the way. The website is a work in progress that is being updated regularly, so your feedback is encouraged, especially suggestions on how the data can be more helpful. CRDF hopes to have the same conversation soon with its federal and industry partners, as well.

There *are* citrus trees in the pipeline that show greening tolerance. The data are telling an encouraging story, and CRDF is committed to working with our partners to get the data to you as soon and responsibly as possible.

Rick Dantzler is chief operating officer of the Citrus Research and Development Foundation.



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