
**FOUNDATION PLANT MATERIALS SERVICE
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TO: All Participants in the California Grapevine Registration and Certification Program

FROM: Susan Nelson-Kluk, FPMS Grape Program Manager

This newsletter is to bring you up to date on the latest information regarding the grape program at FPMS. Some of these items were mentioned in the November FPMS newsletter, but most is new information.

NEW NONREGISTERED GRAPE MATERIALS AVAILABLE

An information sheet listing all the new grape selections planted in the Foundation Vineyard in the last two years is attached. These mother vines are small and have not yet been verified true to variety, but we are offering to produce and sell mist propagated plants on a strictly "as is" basis from these selections. All disease tests required by the California State Department of Food and Agriculture (CDFA) for foundation stock are negative for these selections, and if the mother vines are verified true to variety in the future, FPMS will be able to issue retroactive foundation tags, upon request, for all materials propagated from them. Please note that it will not be possible to verify that vines are "true to clone" since that is not yet technically possible.

Customers may also order mist propagated plants of any registered or nonregistered grape selections in the collection at FPMS. California foundation stock tags may be issued for mist propagated plants that are propagated from registered foundation mother vines.

Customers are encouraged to order mist propagated plants as soon as possible since the amount of material is very limited and it takes a relatively long time to produce an order. The earlier the orders are received, the more likely we will be able to fill them this season. In addition, an allocation deadline of February 15,

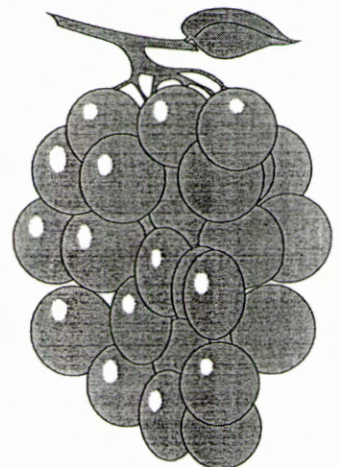
1996, has been established for all 1996 mist propagated grape orders. If orders for mist propagated plants exceed FPMS propagation capacity, then available resources will be allocated between all who order before February 15 th. Thereafter, orders will be processed on a first-come, first-served basis.

To order mist propagated plants, complete the enclosed order form and return to FPMS with 50% prepayment.

NEW REGISTERED GRAPE MATERIALS AVAILABLE

The rootstock variety Couderc 161-49 is available from FPMS as California Foundation stock for the first time this season. This is a riparia X Berlandieri hybrid. According to Galet, it is resistant to phylloxera; very tolerant to lime; susceptible to thylosis in dry conditions; and susceptible to nematodes. It reportedly has only average rooting ability. It is being used in Europe to reduce vigor, and was mentioned in several of the clonal evaluation studies reported on in the 1995 Clonal Symposium.

This season we have also been able to reregister 72 selections that were registered in the past. Registration for these selections was dropped in 1992 when leafroll-associated viruses were discovered in the old foundation vineyard and appeared to be spreading vine to vine. New mother vines of these selections have now been planted in isolated foundation vineyards, leafroll ELISA tested, and verified true to variety. A list of the 72 selections reregistered for the 1995-96 season is available upon request from FPMS.



NEW GRAPE CLONE EVALUATION INFORMATION

Although the amount of information available about grape clones is still limited, several new publications became available in 1995. FPMS now offers the *Grape Clonal Workshop Binder* (August 1995) for \$50. This binder contains articles in English describing clonal evaluation work for many of the more popular and upcoming winegrape varieties. There are also several articles on Thompson seedless and rootstocks. Please use the enclosed FPMS publications form to order.

The American Society for Enology and Viticulture (phone: 916-753-3142, FAX: 916-753-3381) now offers the *Proceedings of the International Symposium on Clonal Selection* (June 1995) for \$25 plus shipping. It includes 33 original papers on grape clonal selection work that has been conducted throughout the world.

Also, the French have recently published: *Catalogue des Varietes et Clones de vigne Cultives en France*. This is the long-awaited 357-page book that describes all of the varieties and clones officially registered in France. For each variety there is a picture of the fruit and leaves, the number of acres planted in France since 1958, an ampelographic description, cultural practice recommendations, notes on susceptibility to disease and pests, and a summary of the clonal selection work to date. In the back of the book there are charts for most varieties that include:

- currently registered French clones by CTPS #
- cross reference clone #s from INRA and ENTAV
- productivity
- wine potential

This is the best single reference, to date, on French materials. The book is in French and costs 280 F, plus shipping. An English version is planned, but it will be condensed and may not come out for a couple of years. To order directly from France contact:

Etablissement National Technique pour l'Amelloration de la Viticulture (ENTAV)
Domain de l'Espiguette
30240 le Grau du Roi
FRANCE
Attention: Gilbert Peyrant
FAX: 33-66-53-29-16

FPMS is purchasing a limited number of these books for resale to customers. The price will be \$85 including shipping via first class mail. Please use the attached FPMS publications form to order from FPMS.

The January 1996 edition of the "California Grape Register" is now available from FPMS. It lists all of the grape selections registered in participant increase blocks along with the source, treatment and testing information. Specific selections offered by most of the private nurseries and increase blocks is indexed in this booklet by nursery and grape variety and selection number. This booklet also includes a list of all the registered selections that can be obtained from FPMS. Please use the attached FPMS publications form to order.

By mid March FPMS will have available a 1996 edition of the "All FPMS Grape Selections" booklet which lists all the grape selections on the database at FPMS including registered, nonregistered, and quarantined selections. Please use the attached FPMS publications form to order.

LEAFROLL AND FANLEAF ELISA TESTING AT FPMS

Dr. Adib Rowhani is continuing to monitor the virus status of FPMS grape materials by testing every foundation mother vine every other year for grapevine fanleaf and tomato ring spot viruses using ELISA. In 1990 the whole foundation vineyard was surveyed for fanleaf by ELISA for the first time, and only one fanleaf positive selection was detected. Since 1991, neither of these viruses has been detected in any of the foundation mother vines.

Dr. Rowhani is also testing all of the foundation mother vines for leafroll-associated viruses types 1,2,3,4, and GVA using ELISA. He tests approximately 1/3 of the vineyard every year, so that every vine is tested every 3 years. New vines are tested the first year they are planted. Any vines that test positive are removed and all adjacent (neighbor) and related (sibling) vines are retested intensively by ELISA. Neighbors and siblings that test negative retain their registration status. Any that test positive are removed. In 1995, none of the currently-registered foundation mother vines tested ELISA positive for leafroll.

As part of the ongoing monitoring of the foundation vineyard, Dr. Rowhani tests suspicious foundation mother vines on the leafroll field indicator Cabernet Franc. Over the last several years, 59 of these vines tested positive for leafroll. These results were reported to CDFA and the action CDFA took in response was addressed in a 12/26/95 memo from CDFA to All Grapevine Registration and Certification Participants. Any questions regarding this action should be directed to your state district biologist or Nursery Service at CDFA in Sacramento, phone: 916-654-0435.

LEAFROLL ELISA RESEARCH

As a research project, Dr. Rowhani has continued testing many of the vines in the old foundation vineyard for leafroll associated viruses type 1,2,3,4, 5 and GVA. He is hypothesizing that leafroll-associated viruses have moved from vine to vine in the old foundation vineyard and he is trying to map the spread of virus. If virus is spreading, then vines that now test leafroll ELISA positive may not have been positive in the past and materials that came from ELISA positive vines recently are more likely to be ELISA positive than materials distributed from the same vines in the past.

Some of the foundation stock used to plant current private increase blocks was taken from old foundation vineyard mother vines prior to the 1992-93 season. No foundation stock was taken out of the old foundation vineyard after that season. We don't know what the leafroll ELISA status of any of these mother vines was prior to 1992-93 but the data from ELISA tests conducted since then is some indication of what it might have been.

To date, CDFA has not taken any action to change the certification status of private increase block mother vines propagated from ELISA positive mother vines if they are not also positive on Cabernet Franc. However, there is research in progress at FPMS studying the correlation between leafroll ELISA and the Cabernet Franc field index, which is the CDFA-recognized test for the presence of leafroll. If a high correlation is found, then in the future CDFA may suspend registration from vines propagated from previously registered ELISA-positive mother vines.

LEAFROLL ELISA AND CABERNET FRANC DATA AVAILABLE TO FPMS CUSTOMERS

FPMS policy is to make available any information about FPMS materials that may be helpful to nurseries and growers including leafroll ELISA data and Cabernet Franc field index data. A report to program participants issued 7/30/92 gave all the leafroll ELISA results up to that time. Copies of this report are available upon request from FPMS.

We also wish to make available data that has been generated since the 1992-93 season as part of the leafroll ELISA research in progress.

Nurseries/program participants are therefore invited to request leafroll ELISA and Cabernet Franc data for the foundation mother vines from which their increase blocks were propagated. Not every old source vine has been tested, but we will provide the information, as available. When making requests, please use the enclosed form to list the source mother vines you wish to have ELISA data supplied for. Send requests to my attention, Susan Nelson-Kluk.

A few program participants have already obtained additional leafroll ELISA information from FPMS. They are using it to help identify and remove materials that may be leafroll ELISA positive in their increase blocks.

THE FUTURE OF THE GRAPE PROGRAM AT FPMS

New information has recently changed our assumptions about the way grape virus diseases are transmitted. In the past we assumed that, except for fanleaf, grape virus diseases were transmitted only by grafting. The regulations governing the current California Grapevine Registration and Certification program reflect that assumption. ELISA data generated over the last four years, however, strongly suggests that leafroll spreads vine to vine within a vineyard. New strategies for maintaining foundation stock at FPMS and for propagating California certified stock in private nurseries which incorporate this information must now be developed. State regulations also need to be updated accordingly. FPMS is committed to working with CDFA and program participants to make these transitions in a way that will maintain the integrity of the existing program and improve it in the future.

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