

CRDF Rootstock Trials Call for Grower Cooperators

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The Citrus Research and Development Foundation (CRDF) is establishing a new project with the objective of evaluating the most promising citrus rootstocks in grower field trials, which are projected to be planted in the summer of 2022. The goal of the new trials is to identify plant material with the traits needed by growers to realize the highest possible pound solids per acre and increase tree viability in the HLB era.

The CRDF rootstock trials will be large-scale field trials assessing new rootstock selections in the final phase of evaluation. Trials will be scientifically designed to ensure powerful data analysis to identify the best performing rootstock selections. Sixteen rootstocks have been chosen for evaluation based on superior performance in small-plot field trials and/or observational data.

Of these 16 rootstocks, some of the new plant materials have been previously unavailable for commercial use and others are known rootstocks which will be used as a standard for comparison. There will be three scions used: Valencia 1-14-19, Vernia UF 35-15, and Hamlin 1-4-1. These scions will be combined with the 16 rootstocks, resulting in 48 rootstock/scion combinations. Each rootstock/scion combination will be replicated five times for a total of 240 plots in the trial. Each plot will have 20 trees per rootstock/scion combination. The total complement of trees for each trial site is 4,800. At roughly 200 trees per acre, each site will require approximately 24 acres.

Below is a list of all the candidate rootstocks for this project:

USDA Candidate Rootstocks	IFAS Candidate Rootstocks	Testable Rootstocks	Standard Rootstocks
US1282	UFR5	US812	X 639
US1283	Orange 14	C 54	US942
US1281	Blue 1		Kuharski
US1279			Swingle (sour on the east coast)
US1284			
US1516			
Super Sour 2			

A critical aspect of any research trial is the identification of growers willing to host a trial site. CRDF intends to have three trial sites for this project, one in each of the three eco-regions of the Florida citrus industry (Ridge, East Coast, and Southwest). The site on the East Coast has already been determined, so this call is to find a grower-cooperator willing to host a rootstock trial on the Ridge, and a grower-cooperator willing to host a rootstock trial on the Flatwoods of Southwest Florida.

Growers selected to host a trial would be provided trees at no cost plus a supplement for tree planting, tree wraps, and first-year establishment costs. Excluding the value of the tree, these financial supplements amount to \$8.95 per tree for Vernia and Valencia trees, and \$13.95 per tree for Hamlin trees. CRDF purchased the trees for \$8.05 per tree, so in addition to the cash financial supplement outlined above, grower-cooperators would be receiving a tree of at least this much value, but since the price of new trees has gone up since CRDF made its purchase, the amount of value is even greater. CRDF is providing financial incentive at this level because it approximates what growers are receiving for CRaFT projects, and such financial incentives are necessary for growers to be willing to plant new trees in the current difficult financial situation caused by HLB.

CRDF personnel and subcontractors will require regular access to the field-trial planting to conduct evaluations, plant tissue and soil sampling, tree canopy rating, and per plot yield evaluation once the trees reach bearing age. In addition, CRDF will plan and conduct an annual Field Day at each site to disseminate data, which will be shared on the citrusrdf.org web site.

Grower-cooperators would be expected to uniformly apply production inputs to support the trees from establishment through to mature tree production. Production practices are expected to conform with UF-IFAS recommendations for irrigation, drainage, fertilization, and pest control. No special treatments would be allowed in the trial which could possibly invalidate the rootstock trial data.

Growers interested in participating and hosting a trial site should submit a letter with their contact information, site location, soil type and acreage available by email to catp@citrusrdf.org. Letters of interest from growers must be received by CRDF no later than 5:00 p.m. on May 16, 2022.