Citrus Clonal Protection Program (CCPP)
Citrus Variety Introduction Options

CCPP can assist you with the introduction, therapy, and pathogen testing of citrus budwood. You have a few options for importing new citrus varieties into California. Depending on your decision I will inform you further for the necessary action for the importation.

1. **Proprietary.** You may choose to introduce a proprietary variety. In this case you must make sure that this variety is not in the public domain and available to everybody in the country from which you are to obtain the budwood. In other words the person from whom you will obtain the budwood should have exclusive rights to this variety (he found it as a bud sport, he has it patented etc.). **In this case the cost to you will be $10,000 USD per variety.**

2. **Public Domain with Financial Support from Requester.** You may choose to introduce a public domain variety and assist with the cost of the introduction. In this case you will receive budwood as soon as it is released from quarantine. The CCPP and the University will retain this variety and they will perform evaluation for trueness-to-type and fruit quality. Following this evaluation, which normally requires 5-7 years, the variety will become part of the CCPP Foundation Blocks, it will enter the public domain, and budwood will be available for general distribution from the CCPP. **In this case the cost to you will be $5,000 USD per variety.**

3. **Public Domain without Financial Support from Requester.** You may request CCPP to introduce a public domain variety. In this case the variety will become part of the CCPP Foundation Blocks and budwood will be available for general distribution from the CCPP immediately after the quarantine release. **In this case there will be no cost to you.**

The time required for the introduction and release of a variety from quarantine is independent of the above importation options. The time required for the establishment of tree sources, disease testing, and therapy varies depending on the condition of the imported budwood, variety, and disease load. From past years’ experience we estimate a 24-36 months window from introduction to completion of the quarantine release paperwork from the State and Federal agencies (see diagram).

When you respond to this message please indicate the number and if possible the names of the varieties that you intend to import into California (do not forget that this process is confidential) as well as the name, mailing address, phone number, and tax ID number of the person or organization responsible for the importation so we can prepare the necessary paper work and materials (greenhouse and laboratory) for the introduction. If you have any additional questions or need any further information, please contact me at vidalg@ucr.edu, (951) 237 9948, or (951) 827 3763.

Thank you for your interest,
Dr. Georgios Vidalakis
Director, Citrus Clonal Protection Program
California Citrus Clonal Protection Program
Procedure and Timeline for the Introduction of New Varieties (Including Contract Cleanup)

1.) INTRODUCTION OF BUDWOOD
   - 1A.) PRE-INDEX
     - Tristeza
     - Psorosis
     - Citrus Viroids
   - Pre-index and primary increase trees started simultaneously
   - 1B.) PRIMARY INCREASE
     - Four source trees made with budwood grafted onto rough lemon rootstocks

2.) THERAPY
   - 2A.) SHOOT-TIP-GRAFTING
     - STG effective in eliminating graft transmissible disease agents including viroids
   - 2B.) THERMAL THERAPY
     - Thermal therapy is effective in eliminating graft transmissible disease agents except for viroids.
     - Thermal therapy is used for all introductions of origin outside of California

3.) INDEX OF THERAPY PROPAGATION
   - Budwood is graft inoculated onto indicator plants - mexican lime, sweet orange and citron to determine if all diseases have been eliminated.
   - 3A.) THERAPY SUCCESS
     - Index negative for graft transmissible disease the introduction enters into the Variety Introduction Index
   - 3B.) THERAPY FAILURE
     - ELISA is also used
     - Index positive for disease (Return to Step 2)

4.) VARIETY INTRODUCTION (VI) INDEX
   - The VI Index is started in the fall of each year.
   - After a variety introduction is found to test free of all bud transmissible diseases in
   - The VI Index, budwood source trees are produced in quarantine for field planting

5.) QUARANTINE RELEASE
   - CCPP must apply to the California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA) for State and Federal Quarantine Releases.
   - With quarantine release CCPP is permitted to move budwood source trees from quarantine in Riverside to the Lindcove Foundation Block