



# Foundation Plant Services

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## *How to Use FPS Custom Grapevine Disease Testing, Disease Elimination and Quarantine Services*

*Rev. 12/14/12*

### **I. Identify a single vine source for the materials**

- A. Make sure the source vine is true to variety and true to clone
  - 1. Inspect vine for phenotypic characteristics that are typical for the desired variety/clone
  - 2. Obtain documentation from supplier as to the variety and clonal identity and source
  - 3. Choose clonal materials that have been checked by the person who developed the clone or materials that are a minimum number of generations away from the original source
- B. Choose materials with the highest possible sanitary status. One or more of the following strategies may be used to do this:
  - 1. Select elite disease-tested materials from research stations
  - 2. Use materials that are a minimum number of generations away from elite stock
  - 3. Prescreen a number of vines with quick disease tests (ELISA) to identify a healthy source vine
  - 4. If there is no way to gain some assurance that the material is healthy, then contract with FPS for backup virus elimination treatment

### **II. Obtain permission to propagate the source materials in the USA**

According to the service agreement between the customer and FPS, the customer (not FPS) is responsible for obtaining permission to propagate all grape materials submitted for custom services. It is a good idea to have a written record of this permission. The FPS service agreement states that "The Customer hereby represents and warrants that it has legal title to, and has the right to propagate the Selection(s) submitted for custom services."

### **III. Complete an FPS custom service request form for each selection and submit it to FPS before December 15<sup>th</sup>**

- A. Choose the type of quarantine service based on knowledge about the health status of the source materials
  - 1. Test the submitted materials, but do not perform disease elimination therapy (select #5 on service request form); choose this option if confident that the source materials are healthy  
***Fee: \$1,500.00/selection public; \$3,000.00/selection proprietary***
  - 2. Test the submitted materials and perform backup disease elimination therapy (select #6 on service request form); choose this option if unsure about the health status of source material  
***Fee: \$2,000.00/selection public; \$3,500.00/selection proprietary  
(additional charges will apply if original materials are diseased)***

3. Perform disease elimination therapy on the submitted materials and then test the treated plants for disease (select #1 on service request form); choose this option if the source materials are very likely to be diseased

***Fee: \$5,000.00/selection public; \$6,500.00/selection proprietary***

B. Decide if you want to be able to produce California certified stock from the material when testing, cleanup and/or quarantine work is completed, and indicate that choice on the service request form

C. Contact Vicki Klaassen by email at [vaklaassen@ucdavis.edu](mailto:vaklaassen@ucdavis.edu) or by phone at (530) 752-7897 to make preliminary arrangements for submission of items for custom disease testing, disease elimination and/or quarantine at FPS

#### **IV. Complete, sign and return a Service Agreement with FPS to perform the required work**

A copy of the portion of the contract describing the different services is attached.

#### **V. Collect dormant cuttings for submission/shipment to FPS**

A. For each selection provide 25-30 dormant hardwood cuttings collected from a single vine source; we prefer cuttings that are 18"-20" (40-50cm) long and with a diameter of 1/4"-3/8" (6-9mm)

B. Label each bundle of cuttings as to the exact vine source

C. Note that testing of materials from the southern hemisphere is delayed by about 6 months

#### **VI. Wait for testing and treatment to be completed**

A. Testing consists of:

1. ELISA panel-- these tests are conducted several times over a 6 month period
2. Herbaceous panel-- 4-5 months when materials are received during the optimum season
3. Field indexing-- 18 months in when materials are received during the optimum season

B. Disease elimination therapy using microshoot tip culture takes about one year to produce plants big enough to conduct field tests; after the plants are produced, another two years is required to test the treated materials to see if any disease that was present has been eliminated

C. If tests indicate that materials that have undergone disease elimination therapy are still diseased, then another round of therapy and testing, requiring a minimum of another three years, will be necessary

#### **VII. Receive a small quantity of propagation material back from FPS**

FPS provides the customer with 10 mist propagated plants of selections that pass all the quarantine and/or California Grapevine Registration and Certification Program tests

*Questions regarding custom grapevine disease testing, disease elimination and quarantine services can be directed to FPS by email at [fps@ucdavis.edu](mailto:fps@ucdavis.edu) or by phone at (530) 752-3590*